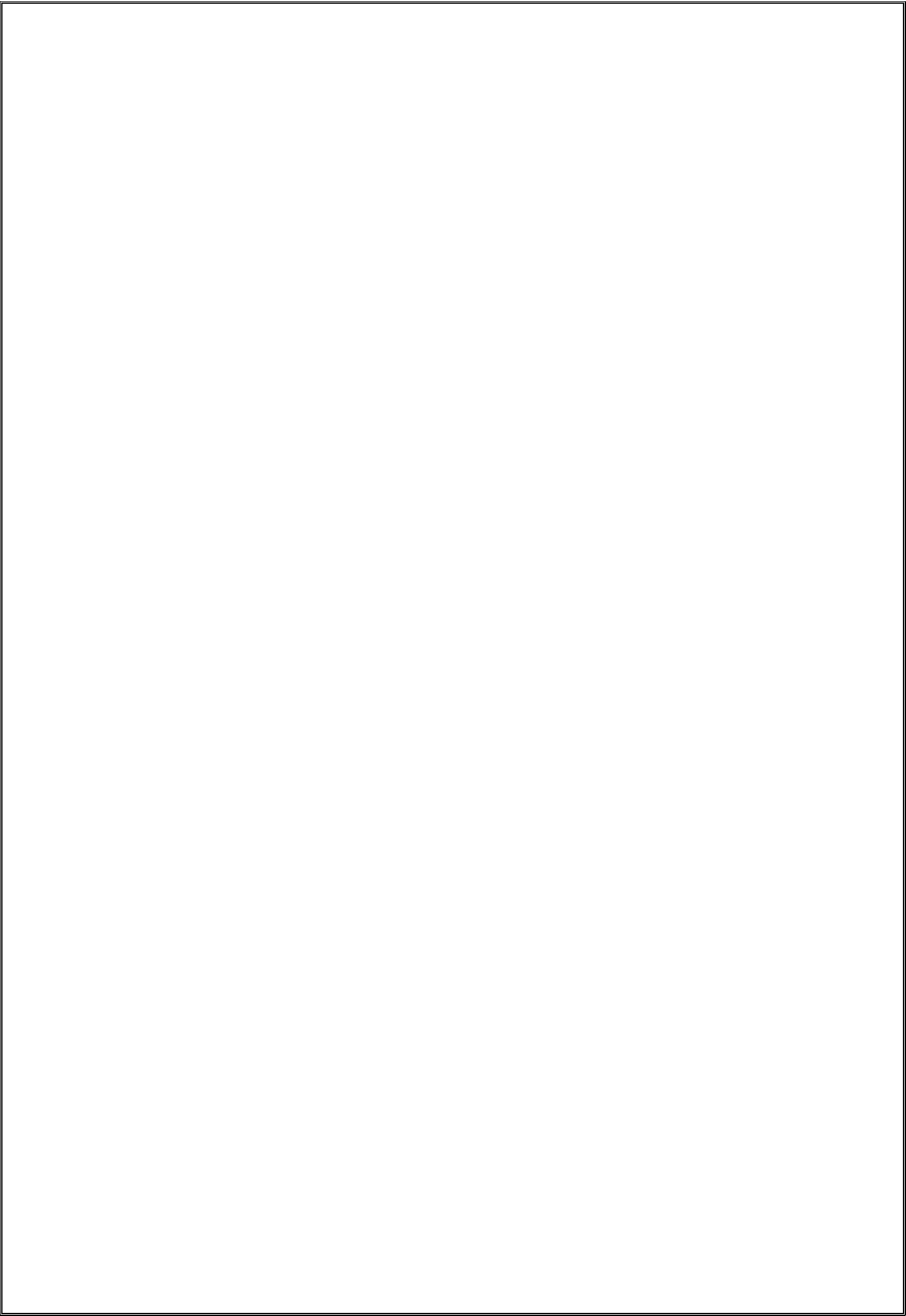




UNIQUE IAS ACADEMY

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UPSC CURRENT AFFAIRS JULY- 2023



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UNIQUE IAS ACADEMY

INDIAN HISTORY & CULTURE

1. SRI ALLURI SITARAMA RAJU

Context:

Recently, the yearlong celebration of the **125th Birth** Anniversary of Shri Alluri Sitarama Raju and **100 years of the Rampa Rebellion** concluded in Hyderabad.

ABOUT:

- **Birth Place:** Born on 04 July 1897, at Mogallu near **Bhimavaram, Andhra Pradesh**.
- By the age of 18, he renounced all worldly pleasures and became a Sanyasi.

Contribution in India's Independence**1. Influenced by Mahatma Gandhi during Non-Cooperation Movement (NCM):**

- He inspired the tribals to seek justice in the **local panchayat courts** and boycott the colonial courts.
- He persuaded people to wear **khadi** and give up **drinking**

2. Rampa Rebellion (1922-1924)

- It is also known as the **Manyam (which means forest area) Rebellion**.
- He is also referred as "**Manyam Veerudu**" (Hero of the Jungles) by the local people.

Causes

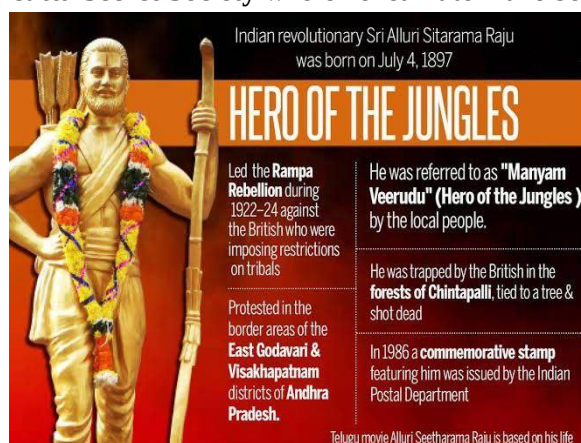
- ✓ Alienation of tribal population from Rampa and Gudem Hills: Madras Forest Act, of 1882.
- ✓ Banning traditional Podu agricultural system (slash-and burn shifting cultivation).
- ✓ Exploitation of Tribals: without proper wage.
- ✓ Muttadars (Village Headman) power curtailed.

In August **1922**, Shri Alluri Sitarama Raju launched movement against British tyranny rule.

- ✓ **Organised adivasis** against oppressive Madras Forest Act, 1882.
- ✓ Organised **militant guerrilla movement**
- ✓ Realised that the **traditional weaponry** would be of no use against the heavily armed the British forces and snatched from the enemy, and for that he launched attacks on **police stations**.
- ✓ First attack : **Chintapalli police station** in Visakhapatnam.

Rampa Rebellion later inspired the tribals of Orissa and they started no rent Struggle along with violating forest laws.

3. He was also a member of a **Calcutta Secret Society** where he learnt to make bombs.



2. LOKMANYA‘ BAL GANGADHAR TILAK

Context:

The award has been instituted by the Tilak Smarak Mandir Trust in the memory of the nationalist Lokmanya‘ Bal Gangadhar Tilak and is given on Tilak’s death anniversary.

Lokmanya‘ Bal Gangadhar Tilak

- Born on July 23, 1856, Tilak was a mathematician, philosopher, scholar and social reformer.
- To impart quality education to the country’s youth, he **founded the Deccan Education Society** in 1884.
- He also started two weeklies, **Kesari (in Marathi) and Mahratta (in English)**, through which he criticized British policies of that time.
- Tilak **joined the Congress in 1890**, but due to ideological differences, he and his supporters were known as extremist leaders within the party.
- British **arrested him on the charges of sedition in 1906** and a court sentenced him to six years of imprisonment in Mandalay (Burma)
- He was popularly known as Lokmanya. The famous slogan, —**Swaraj is my birth right and I shall have it** was coined by him.
- Tilak with Annie Besant, Joseph Baptista, and Muhammad Ali Jinnah founded the **All India Home Rule League in 1916**.
- In the same year, he concluded the **Lucknow Pact with Jinnah, which provided for Hindu-Muslim unity in the nationalist struggle**.
- When BalGangadharTilak was imprisoned during the freedom struggle, he wrote a book titled **‘Gita-Rahasya’**.
- The events like the **Ganapati festival and ShivajJayanti were used by Tilak to build a national spirit** beyond the circle of the educated elite in opposition to colonial rule.

Highlight the similarities and differences between Both Mahatma Gandhi and Bal Gangadhar Tilak:

- Both Mahatma Gandhi and Bal Gangadhar Tilak contributed and changed the intensity of India’s struggle for freedom through their approaches toward the movement. These approaches, which were based on their respective ideologies and beliefs, had several similarities as well as differences.

Similarities

- **Swadeshi and boycott of foreign cloth:** Both of them considered boycott of foreign cloth and strengthening of indigenous industries as very important step towards the struggle against the colonial rule.
- Both Tilak and Gandhiji contributed to the integration of lower middle class, peasants, artisans and workers to the mainstream movement lead by the Congress.
- With the help of Poona Sarvajanik Sabha, Tilak initiated a no-tax campaign in Maharashtra during 1896-97. On similar lines, Gandhiji launched a pan-India civil disobedience movement, withholding the payment of various taxes, most importantly the salt tax.
Both the leaders emphasised upon a demand for swaraj or demand for self government in their respective struggles.
- Both Tilak and Gandhiji used Press to propagate and spread their ideas on the colonial rule. They used the press to educate the common masses about the atrocities under the British rule.

Differences

- **Regard and approach towards the colonial law:** While Tilak's approach towards freedom struggle remained within the legal framework for the colonial law, Gandhiji did not hesitate to step out of this framework.
- Eg- While both of them were arrested on the charges of sedition, Tilak denied the charges, Gandhiji pleaded guilty.
- **Violence as a means to achieve independence:** Gandhiji's approach was completely based on the belief of non-violent means (satyagrah) to achieve independence'. Although, Bal Gangadhar Tilak ruled out the use of violence in attaining self rule, he was not a preacher of Ahimsa or non-violence. He said, 'passive resistance was the means to an end but was not the goal in itself.'
- **Legislative Councils:** Bal Gangadhar Tilak was a member of the Legislative Council and used it to build the national movement. However, Gandhiji never became a member of the Legislative Council and relied more on non-cooperation with the British government.
- **Political ideology:** While Tilak, an extremist, believed in the militant opposition to colonial rule, Gandhiji, a moderate, believed in more gradual and persuasive approach towards the struggle for freedom.
- **Previous experience of popular struggles:** Tilak's political ideology lacked the groundwork of previous struggles which Gandhiji had from his South African experience.

3. BASTILLE DAY

Context:

- The Indian Navy Marching Contingent is set **to participate in the Bastille Day Parade in Paris, France** on July 14, 2023.

About Bastille Day

- The National Day of France, also known as Bastille Day, is celebrated on July 14 every year.

What was Bastille?	The Bastille was a fortress prison located in the heart of paris, which had become a symbol of royal tyranny and oppression.
History	The fall of the Bastille is widely considered the beginning of the French Revolution. The event also marked the beginning of a period of intense violence and social upheaval in France.
French Revolution (1789-1799)	A significant period of social and political upheaval in France was characterized by the overthrow of the French monarchy, the establishment of a republic, and the execution of thousands of people, including King Louis XVI and Queen Marie Antoinette.
Significance	The fall of the Bastille symbolized the people's victory over the monarchy and the end of the old regime. The event led to the abolition of feudalism, the declaration of the Rights of man and Citizen, and the establishment of the First French Republic.
Global Importance	The Principles of liberty, equality, and fraternity espoused during the French Revolution have had a profound impact on the world's political and social landscape. These values have influenced many other revolutionary movements throughout history.

The Indo-French strategic partnership, which celebrates its 25th anniversary this year, extends to the maritime domain and includes collaboration in shipbuilding.

- **Collaborations:** Construction of **Scorpene class submarines by Mazagon Dock Shipbuilders Limited** in collaboration with Naval Group, France
- **Naval exercise:** Varuna (initiated in 1993)

About Indian Navy:

- The Indian Navy is **one of the largest navies in the world**, equipped with a diverse range of ships, submarines, and aircraft. Their motto, “**Sam No Varunah**,” meaning “May the lord of oceans be auspicious unto us,” (from Rig Veda) reflects their commitment to excellence. It boasts its own **aircraft carriers, destroyers, frigates, and nuclear submarines**

4. FUSION OF ROCK ART AT RUDRAGIRI HILLOCK

Context:

The Rudragiri hillock in **Andhra Pradesh** features a **unique combination of prehistoric rock paintings from the Mesolithic period** and exquisite artwork from the **Kakatiya dynasty, dating back to around 1300 AD**.

- The site includes **five naturally formed rock shelters** that served as living quarters during the **Mesolithic age, around 5000 B.C.**
- The Kakatiya-era paintings display scenes from **the epic Ramayana and are adorned with a variety of colours derived from white kaolin and different pigments.**

One of the caves depicts a fierce battle between the **Vanara brothers Vali and Sugriva**, with Rama shooting arrows at Vali. Another cave features a grand sketch of **Hanuman carrying the Sanjivani hill in his right hand, symbolizing his mission to save Lakshmana’s life.**

About Kakatiya Dynasty:

- Kakatiyas is an Andhra dynasty that flourished in **the 12th century CE**. The Kakatiya dynasty ruled from **Warangal (Telangana) from CE 1083-1323**.
- They were known for the construction of a **network of tanks for irrigation and drinking water and thereby gave a big boost to the overall development of the region.**
- There are hundreds of Hindu temples built under **the patronage of Kakatiya kings like Ganapati Deva, Rudrama Devi and Prataparudra in the Kakatiya dynasty**. E.g., Thousand Pillar Temple or Rudreshwara Swamy Temple, Telangana. It is a **star-shaped, triple shrine (Trikutalayam) dedicated to Vishnu, Shiva, and Surya.**

5. ZO PEOPLES OF MANIPUR & MIZORAM

Context:

The recent clashes in Manipur has raised attention of many leaders who called for a **reunification of the Zo people in view of the continuing ethnic violence** between the dominant **Meiteis and the Kuki-Zomi tribes in the neighbouring state.**

About Zo tribes:

- The Zo people comprise various tribes, including **Chin, Kuki, Mizo, Lushei, Zomi, and others, spread across Myanmar, India, and Bangladesh**. The tribes share a common history, including **migration and settlements in different regions, and are connected by their Christian faith.**

- The movement for Zo reunification, while emotionally appealing to the people of Mizoram, faces political challenges in terms of carving out areas from Manipur, Tripura, and neighbouring countries for integration with Mizoram.

6. MIHIR BHOJA

Context:

Recently a statue of Raja Mihir Bhoja was unveiled in Kaithal, Haryana.

About Mihir Bhoja

- A prominent **9th-century ruler from Gurjara – Pratihara dynasty**.
- He succeeded his **father Rambhadra** and **ascended to the throne in 836 CE**.
- He adopted the **title of Adivaraha (devotee of Lord Vishnu)**. Also, some of
- the **coins from his era feature the term Adivaraha**.
- **Arab merchant Sulaiman** described him as one of the **greatest Gurjara – Pratihara emperors**.
- He was also a **great patron of art and literature**. **Poet Rajsekhara** adorned his court.

Political consolidation by Mihir Bhoja

- He **reorganized and consolidated** the Pratihara empire through conquests and diplomacy.
 - Various **inscriptions at Varaha, Daulatpur, Kahala, Pahewa, etc.**, indicate his control over **Malwa, Rajputana, Madhyadesh**.
 - **Kalhana's Rajatringini** mentions the **expanse of his empire to Kashmir** in the north.
- **Tripartite struggle:**
 - He was also involved in tripartite struggle **for Kannauj** with **Palas in the East** and **Rashtrakutas in the Deccan**.
 - He fought wars with Pala king **Devapala**. Later, according to **Gwalior prashasti**, Bhoja **defeated the son of Devapala**.
 - During his reign, **Amoghavarsa and Krishna II** were Rashtrakuta kings ruling over Kannauj. Bhoja captured Kannauj from Rashtrakutas and **extended his empire up to the river Narmada**.

Kannauj Triangle (Tripartite struggle)



Gurjara Pratihara (730 CE-1036 CE)

Prominent Rulers 	➤ Nagabhata (Founder) ➤ Vatsraja ➤ Nagabhata II ➤ Mihir Bhoja ➤ Mahendrapal ➤ Jasapala (last ruler)
Major Cities 	➤ Ujjain: Capital of Vatsraja ➤ Kannauj: Capital city of Mihir Bhoja and later rulers
Literary records 	➤ Aihole inscriptions of Pulakesin II ➤ Travelogues of Hiuen Tsang ➤ Harshacharita of Banabhatta
Administration 	➤ Kings adopted big titles like 'Parameshwara', 'Maharajadhiraj', etc. ➤ No references of council of ministers. ➤ State was divided into Bhuktis, Bhuktis into Mandalas, and Mandalas into cities and villages. ➤ Villages were locally administered
Socio-Religious conditions 	➤ Prevalence of caste system, inter-caste marriages, polygamy for royal and rich classes, etc. ➤ This was the age of progress for the Brahminical religious order with Vaishnava, Shaiva, Shakti and Surya being the most prominent sects. ➤ Idol worship, Yajnas and giving charity to religious places were also prominent.
Art and Architecture 	➤ Rulers of the dynasty were great patrons of arts, architecture and literature. ➤ Notable sculptures of this period include Viswaroopa form of Vishnu, marriage of Shiva and Parvati, female figure Sursundari, etc. ➤ The most important architectural work of this dynasty are at Osian (in modern day Jodhpur district of Rajasthan), which includes Hari-Hara temple built in Maha-Maru style of architecture. ➤ Early works at Osian also portray Panchayatana style (central shrine surrounded by four subsidiary shrines) of temple building. ➤ Teli ka Mandir at Gwalior fort, dedicated to a Shakti-cult, is one of the oldest surviving large-scale works of this dynasty. It was built during the reign of Mihir Bhoja.

▪ Dynasty ended in 1036 CE due to a quick succession of rulers, family feuds, Turkic attacks from the west and Pala advances from the east.

GEOGRAPHY

1. EXTREME RAIN EVENTS: HOW UNUSUAL, WHAT IS CAUSING THEM

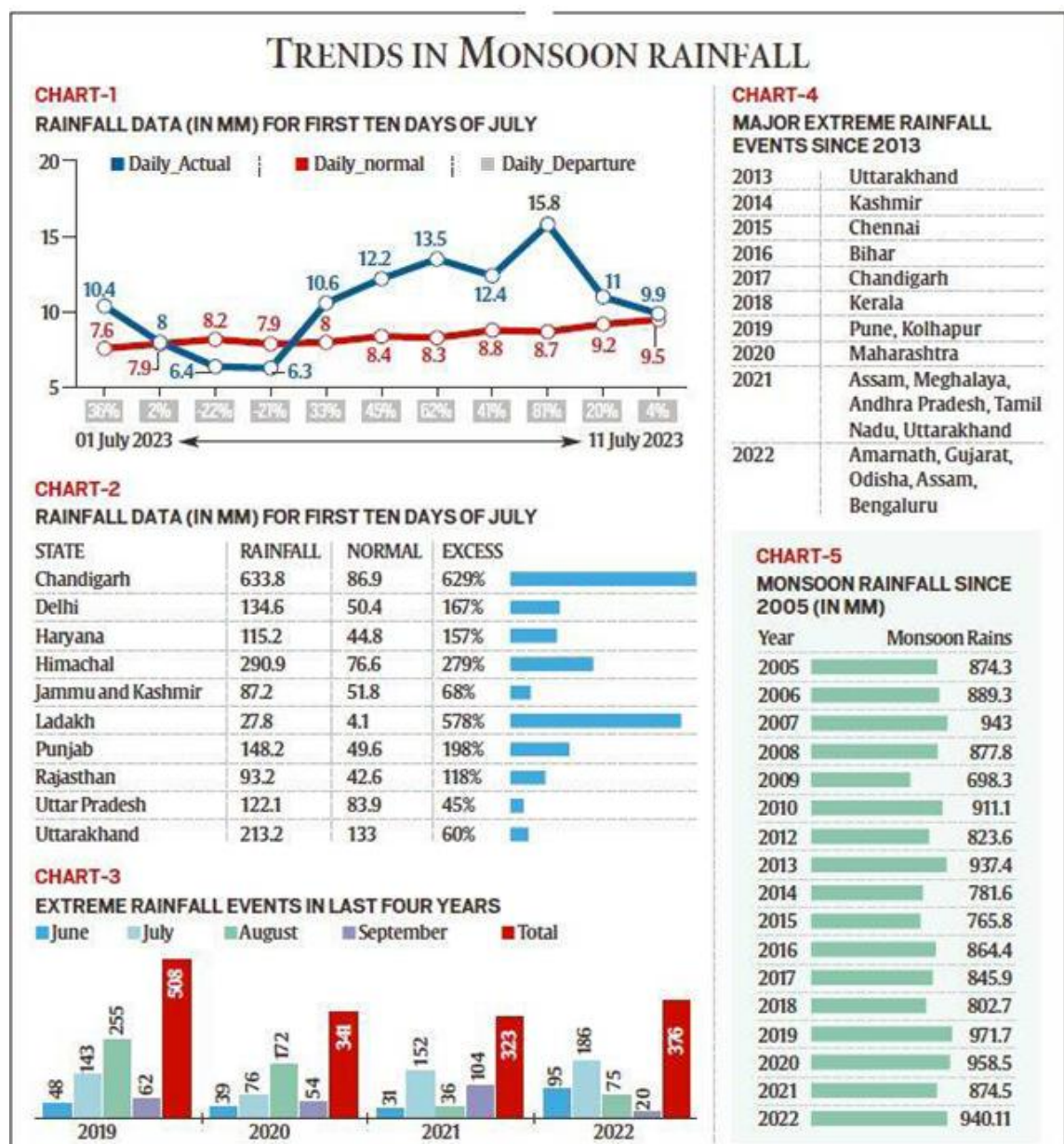
Context:

Northern India is currently in the midst of an extremely wet phase of the monsoon.

What is an extremely heavy rainfall event?

- It occurs when **more than 205 mm of rainfall** happens at any place within a 24-hour period. (IMD)
- Such events of extremely heavy rainfall are **not unexpected** during the monsoon season.
- After the 2013 Uttarakhand tragedy, there has not been a single year without at least one major disaster-like situation produced by an extreme rainfall event.

Trends in recent years:



- **Overall rainfall** during the monsoon **has remained more or less constant** over the last two decades.
- **But the intra-seasonal variation has increased** - fewer days are producing a bulk of the seasonal rainfall, while the rest of the days remain dry.

How is this year's monsoon rainfall unusual?

- The monsoon season this year was not expected to be very wet.
- July rainfall in Himachal Pradesh, Haryana, Punjab, Rajasthan, Uttarakhand, and Uttar Pradesh is **substantially higher** (by 26%) **than normal**.
- Heavy rain has resulted in **large-scale destruction and loss of lives**, particularly in the hilly areas.

Reasons for this extreme rainfall:

- **Rains induced by the Biparjoy cyclone:** By the first two weeks of the monsoon, India had accumulated a rainfall deficit of more than 50%. However, this deficit had come down to 8% by the end of June.
- **Western disturbances:** IMD has attributed this spell to an interaction between the monsoon winds and western disturbances that converged over northern India.

- **Climate change:** It is known to increase the possibility, frequency and intensity of extreme weather events, including heavy rainfall and heat waves.
- **Warming of the Arabian Sea:** Excess rainfall over northwest India is consistent with the Arabian Sea having warmed by about 1.5 degrees Celsius since January.

How can Indian cities bring them self out of these troubled waters?

- The authorities need to plan the usage of shallow aquifers to prevent water logging.
- At the same time, the city needs to recharge the deeper aquifers with rainwater.
- Forming a **water plan to recharge aquifers**
- **Rainwater harvesting structures** along the storm water drains can help mitigate floods while utilizing rainwater resources.

Conclusion:

- Only improved forecasts with sufficient granularity in space and time can reduce the element of surprise resulting from these extreme weather events.

2. CHALLENGES POSED BY SAND AND DUST STORMS

Context:

According to the UN, sand, and dust storms (SDS) have increased dramatically in frequency and severity in recent years.

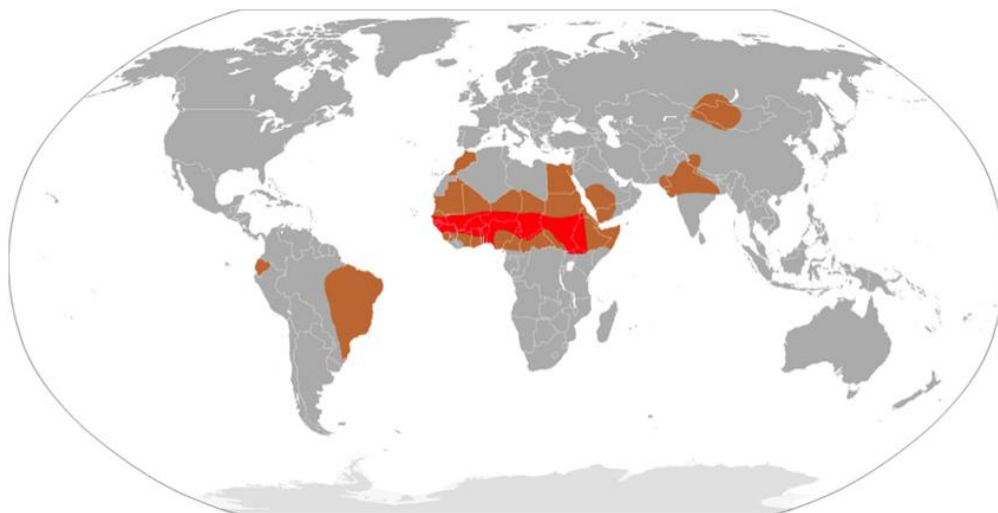
What is SDS?

- They are **common meteorological hazards in arid and semi-arid regions**, usually caused by thunderstorms/ strong pressure gradients associated with cyclones, which **increase wind speed over a wide area**.
- These strong winds **lift large amounts of sand and dust from bare, dry soils** into the atmosphere, transporting them hundreds to thousands of km away.

Impact:

- **On weather/climate/environment:**
 - Dust particles act as **condensation nuclei** for cloud formation **affecting the amount and location of precipitation**.
 - Airborne dust functions in a manner similar to the **greenhouse effect**, which affects the energy reaching the Earth's surface.
 - SDS are recurring environmental phenomena which reduce **air quality, and visibility**.
- **On human health:**
 - **Particles larger than 10 µm** are not breathable, and thus can only damage external organs.
 - **Particles smaller than 10 µm**, often get trapped in the nose, mouth and upper respiratory tract, and thus can be associated with respiratory disorders such as asthma, etc.
- **On the land and marine ecosystems:**
 - Surface dust deposits are a **source of micronutrients** for both continental and maritime ecosystems. **For example**, Saharan dust is thought to fertilise the Amazon rainforest.
 - But dust also has **many negative impacts on agriculture/food security**, including
 - Reducing crop yields by burying seedlings,
 - Causing loss of plant tissue,
 - Reducing photosynthetic activity and
 - Increasing soil erosion.

Primary hotspots of the dust storm are:



- Sahara Desert,
- Middle East,
- Taklamakan Desert in northwest China,
- Southwest Asia,
- Central Australia,
- Etosha and Makgadikgadi basins of southern Africa,
- Salar de Uyuni in Bolivia and
- Great Basin in the US

Concerns raised by the UN:

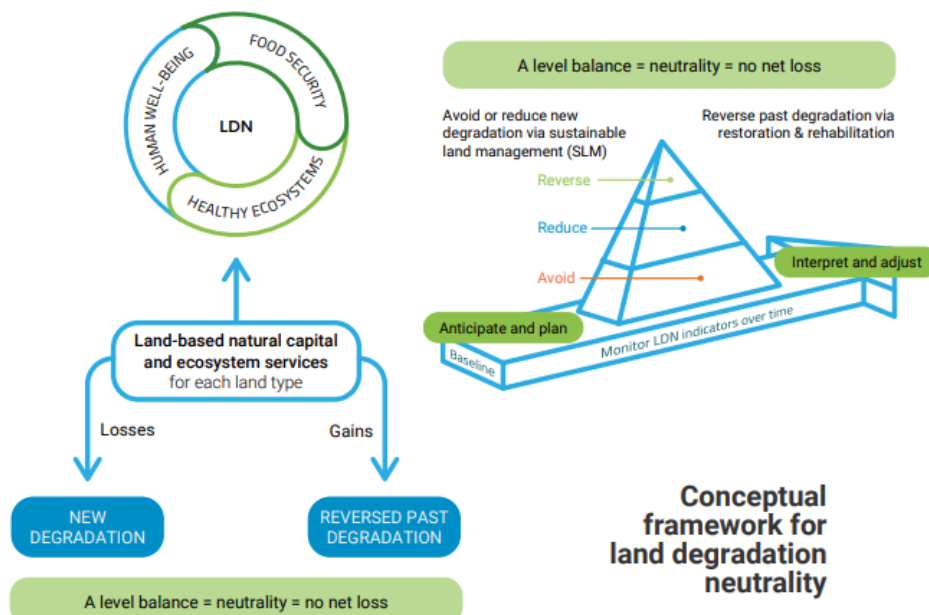
- **Around 2 million tonnes** of sand and dust enter the atmosphere annually.
- SDS often originate in dry land areas, which cover **41% of the Earth's land surface** and comprise some of the most fragile ecosystems, highly susceptible to global climate change.
- **Human-induced climate change** has increased the frequency and intensity of SDS.
- The impact of SDS is felt in **all regions of the world**, both in developed and developing countries.
- The growing intensity and frequency of SDS **present a formidable challenge to achieving SDGs**.
- SDS are linked to at least 11 of 17 SDGs. These include –
 - SDG 1 on ending poverty,
 - SDG 2 on ending hunger,
 - SDG 3 on health for all,
 - SDG 6 on water and sanitation,
 - SDG 8 on inclusive and sustainable economic growth,
 - SDG 11 on sustainable cities,
 - SDG 13 on climate action and
 - SDG 15 focuses on combating desertification, land degradation.
- These will **especially affect Africa and the Middle East** where desertification is most common.
- However, **the global recognition of SDS as a hazard is generally low**.

Steps taken/needed:

- **The UN General Assembly recognised** (in 2015) that SDS pose a great challenge to the sustainable development of affected countries and regions.
- **The UN Convention to Combat Desertification (UNCCD)** observed the first-ever **International Day of Combating Sand and Dust Storms** on July 12, 2023.

- **Achieving SDGs** ⇔ Reducing the occurrence and impact of SDS in affected areas.

Arresting land degradation:



- **The SDS policy and planning** should reduce societal vulnerability by mitigating the effects of wind erosion.
- **A multi-sectoral process bolstered by information-sharing** should involve short-and long-term interventions, engage multiple stakeholders and raise awareness of SDS.

Conclusion:

Addressing SDS requires an integrated approach, which involves sustainable land management, climate change mitigation and adaptation, and disaster risk reduction including early warning systems and international cooperation

3. GHAGGAR RIVER

Context:

In early July this year, the Ghaggar River and its tributaries in Haryana, caused widespread devastation after reclaiming their floodplains.

- The river, including its tributaries **Tangri, Markanda, and others**, were previously considered dead and heavily encroached upon. However, due to heavy monsoon rains in the **Shivalik hills**, the rivers flooded their catchment areas and breached their banks, resulting in significant losses.
- Additionally, unscientific, and illegal mining has harmed the natural balance of rivers like the Ghaggar and Yamuna.

About Ghaggar-Hakra River

It is an **intermittent river in India and Pakistan** that flows only during the monsoon season. The river is known as **Ghaggar before the Ottu barrage** and as **Hakra** downstream of the barrage in the Thar Desert. In pre-Harappan times the **Ghaggar was a tributary of the Sutlej**.

Origin: It originates in the village of **Dagshai in the Shivalik Hills** of Himachal Pradesh and flows through Punjab and Haryana states into Rajasthan.

Tributaries: The main tributaries of the Ghaggar are the Kaushalya River, Markanda, Sarsuti, Tangri and Chautang

4. PARKACHIK GLACIER IN LADAKH

Context:

A new study conducted by scientists from the **Wadia Institute of Himalayan Geology** reveals changes in the **Parkachik Glacier in Ladakh, India**.

- The research also estimated the surface ice velocity of the glacier, **showing a reduction of about 28% in the lower ablation zone between 1999-2000 and 2020-2021**.

Based on simulations, if the glacier continues to retreat at a similar rate, **the study predicts that three lakes of different sizes may form due to subglacial over-deepening**.

There are two main reasons for the rapid melting of the glacier:

- First is global warming and increasing temperatures in the region
- Second is that it is at a lower altitude than other glaciers in the Zaskar region

About the glacier:

Parachik Glacier is a mountain glacier in Kargil, Ladakh. It is a mass of ice moving slowly down the Nun-Kun slopes. This ice mass falls finally into the Suru River. It is one of the largest glaciers in the Suru River valley, covering an area of 53 square km and is 14 km long. The Suru River valley is a part of the southern Zaskar Ranges in the western Himalayas

5. MAHARASHTRA'S SAHYADRI PLATEAU

Context:

Land-use changes in Maharashtra's Sahyadri plateau, specifically the rapid shift from **traditional local grain cultivation to monoculture plantations of mango and cashew**, are impacting various elusive amphibians, insects, and reptiles that live under loose rocks.

- The study was supported by the **United Kingdom-based On the Edge Conservation**, the Habitat Trust (India) and the **Maharashtra Forest Department** apart from BEAG and NCF.

What is a Plateau?

- A plateau is a flat, elevated landform with a relatively level surface, often surrounded by steep slopes or cliffs. It is higher than the surrounding areas and typically stretches over large areas.

About Sahyadri plateau:

- The Sahyadri plateau is located in the western part of India, parallel to the Arabian Sea. It stretches from Gujarat in the north to Karnataka in the south. It has an average elevation of around **1,000 meters**.

About Sahyadri mountain ranges

- The Western Ghats of Maharashtra are locally known as the Sahyadri ranges. **Kalsubai** is the highest peak in Maharashtra. **Kaas Plateau also known as the Maharashtra Valley of Flowers** is situated in the Sahyadri range of Western Ghats.

Destruction of rocks

The Deccan Sheet Rocks in Hyderabad are home to a unique and vibrant ecosystem, **including rare flora and fauna**. However, the rapid destruction of these rocks due to urban development is threatening the survival of this diverse ecosystem.

How the destruction of rocks affects flora and fauna?

1. It disrupts their **natural habitats, leading to the loss of biodiversity**.
2. Many plants and animals, especially those **adapted to rocky environments**, lose their homes and food sources.

3. This disruption can result in the **decline or extinction of certain species**, impacting the delicate balance of the ecosystem.
4. The removal of rocks can **alter microclimates and water availability**, further affecting the survival of flora and fauna.

6. THE FIRST GSI SURVEY OF THE SIACHEN

Context:

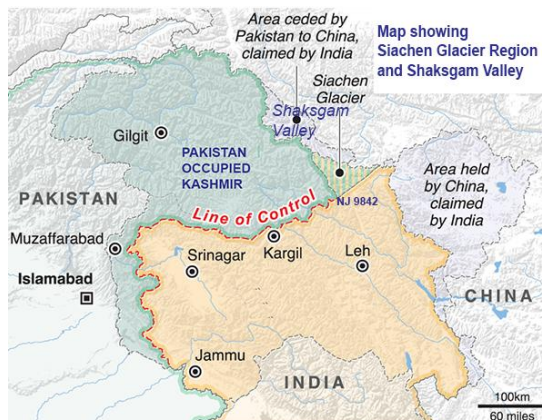
- **NJ 9842 vs. 5Q 131 05 084:** Exploring India-Pakistan's last demarcated point and the Siachen glacier's assigned number by the Geological Survey of India (GSI).
- **Lack of recognition:** Despite the historical importance, the first Siachen survey remains overlooked by scholars and mountaineers.

The First Siachen Survey

- K. Raina's leadership: In June 1958, V.K. Raina, an Indian geologist, conducted the inaugural Siachen survey.
- Unforeseen conflict: The peaceful region surveyed in 1958 became a disputed area between India and Pakistan, leading to Operation Meghdoot in 1984.

About Siachen Glacier

- It is the **highest battleground on Earth**. Troops are deployed at elevations of up to 6,700 metres (22,000 feet) at minus 60 degrees C.
- India occupied Siachen glacier under **Operation Meghdoot in 1984**.
- **Siachen Glacier, piedmont glacier** located in the **Karakoram Range**.
- It lies in the **heavily glaciated Himalayan region known as the —Third Pole,** because mountain glaciers in this region contain more fresh water than is found anywhere else on Earth except for the polar ice caps.
- The **Siachen Glacier lies between the Saltoro Ridge**, a subrange of the Karakorams, to the west and the main Karakoram Range to the east.
- It is 75 km (47 miles) long, which makes it the second longest nonpolar glacier in the world, after Fedchenko Glacier in Tajikistan.
- The Siachen Glacier is **positioned from northwest to southeast**.
- It originates at the base of the Indira Col West, a col (low point) on the Indira Ridge, at an altitude of 6,115 metres (20,062 feet), and it descends to an altitude of 3,570 metres (11,713 feet).
- On its **left flank** are three tributary glaciers: **TeramShehr, North Terong, and South Terong**.
- On its **right flank** are tributary glaciers: **Zingrulma, Gyongla, Lolofond Nubra River originates from Siachen glacier**.
- The name Siachen refers to a land with an abundance of roses.



7. GODAVARI FLOWS ABOVE DANGER MARK AT BHADRACHALAM

Context:

Godavari flows above danger mark at Bhadrachalam, official says 'prepared for flood situation'

Godavari:

- The Godavari is the **largest Peninsular River system**. It is also called the **Dakshin Ganga**.
- The Godavari basin extends over states of **Maharashtra, Telangana, Andhra Pradesh, Chhattisgarh** and **Odisha** in addition to smaller parts in Madhya Pradesh, Karnataka and Union territory of Puducherry having a total area of 3,12,812 Sq.km with a maximum length and width of about 995 km and 583 km.
- The basin is bounded by **Satmala hills**, the **Ajanta range** and the **Mahadeo hills** on the north, by the Eastern Ghats on the south and the east and by the Western Ghats on the west.
- The Godavari River rises from **Trimbakeshwar** in the Nashik district of Maharashtra about 80 km from the Arabian Sea at an elevation of 1,067 m. The total length of Godavari from its origin to outfall into the Bay of Bengal is 1,465 km.
- Godavari river rises near Nasik in Maharashtra at an elevation of about 1067 m and flows for a length of about 1465 km before out falling in to the Bay of Bengal. The principal tributaries of the river are **the Pravara, the Purna, the Manjra, the Penganga, the Wardha, the Wainganga the Pranhita (combined flow of Wainganga, Penganga, Wardha), the Indravati, the Maner and the Sabri**.



POLITY & GOVERNANCE

1. THE MULTI-STATE COOPERATIVE SOCIETIES (AMENDMENT) BILL 2023

Context:

The Multi-State Cooperative Societies (Amendment) Bill 2023 was passed by the Lok Sabha.

Cooperatives in India and issues faced by them:

Meaning: Co-operatives are voluntary, democratic, and autonomous organisations controlled by their members who actively participate in its policies and decision-making.

Efforts to promote them:

- **After independence**, the first five-year plan (1951- 56) emphasised the adoption of co-operatives to cover various aspects of community development.
- **97th Amendment (2011):** It inserted Article 43B in the DPSP of the Indian Constitution inserted,
 - As per Article 43B. States shall Endeavour to promote voluntary formation, autonomous functioning, democratic control and professional management of cooperative societies.

Issues faced by the co-operatives:

- Inadequacies in governance
- **Politicisation and the excessive role of the government**
- Inability to ensure active membership
- Lack of efforts for capital formation
- **Inability to attract and retain competent professionals**
- Elections to co-operative boards have been postponed indefinitely

What are Multi-state Co-operative Societies?

- Regulated by the **Multi-State Co-operative Societies Act 2002**, these are societies that have operations in more than one state (like FPOs).
- **Part IXB** (also inserted by the 97th amendment) of the Indian constitution is applicable only to multi-state co-operative societies (as per an SC verdict), as states have the jurisdiction to legislate over state co-operative societies.

About the Multi-State Cooperative Societies (Amendment) Bill 2023:

It seeks to amend the Multi-State Co-operative Societies Act 2002.

Key features	2002 Act	2023 Bill
Election of board members	Elections to the board are conducted by its existing board.	Co-operative Election Authority: The central government will establish the Authority to conduct such elections. It will consist of a chairperson, VC, and up to 3 members appointed by the central government on the recommendations of a selection committee.
Amalgamation of co-operative societies	Amalgamation and division by passing a resolution at a general meeting with at least two-thirds of the members present	Allows state co-operative societies to merge into an existing multi-state co-operative society, subject to the respective state laws.

	and voting.	
Fund for sick cooperative societies		Co-operative Rehabilitation, Reconstruction and Development Fund: Multi-state co-operative societies that are in profit for the preceding three financial years shall finance the Fund.
Restriction on redemption of government shareholding	The shares held in a multi-state co-operative society by certain government authorities can be redeemed based on the bye-laws of the society.	Any shares held by the central and state governments cannot be redeemed without their prior approval.
Redressal of complaints		Co-operative Ombudsman: The central government will appoint one or more such Ombudsman with territorial jurisdiction. They shall complete the process of inquiry and adjudication within 3 months from the receipt of the complaint. Appeals (within a month) → Central Registrar appointed by the central government.

Importance of the Bill:

- **By increasing their transparency** and implementing a system of frequent elections, it will strengthen co-operatives.
- The Bill aims to address issues with the **operation and governance** of cooperative societies as well as match its provisions with that in Part IXB of the Constitution.

Issues related to the Bill:

- **Imposing a cost on well-functioning societies:** Sick multi-state co-operative societies will be revived by a Fund that will be financed through contributions by profitable multi-state co-operative societies.
- **Dilute autonomy and independence of co-operatives:** By empowering the government to restrict redemption of its shareholding in multi-state co-operative societies.

2. UNIFORM CIVIL CODE

Context:

The push for a Uniform Civil Code is raising concerns about religious rights and personal laws, as the Supreme Court's inquiry on religious freedom remains unresolved.

What is UCC?

- **Uniform Civil Code** refers to the proposition of **having a uniform set of civil laws for all citizens of a country, irrespective of their religious or cultural affiliations.**

The principle behind UCC:

- The concept of a UCC is **rooted in the idea of equality and uniformity before the law** and it **aims to replace the personal laws based on religious practices that currently govern matters such as marriage, divorce, inheritance, adoption, and succession.**

Historical Perspectives on UCC

- **British rule:** There was a **lack of uniformity in civil matters** as **personal laws based on religious customs and traditions** were **recognized for different communities**. The idea of a UCC emerged as a **response to this fragmentation** and as a **means to promote a common civil identity**.
- **Portuguese rule:** When Goa was under Portuguese rule until 1961, a **Uniform Civil Code** based on the **Portuguese Napoleonic code** was implemented.
- **Nehruvian Vision:** Jawaharlal Nehru envisioned a **modern and progressive India** and saw the **UCC as an essential element of nation-building**. He believed that a UCC would **help eliminate divisions based on religion** and **promote equality among citizens**.
- **Hindu Code Bill:** The Hindu Code Bill sought to **codify and modernize Hindu personal laws relating to marriage, divorce, adoption, and inheritance**. It was seen as a **step towards a UCC**, as it aimed to **bring uniformity in personal laws within the Hindu community**.
- **Shah Bano Case:** The Supreme Court judgment, in this case, sparked debates on the need for a **UCC to ensure gender justice and equal rights for women across religious communities**.

Constitutional Perspectives on UCC

- **Constituent Assembly Debates:** During the framing of the Indian Constitution, the debates witnessed diverse viewpoints, with **some members advocating for a UCC as a way to promote gender equality and secularism**, while others expressed concerns about **preserving religious and cultural rights**.
- **Directive Principles of State Policy:** **Article 44** of the Indian constitution states that the **state shall endeavour to secure for its citizens a uniform civil code throughout the territory of India**.
- **Secularism:** The Indian Constitution enshrines the principle of secularism, which mandates the **separation of religion and the state**. A UCC is seen as a **way to promote secularism** by ensuring equal treatment of all citizens irrespective of their religious affiliations.
- **Equality and Non-Discrimination:** The Constitution of India guarantees **equality before the law under Article 14**, and prohibits **discrimination on grounds of religion, race, caste, sex, or place of birth**. UCC would uphold these principles by **ensuring equal rights and equal treatment for all citizens, regardless of their religious backgrounds**.
- **Gender Justice:** The Constitution also guarantees the **right to equality and the right against discrimination based on gender**. A UCC is seen as a means to promote **gender justice**.

How do Personal laws govern different communities?

Muslims, Hindus, Jains, Buddhists, Sikhs, Parsis, and Jews are governed by their own personal laws.		
Goa has UCC, which retained its common family law known as the Goa Civil Code after it was liberated from Portuguese rule in 1961. The rest of India follows different personal laws based on their religious or community identity .		
All Hindus	Reformed Hindu Personal Law	Applies to Hindus after the enactment of the Hindu Marriage Act, 1955. Renounced Hindus still under Hindu Law
	Hindu Personal Law in Special Marriage Act	Hindus married under the Special Marriage Act, 1954 are still governed by Hindu Personal Law.
Muslims	Muslim Personal Law	Muslims married under the Special Marriage Act, 1954 are no longer governed by Muslim Personal Law.

Argument in favour of UCC:

Benefits of UCC	Explanation
National Integration and Secularism	UCC would create a common identity among citizens , fostering national integration . It promotes secularism by treating all religions equally and reducing communal conflicts .
Gender Justice and Equality	UCC ensures gender justice by removing discriminatory laws and granting equal rights to women in marriage, divorce, inheritance , etc. It empowers women and upholds their fundamental rights
Simplification and Rationalisation of Legal System	UCC simplifies the legal system by eliminating the complexities and contradictions of multiple laws. It harmonizes civil and criminal laws and enhances accessibility for the common people.
Modernisation and Reform of Outdated Practices	UCC modernizes and reforms outdated practices , aligning personal laws with human rights and constitutional values. It abolishes practices like triple talaq and child marriage

Argument against UCC:

Challenges	Explanation
Diverse Personal Laws and Customary Practices	Harmonizing India's diverse laws and practices to establish uniformity is complex , especially when many laws are undocumented or contradictory .
Resistance from Religious and Minority Groups	Some religious and minority groups argue that it could impose majority views and undermine their constitutional rights, particularly under Article 25 guaranteeing freedom of religion .
Lack of Political Will and Consensus	Concerns exist regarding potential communal tensions and conflicts arising from its implementation.
Practical Difficulties and Complexities	Implementing UCC would involve substantial efforts such as drafting, codifying, harmonizing, and rationalizing personal laws and practices.

Law Commission Views:

- **21st Law Commission of India:** It said the “issue of uniform civil code is vast, and its potential repercussions, untested in India”. It said that “UCC is neither necessary nor desirable at this stage”.
- The government had asked the **22nd Law Commission of India** to undertake an examination of various issues relating to UCC.

SC-related cases:

Landmark Cases	Ruling and Implications
Shah Bano Case (1985)	The Supreme Court upheld the right of a Muslim woman to claim maintenance from her husband even after the Iddat period.
It highlighted the need for a UCC to remove contradictions based on ideologies.	
Sarla Mudgal (1995)	The Supreme Court stated that a Hindu husband cannot convert to Islam and marry without dissolving his first marriage.
It emphasized that a UCC would prevent fraudulent conversions and bigamous marriages.	
Shayara Bano case (2017)	The Supreme Court declared triple talaq as unconstitutional and violative of Muslim women's dignity and equality.
It recommended that Parliament enact a law to regulate Muslim marriages and divorces	

Conclusion:

- The implementation of a **Uniform Civil Code (UCC) in India** requires a balanced approach that respects **multiculturalism and diversity**. Inclusive discussions with stakeholders, including **religious leaders and legal experts**, are essential to ensure diverse perspectives are considered. The focus should be on **eliminating practices that hinder equality and gender justice while avoiding reactive culturalism**. The reform process of Muslim Personal Law should be led by the Muslim clergy, and Muslims should critically examine practices to promote equality and justice. The aim is to develop a **just and inclusive UCC that upholds constitutional values**.

3. MULTIDIMENSIONAL POVERTY INDEX

Context:

According to the global Multidimensional Poverty Index (MPI) 2023, a total of 415 million people moved out of poverty in India within just 15 years from 2005/2006 to 2019/2021.

What is the global MPI?

- It is a key international resource that measures (annually) acute multidimensional poverty across more than 100 developing countries.
- First launched in 2010 by UNDP and Oxford Poverty and Human Development Initiative (OPHI), the global MPI advances SDG 1 - ending poverty in all its forms everywhere.**
- It also measures interconnected deprivations across indicators related to SDGs 1, 2, 3, 4, 6, 7 and 11.

How does it measure multidimensional poverty?

- By constructing a deprivation profile** for each household and person **across 10 indicators** spanning **health, education, and standard of living**.
- A person is multidimensionally poor** if s/he is deprived in one-third/33% or more of the weighted indicators out of the 10 indicators.
- Those who are deprived of one-half or more of the weighted indicators are considered living in **extreme multidimensional poverty**.

Significance of the global MPI:

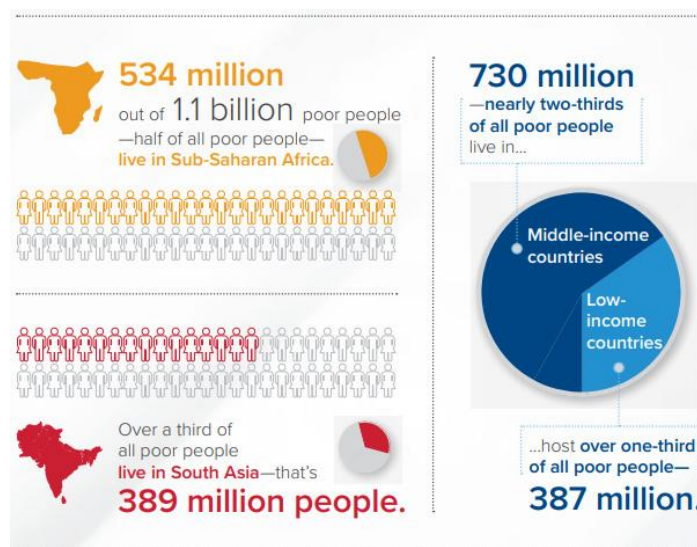
- It monitors poverty reduction and informs policy, showing how people experience poverty in different aspects of their daily lives.

The 2023 global MPI:

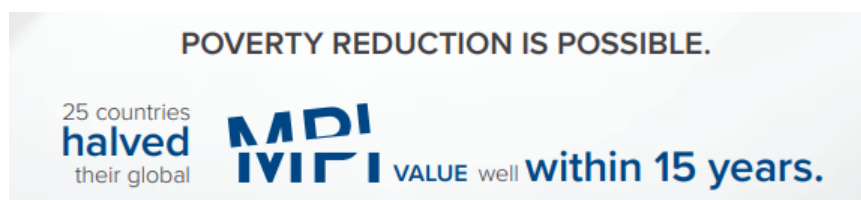


Dimensions of poverty	Indicator	Deprived if living in the household where....	Weight
Health	Nutrition	An adult under 70 years of age or a child is undernourished.	1/6
	Child mortality	Any child under the age of 18 years has died in the five years preceding the survey.	1/6
Education	Years of schooling	No household member aged 10 years or older has completed six years of schooling	1/6
	School attendance	Any school-aged child is not attending school up to the age at which he/she would completed class 8.	1/6
Standard of living	Cooking fuel	The household cooks with dung, wood, charcoal or coal.	1/18
	Sanitation	The household's sanitation facility is not improved (according to SDG guidelines) or it is improved shared with other households.	1/18
	Drinking Water	The household does not have access to improved drinking water (according to SDG guidelines) or safe drinking water is at least a 30-minute walk from home, round trip.	1/18
	Electricity	The household has no electricity	1/18
	Housing	Housing materials for at least one of roof, walls and floor are inadequate: the floor is of natural materials and/or the roof and/or walls are of natural or rudimentary materials	1/18
	Assets	The household does not own more than one of these assets; radio, TV, telephone, computer, animal cart, bicycle, motorbike or refrigerator, and does not own a car or truck.	1/18

Distribution:



Reduction:



Good news: 25 countries, including India, successfully halved their global MPI values within 15 years.

Concerns:

- **Child poverty** will continue to be a pressing issue, particularly in relation to school attendance and under nutrition. The poverty rate among children is **27.7%**, while among adults is 13.4%.
- **Poverty predominantly affects rural areas**, with 84% of all poor people living in rural areas.
- **The lack of comprehensive data** during the period of the COVID-19 pandemic poses challenges in assessing immediate prospects.
- **The negative impacts of the pandemic** in dimensions such as education are significant and can have long-lasting consequences.

Case of India:

In 2005/2006, about 645 million people were in multidimensional poverty in India, with this number declining to about 370 million in 2015/2016 and 230 million in 2019/2021. Thus, **415 million** poor people moved out of poverty from 2005/2006 to 2019/2021.

- Incidence fell from 55.1 to **16.4%**.
- **Deprivation in all indicators declined.**
- The poorest states and groups, including children and people in disadvantaged caste groups, had the fastest absolute progress.
- The above findings are significant as **India surpassed China** (in Apr 2023) to become the world's most populous nation with **142 crore people**.

Way ahead:

- **Intensify efforts** to comprehend the dimensions most negatively affected.
- **Strengthen data collection and policy efforts** to get poverty reduction back on track.

- **Broaden the picture** to include the impacts of the pandemic on children.

Conclusion:

The report demonstrates that poverty reduction is achievable, demonstrating the feasibility of the SDG target - **ending poverty in all its forms everywhere by 2030.**

4. PERMANENT COURT OF ARBITRATION

Context:

India has stated that it **cannot be forced to participate in “illegal” proceedings at the Permanent Court of Arbitration** regarding the **Kishenganga and Ratle hydropower projects in Kashmir.**

- The court ruled that it has the **authority to consider the dispute between India and Pakistan on the matter.** India has argued that it will not join the proceedings initiated by Pakistan as the **dispute is already being examined by a neutral expert under the Indus Waters Treaty.**

About Indus Water Treaty:

The treaty, brokered by the **World Bank in 1960**, deals with **cross-border river matters.** India believes that the **parallel processes initiated by Pakistan violate the provisions of the treaty.** India has been participating in the neutral expert proceedings and has been in talks with Pakistan for treaty modification.

About Permanent Court of Arbitration:

- Established in 1899. An international **intergovernmental institute has been established in order to resolve disputes between states.**
- The PCA has a **three-part organisational structure** that includes the Administrative Council, which oversees its policies and finances, Members of the Court, a panel of independent prospective arbitrators, and the International Bureau, which is led by the Secretary-General.
- It has a **Financial Assistance Fund**, which attempts to **assist poor nations in meeting a portion of the expenses associated with international arbitration** or other forms of dispute resolution offered by the PCA.

5. RIGHT TO REMAIN SILENT

Right to Remain Silent



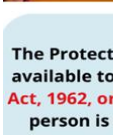
Context: The Supreme Court of India has emphasized that all accused individuals have the **right to remain silent and cannot be forced to speak or admit guilt.**



What is the Right to Remain Silent?
The right to remain silent is a **legal principle** that allows individuals to refuse to answer questions or provide information to law enforcement or during legal proceedings **without facing negative consequences**



Observation of SC
Cooperation with an investigation does not equate to **confession**, and an accused person's choice to remain silent cannot be considered non-cooperation. An accused's decision to remain silent should not absolve the prosecution from proving guilt beyond a reasonable doubt.



Exceptions:
The Protection limited **only to criminal proceeding**. Right is not available to a person who is being interrogated under **Customs Act, 1962, or Foreign Exchange Management Act, 1999**, since the person is not **“accused of an offence”** and isn't entitled to a lawyer.

6. THE OFFSHORE AREAS MINERAL (DEVELOPMENT AND REGULATION) AMENDMENT BILL, 2023

Context:

The Offshore Areas Mineral (Development and Regulation) Amendment Bill 2023 to amend the offshore areas mineral law was introduced in Lok Sabha.

About the bill:

The bill, prepared by the **Ministry of Mines**, seeks to amend the Offshore Areas Mineral (Development and Regulation) Act **2002**, to allow auction of minerals mined offshore.

Purpose behind amending the 2002 Act:

- **To mine rocks under the sea:** Under the original Act, not even a single rock could be not mined out from the sea bed mainly due to pending litigations.
 - Hence, the Bill allows the use of the national wealth in the sea for the use of the people of the country.
- **To provide an auction of minerals mined offshore:** The original Act does not allow the auction of such minerals.
- **To facilitate private sector participation:** In the mining of non-atomic minerals in India's territorial waters and continental shelf.
 - Meanwhile, the bill includes a provision to grant mineral concession without competitive bidding to Government companies or corporations.
 - However, private companies might be encouraged **to contribute cutting-edge technologies for the execution of complex mining operations.**
- **To improve transparency in the allocation of mineral resources:** With a provision for granting production leases only through auction, Mint reported.
- **To grant an exploration licence or production lease:** Only to a government company in case the quality of minerals in that particular area is equal to or above the threshold value decided by the Centre.
- **To propose area under a production lease:** Such areas shall comprise contiguous standard blocks and shall not exceed an area of 15 minutes latitude by 15 minutes longitude.
- **To promote ease of doing business:** A provision has been made for easy transfer of exploration licence, composite licence, or production lease.
- **To remove discretion in the grant of renewals:** The provisions for renewal of production leases have been removed and the period of production lease has been increased to 50 years.
- **To grant powers to the central government:** To revise the order made by the Administering Authority, issue directions and call for information from the Administering Authority, in the public interest.

What India gains from this Bill?

- As India aims to become a high-growth economy, it needs to harness its maritime resources to its optimal capacity.
- The bill encourages the participation of the **public-private sector.**
- **The private sector** will bring the necessary expertise and technology to explore and mine the mineral resources present in the EEZ.

7. THE CINEMATOGRAPH (AMENDMENT) BILL 2023

Context:

Rajya Sabha passed the Cinematograph (Amendment) Bill 2023, which cracks down on film piracy along with changing how movies are certified by the censor board.

The background:

- **The Cinematograph (Amendment) Bill 2019** was introduced in the Rajya Sabha proposing changes **related only to film piracy**.
- This Bill was referred to the Standing Committee on Information Technology, whose recommendations included **age-based categories of certification**.
- The revised Cinematograph (Amendment) Bill 2021 and the final version (2023 Bill) were drafted after consultations with industry stakeholders and the public.

About the 2023 Bill:

- Introduced by the Ministry of I&B, the Bill seeks to amend **the Cinematograph Act 1952**.
- **The 1952 Act authorises the Central Board of Film Certification (CBFC)** to require cuts in films and clear them for exhibition in cinemas and on television/ refuse the exhibition of a film.

Why does the Cinematograph Act 1952 need amendments?

- **To harmonise the law** with various executive orders, SC judgements, and other legislations like the Copyright Act, 1957 and the IT Act (IT) 2000.
- **To improve the procedure** for licensing films for public exhibition by the CBFC, and
- **To expand the scope** of categorisations for certification.
- **To curb the menace of piracy**, there was a huge demand from the film industry to address the issue of unauthorised recording and exhibition of films, which is causing them huge losses (Rs 20,000 crore annually).

Salient features	The Cinematograph Act 1952	The Cinematograph (Amendment) Bill 2023
Additional certificate categories	Under the Act, film may be certified for exhibition: without restriction ('U'); without restriction, but subject to guidance of parents or guardians for children below 12 years of age ('UA'); only to adults ('A'), or only to members of any profession or class of persons ('S').	The Bill adds certain additional certificate categories based on age. It substitutes the UA category with the following three categories to also indicate age-appropriateness : UA 7+, UA 13+ or UA 16+. This is in line with the Shyam Benegal committee's (2017) recommendations.
Separate certificate for television/other media		Films with an 'A' or 'S' certificate will require a separate certificate for exhibition on television, or any other media prescribed by the central government. The Board may direct the applicant to carry appropriate deletions or modifications for the separate certificate
Unauthorised recording and exhibition to be punishable	Provides for certain exemptions - use of copyrighted content without owner's authorisation in case of reporting of current affairs, etc.	In order to stop piracy , the Bill prohibits carrying out or abetting the unauthorised recording and unauthorised exhibition of films. Exemptions under the Copyright Act 1957 will also apply to the above offences . The above offences will be

		punishable with: imprisonment between 3 months and 3 years, and a fine between 3 lakh rupees and 5% of the audited gross production cost.
Validity of certificates	For 10 years	Perpetually/always valid
Revisional powers of the central government	Empowers the central government to examine and make orders in relation to films that have been certified or are pending certification. The Board is required to dispose of matters in conformance with the order.	Removes this power of the central government

Significance of the Bill:

- It will make the certification process **more effective**, in tune with the present times.
- By comprehensively curbing the menace of film piracy, **it will help in faster growth of the film industry and boost job creation in the sector.**

Concerns:

- **OTT platforms out of the purview of the Bill:** What if an uncut movie is broadcast on OTT?
- **Age-appropriate categories are self-regulatory:** It places the onus on parents and guardians to determine if the material is appropriate for viewers of a particular age range.

8. CAN A GOVERNOR DISMISS A MINISTER?

Context:

The Governor of Tamil Nadu (RN Ravi) has dismissed a Minister (V. Senthil balaji) in the Council of Ministers of TN and later backtracked on his decision keeping the dismissal order in abeyance.

About the minister and his dismissal:

- The minister was facing serious criminal proceedings in a number of cases of corruption and was arrested by the ED earlier.
- He was dismissed on the pretext that **he will adversely impact the due process of law**, including a fair investigation **that may eventually lead to the breakdown of the Constitutional machinery in the State.**

Criticism of this unprecedented act of the governor:

- Dismissing a Minister of a government which **enjoys an absolute majority** in the State legislature, **without the recommendation of the Chief Minister** of the State, is going to set a dangerous precedent.
- It has the **potential to destabilise State governments putting the federal and whole constitutional systems in danger.**

Power of the Governor to dismiss a minister:

The Government of India Act 1935: The appointment, summoning, determination of their salaries and the dismissal of Ministers shall be exercised by the Governor at his discretion.

What does the Indian Constitution say?

- **According to Article 164 of the Constitution**, the CM is appointed by the Governor (without any advice from anyone) and the individual Ministers are appointed by the Governor only on the advice of the CM.
- This implies that the **Governor cannot appoint an individual Minister according to his discretion.**
- **The Governor can dismiss a Minister only on the advice of the CM.**

The reason is simple:

- The CM alone has the **discretion to choose his Ministers**. He also decides who will not remain as a Minister in his Council.
 - This is a **political decision** of the CM, who is ultimately **answerable to the people**.
- **The Governor is a mere constitutional head** and there is no executive function which a Governor can perform independently under the Constitution. (BR Ambedkar)
 - **Article 163:** A Council of Ministers (led by the CM) shall assist and advise the Governor in the discharge of his duties, except when the Governor is compelled to exercise his discretion under this Constitution.
- **The pleasure doctrine is a formal act:** This has been **brought into the Constitution of India from the Government of India Act 1935**.
 - But these words simply refer to issuing the order of dismissal (by the Governor), but **only on the advice of the CM**.

Judicial clarification:

- **In Shamsher Singh vs State Of Punjab (1974)**, the SC declared the President and Governor as the custodians of all executive powers, who exercise these powers in accordance with the advice of their Ministers (except in exceptional situations).
- **In Nabam Rebia vs Deputy Speaker (2017)**, the SC reaffirmed the law laid down in Shamsher Singh and the discretionary powers of the Governor are limited to the postulates of Article 163(1).
- The Court also set aside the decisions in the **Mahabir Prasad Sharma (1968)** and **Pratapsing Raojirao Rane (1999)** cases, where it was held that the Governor can exercise power under Article 164 in an unfettered manner.

Conclusion:

In sum, the dismissal of a Minister of the TN Government by the Governor of the State without the advice of the Chief Minister is **constitutionally wrong**.

9. PALLIATIVE CARE IN INDIA

Context:

Access to palliative care in India continues to be abysmal.

What is palliative care?

- Palliative care is the **branch of medicine** focusing on **improving the quality of life and preventing suffering among those with life-limiting illnesses** like heart failure, kidney failure, certain neurological diseases, cancer, etc.
- Often misinterpreted as end-of-life care, **it focuses on the person as a whole**, not just the disease.

Objectives of palliative care:

- **To identify patients** at risk of over-medicalisation at the expense of quality of life and financial burden on the family.
- To address the **physical, psychological, spiritual, and social domains** of the health of people suffering from life-limiting diseases.
- It also includes **bereavement/grieving support** for the caregivers in case of the death of the patient.

How many need palliative care in India?

- **India has experienced a steep rise** in the burden of lifestyle-related non-communicable diseases.
- **Nearly 1.4 million people** are diagnosed with cancer in India every year while diabetes, hypertension, and respiratory diseases are also on the rise.

- **Estimated 7-10 million people** need palliative care sooner or later in the disease trajectory.

Status of palliative care in India:

- *Skewed availability of palliative care services* → largely been available at tertiary healthcare facilities in urban areas → **only to 1-2%** of those who require it in the country.
- **55 million people in India** are pushed below the poverty line every year due to health-related expenditures (over-medicalisation plays a significant role).

Steps taken:

- **A three-tier health system**, multiple national health programmes and schemes (like the Ayushman Bharat Health Insurance Scheme).
- **National Programme for Palliative Care (NPPC)**: It was announced in 2012, however, the lack of a dedicated budget has prevented the implementation of the programme since its inception.
- **National Programme for Health Care for the Elderly**: Launched in 2010, to provide accessible, affordable, and high-quality long-term, comprehensive, and dedicated care services to an Ageing population.
- **Some best practices**: NGOs like Pallium India, Karunashraya, and CanSupport are trying to fill the gap in palliative care in India.
 - However, NGOs have limitations on how much they can spend and that does not compare in any way with how much the government can spend.
- **National Programme for Prevention & Control of Non-Communicable Diseases (NP-NCD)**:
 - Launched in 2010 to counter the rising burden of non communicable diseases in the country.
 - The programme envisaged the provision of **promotive, preventive, and curative care** from primary to tertiary institutes.
 - **In order to strengthen palliative care**, the GoI revised the operational guidelines of NP-NCD.

What are the gaps in the guidelines?

- **Mention palliative care in synonymy with cancer only**: However, the need for palliative care was higher for non-cancer illnesses.
- **No mention of home-based palliative care services**: Since most patients who need palliative care are suffering from debilitating diseases, home-based care forms the ideal mode of healthcare delivery.
 - However, palliative care service delivery starts only from the district hospital in the revised guidelines.
- **No mention of paediatric palliative care**: The guidelines skipped an opportunity to bring focus on children suffering from chronic diseases.
- **Linking of 11 programmes (including NPPC) to promote convergence**: The mechanisms of the linkage with a programme (NPPC) that has not yet been fully implemented are unclear.

Way ahead:

- **Broaden the sphere of palliative care** to include multiple diseases and services.
- **Palliative care needs to be integrated** into health systems at all levels.
- **Include palliative care along with curative treatment.**
- Increased focus should be given to the impact assessment of palliative care programmes.

Conclusion:

It is high time for India to realise the ongoing pandemic of non-communicable diseases and strengthen its palliative care services.

10. CRIMINALISATION OF POLITICS

Context:

The Association for Democratic Reforms (ADR) has approached the Election Commission of India (ECI) **seeking action against political parties** that fail to publish details of candidates' criminal antecedents as ordered by the Supreme Court.

Meaning of Criminalization of Politics:

The criminalisation of politics refers to the **phenomenon where individuals with criminal backgrounds or pending criminal cases** actively participate in **politics and hold positions** of power.

It signifies the **infiltration of criminal elements** into the political system, compromising the **integrity and functioning** of democratic institutions.

Status of Criminalization of Politics:

- Increase in the number of MPs with criminal charges: **In 2004, 24%** of parliamentarians had pending criminal cases, which **rose to 43% in 2019**.
- According to data compiled by the **Amicus Curiae**, **a total of 4,984 criminal cases** involving **legislators were pending** in various courts across the country as of 1st December 2021.
- In the 2019 Lok Sabha elections, **159 MPs had declared serious criminal cases against them**, including those of rape, murder, attempt to murder, kidnapping, and crimes against women.

Causes of Criminalisation of Politics:

Causes	Examples
Vote Bank Politics	Candidates and parties engaging in vote-buying and other illegal practices to secure votes
	Political leaders maintain close ties with criminal elements to mobilize support and win elections
Corruption	Politicians involved in bribery, embezzlement, and other corrupt practices for personal gains
	Misuse of power and resources for personal enrichment , leading to a culture of corruption in politics
Vested Interests	Voters prioritise caste, religion, or community affiliations over the criminal records of candidates
	Election of politicians with criminal backgrounds based on narrow community interests rather than merit or accountability
Muscle Power	Use of muscle power, intimidation, and violence to control elections and suppress opposition
	Politicians with criminal backgrounds employ “goondas” or hired muscle to influence voters and secure electoral victories
Money Power	Influence of black money, illegal funding, and mafia connections in financing election campaigns
	Politicians use illicit funds to buy votes, manipulate election outcomes , and sustain their political dominance
Weak Governance	Lack of stringent laws and regulations to deter criminal activities in politics
	Inadequate enforcement of election laws , allowing politicians with criminal records to participate and win elections

Impact of Criminalisation of Politics:

Impact	Description
Erosion of Democratic Values	Candidates with criminal backgrounds winning elections undermines the principles of free and fair elections, limiting voter choice
Weakening of Governance	Law-breakers becoming law-makers hampers effective governance
Compromised Integrity of Institutions	Normalizes corruption and erodes public trust in government
Increased Criminal Activities	Politicians involved in organized crime or protection rackets e.g., Recently deceased former MP Atiq Ahmed of Uttar Pradesh had several charges of being involved in Criminal activities
Social Disharmony	Violence and unrest due to the influence of criminal politicians, Political clashes and violence during elections
Deterioration of Public Perception	Decreased faith in the political system and public disillusionment led to lesser participation in the democratic process
Undermining the Rule of Law	Politicians involved in criminal activities create a culture of impunity
Hindrance to Development	Diversion of resources for personal gain rather than public welfare
Threat to National Security	Politicians with connections to terrorist groups or organized crime networks

Suggestions against the Criminalization of Politics:

Aspect	Summary
ADR Recommendation	ADR recommends permanent disqualification of candidates convicted of serious criminal offences from contesting elections. ADR has also asked the ECI to publish a list of defaulting parties.
Legal Aspects	Indian Constitution does not specify disqualification criteria due to criminality. Representation of Peoples Act 1951 (Section 8) disqualifies individuals punished with a jail term of more than two years from standing in elections for six years after the jail term has ended.
Law Commission	The 244th report (2014) recommends the disqualification of individuals with charges framed against them at least one year before the scrutiny of nominations for an offence punishable with a sentence of five years or more.
Government Initiative	The Union government started a scheme in 2017 to establish 12 special courts for a year to fast-track the trial of criminal cases against MPs and MLAs.
Supreme Court Judgements	Association for Democratic Reforms v. Union of India (2002): Candidates must declare criminal and financial records along with educational qualifications.

	Lily Thomas v. Union of India (2013): MPs or MLAs convicted of a crime and sentenced to a prison term of two years or more are disqualified from holding office. Public Interest Foundation v. Union of India (2019): Political parties must publish candidates' criminal records on websites, social media handles, and newspapers.
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Other suggestions:

- **State Funding of Elections:** Committees on electoral reforms, such as the Dinesh Goswami and Inderjeet Committee, recommend state funding of elections to reduce the use of black money and limit the criminalization of politics.
- **Strengthening Election Commission**
- Voters need to **remain vigilant and report any misuse of money**, gifts, or inducements during elections.
- **Proactive Role of the Judiciary:** Fast-tracking the judicial process can help eliminate corruption and criminal elements from the political system. It **requires a time-bound justice delivery** system, stronger actions by the Election Commission, and necessary amendments to relevant laws.
- Amending the Representation of Peoples Act (RPA) of 1951 to **disqualify individuals with pending serious criminal charges from contesting elections**.

Conclusion:

The criminalization of politics poses a serious threat to democracy and good governance. It undermines the principles of free and fair elections, affects the integrity of public servants, causes social disharmony, and erodes public trust in the government. Addressing this issue is crucial for the health and functioning of democratic systems.

About ADR:

Association for Democratic Reforms (ADR), an **electoral watchdog** established in 1999 by a group of professors from the Indian Institute of Management (IIM) Ahmedabad to pursue electoral reforms in India.

11. DELIMITATION COMMISSION

Context:

Recently, Delimitation Commission finalize the Delimitation Order for the Union Territory of Jammu & Kashmir.

Delimitation Commission of India

- The **Delimitation Commission of India, also known as the Boundary Commission of India**, is a commission established by the Indian government under the provisions of the Delimitation Commission Act.
- The commission's principal responsibility is to redraw the borders of the various assembly and Lok Sabha constituencies based on a recent census. During this practice, the representation from each state remains constant.
- The seats for SC and ST in a state, on the other hand, are adjusted by the census.
- Delimitation is the process of redrawing boundaries of Lok Sabha and State Assembly constituencies based on a recent Census to ensure that each seat has an almost equal number of voters.
- The last delimitation exercise took place in 1976. While the current boundaries were drawn based on the 2001 Census, the number of Lok Sabha and State Assembly seats remained frozen based on the 1971 Census.
- In 2002, the Constitution was amended to place a freeze on the exercise until the first Census conducted after the year 2026.
- The basic objective of this is a fair representation, fair geographical division for all the political parties, and to follow the motto of " **One Vote One Value.**"

Constitutional Provisions

- **Under Article 82**, the Parliament enacts a Delimitation Act after every Census.
- **Under Article 170**, States also get divided into territorial constituencies as per Delimitation Act after every Census.

12. MANIPUR VIOLENCE: WHAT IS A ZERO FIR AND WHY IT IS REGISTERED

Context:

First information report (FIR):

- The term first information report (FIR) is **not defined in the Indian Penal Code (IPC), Code of Criminal Procedure (CrPC), 1973, or in any other law**, but in police regulations or rules, information recorded under
- Section 154 of CrPC is known as First Information Report (FIR).
- Section 154 (—Information in cognizable cases) says that —every information relating to the commission of a cognizable offence, if given orally to an officer in charge of a police station, shall be reduced to writing by him or under his direction, and be read over to the informant; and every such information, whether given in writing or reduced to writing as aforesaid, shall be signed by the person giving it, and the substance thereof shall be entered in a book to be kept by such officer in **such form as the State Government may prescribe**.

What is a cognizable offence?

- A cognizable offence/case is one in which a police officer may, in accordance with the First Schedule of the CrPC, or under any other law for the time being in force, make an arrest without a warrant.
- In the First Schedule, —the word cognizable‘ stands for _a police officer may arrest without warrant‘; and the word non-cognizable‘ stands for _a police officer shall not arrest without warrant‘.

What is the difference between a complaint and an FIR?

- The CrPC defines a —complaint as —any allegation made orally or in writing to a Magistrate, with a view to his taking action under this Code, that some person, whether known or unknown, has committed an offence, but does not include a police report.¶
- However, an **FIR is the document that has been prepared by the police** after verifying the facts of the complaint. The FIR may contain details of the crime and the alleged criminal.
- In case of non-cognizable offences, an FIR under Section 155 CrPC, commonly called —NCR¶, is registered.
- No police officer shall investigate a non-cognizable case without the order of a Magistrate having power to try such case or commit the case for trial.¶

What is a Zero FIR?

- Unlike an FIR, which is restricted by jurisdiction, a zero FIR can be filed **in any police station**, regardless of whether the offence was committed under the jurisdiction of that particular police station. Whereas FIRs have serial numbers assigned zero FIRs are assigned the **number ‘0’**. Hence the name.
- After a police station registers a zero FIR, it has to transfer the complaint to a police station that has the jurisdiction to investigate the alleged offence. Once a zero FIR is transferred, the police station with the appropriate jurisdiction assigns it a serial number, thereby converting it into a regular FIR. The concept of a zero FIR is relatively new and was introduced on the recommendation of the Justice Verma Committee in the aftermath of the Nirbhaya gang rape case in 2012 to put a legal obligation on police to take quick action and prevent them from using the excuse of absence of jurisdiction.

What if the police refuse to register an FIR?

- If no FIR is registered, the aggrieved persons can file a complaint under Section 156(3) CrPC before a concerned court which, if satisfied that a cognizable offence is made out from the complaint, will direct the police to register an FIR and conduct an investigation.

13. DIRECTORATE OF ENFORCEMENT

Context:

Recently, Supreme Court declared the **third extension given to the Directorate of Enforcement (ED) chief invalid**.

More on news

- **SC upheld the amendment to the Central Vigilance Commission (Amendment) Act, 2021, Delhi Special Police Establishment (Amendment) Act, 2021, and the Fundamental (Amendment) Rules, 2021.**
 - Amendments allow the **tenures of Directors of the Central Bureau of Investigation and the ED a maximum of three annual extensions**.



- However, the SC ruled that the current **ED chief's term extension was unlawful** for **violating the mandate of the Supreme Court's 2021 judgment**, wherein the court had barred further extensions.

About the Directorate of Enforcement (ED)

- ED is a **multi-disciplinary organisation** mandated to investigate **economic crimes and violations of foreign exchange laws**.
 - Works under **the Department of Revenue, Ministry of Finance**.
 - It is **headquartered at New Delhi**.
- **Appointment of Director of ED**
 - ED director is appointed as per **provisions of the CVC Act 2003**.
 - **Tenure should be "not less than two years,"** and any **transfer has to be sanctioned by the appointing committee chaired by CVC**.
 - ✓ The mandatory two-year appointment period is **followed by a maximum of three annual extensions** under the Central Vigilance Commission Act of 2021.

Powers of the Directorate of Enforcement

- **Power to seize assets:** ED has the authority to **undertake "search and seizure" against any individual** based on information in the officer's possession and by establishing in writing exact "reasons to suspect".
- **Power to summon:** FEMA has empowered the ED to **hold an enquiry against any person/entity who is alleged to have committed a contravention** of the provisions of FEMA or rules and regulations made thereunder.

- Moreover, under **ED has the same power as a civil court** regarding discovery, inspection, production of evidence, summons, examining, issuing commissions, etc.
- **Power to arrest:** ED can **investigate and make arrests for violation of** the Prevention of Money Laundering Act (PMLA)2002 and FEMA 1999 without waiting for registration of a formal FIR by police.
- **Record Admissibility:** In 2022, the Supreme Court ruled that **statements recorded by ED officials can be admitted as evidence in court**, as they are not police officials and are **thus not subject to challenge on the grounds of being selfincriminatory**.
- **Recovery of Fines, Penalties and Arrears of Penalties:** ED can take necessary steps to recover fines, penalties, or arrears of penalties by the concerned person under the FEMA act.

Issues with the Directorate of Enforcement

- **Abysmal convictions rate:** From 2014-2022, ED's **conviction rate is as low as 0.5 per cent**.
- **Lack of transparency:** There is a **lack of clarity and transparency about ED's selection of cases to investigate**, which **exacerbates** perceptions of being used as a political tool by the ruling party.
- **Falling credibility:** **The image** of investigative agencies like ED, CBI, and SFIO has been tarnished by allegations of **corruption, lack of impartiality, and a close nexus with the political class**.
- **Lack of workforce:** ED needs more resources, **infrastructure, and workforce** to deal with rising complexities and economic offences.

Way forward

- **Enhancing capacity:** ED requires an increased workforce and proper training in modern technology to effectively address the surge in high-value money laundering, cybercrimes, and cryptocurrency-related cases.
- **Regulation:** The discretion exercised by ED under PMLA should be **guided by the rule of law** and must be transparent, non-arbitrary and based on facts of the case rather than politically motivated.
- **Reducing Pendency:** Measures such as Fast Track courts and special benches should be constituted to expedite the adjudication process.
- **Oversight Committee:** A committee should be constituted to **overlook and streamline the case selection process** based on objective criteria and to boost transparency in the functioning of the ED.
- **Awareness and Protection:** **Public awareness should be generated about the ED's role**, reform its image, and **encourage whistleblowers to come forward**.

14. NARI ADALATS

Context:

The Indian government is launching a **unique initiative to establish women-only courts** (known as Nari Adalats) at the village level as an **alternative dispute resolution forum** for issues such as domestic violence and property rights.

- The pilot project will start in **50 villages each in Assam and Jammu and Kashmir** in August and will later be expanded to the rest of the country.

Composition:

- The Nari Adalat of each village **would have 7-9 members** – half of which (Nyaya Sakhis [legal friends]) would be the elected members of the **gram panchayat and the other half women** with social standing like teachers, doctors and social workers – who would be nominated by the villagers.
- The **head of Nari Adalat called the Mukhya Nyaya Sakhi** [chief legal friend] will be chosen among the Nyaya Sakhis.

Tenure of Head: The tenure of the head will be **generally six months after which a new one will be selected**.

Aim: The courts aim to address individual cases, raise awareness about social schemes, and provide accessible and affordable justice through alternate dispute resolution, counselling, and grievance redressal.

Part of Mission Shakti: The initiative is part of the Sambal **sub-scheme of Mission Shakti** (Ministry of Women and Child Development), which focuses on strengthening women's safety, security, and empowerment.

- The scheme draws inspiration from the **Parivarik Mahila Lok Adalats**, which were run by the National Commission for Women until 2014-15 and addressed family and matrimonial disputes.

Implementation:

Collaboration between the Ministry of Women and Child Development, Ministry of Panchayati Raj, Ministry of Rural Development and Common Service Centres operated by the Ministry of Electronics and Information Technology.

INTERNATIONAL RELATIONS

1. ECOWAS

Context:

- West African nations imposed sanctions if Niger's coup leaders fail to reinstate ousted President Mohammed Bazoum within a week.
- The 15-nation ECOWAS bloc's response to the Sahel region's seventh coup of recent years came as crowds in Niger's capital Niamey burned French flags and stoned the former colonial power's mission, drawing tear gas from police.

About ECOWAS:

- It is a regional political and economic union of fifteen countries located in West Africa.
- Established in 1975, with the signing of the Treaty of Lagos.
- The goal of ECOWAS is to achieve —collective self-sufficiency for its member states by creating a single large trade bloc by building a full economic and trading union.
- It also serves as a peacekeeping force in the region.
- Considered one of the pillar regional blocs of the continent-wide African Economic Community (AEC).

ECOWAS includes two sub-regional blocs:

- The West African Economic and Monetary Union is an organisation of eight, mainly French-speaking states.
- The West African Monetary Zone (WAMZ), established in 2000, comprises six mainly English-speaking countries.

Sahel region of Africa

- It is a semi-arid region of western and north-central Africa extending from Senegal eastward to Sudan.
- It forms a transitional zone between the arid Sahara (desert) to the north and the belt of humid savannas to the south.
- The Sahel stretches from Senegal on the Atlantic coast, through parts of Mauritania, Mali, Burkina Faso, Niger, Nigeria, Chad and Sudan to Eritrea on the Red Sea coast.

CAN SANCTIONS WORK?

- Similar sanctions were imposed by ECOWAS on Mali, Burkina Faso and Guinea following coups in those countries in the past three years.

- Although the financial sanctions led to defaults on debt - in Mali in particular - such measures have tended to hurt civilians more than the military leaders who seized power in some of the world's poorest countries, political analysts say. Timelines to restore civilian rule have been agreed in all three countries, but there has been little progress implementing them.

Why Niger is important?

- Niger has been a key ally in Western campaigns against insurgents linked to al Qaeda and Islamic State in the Sahel, and there are concerns that the coup could open the door to greater Russian influence there. Thousands of French troops were forced to withdraw from neighbouring Mali and Burkina Faso following coups there.
- Niger is one of the poorest countries in the world, receiving close to \$2 billion a year in official development assistance, according to the World Bank.

2. KERCH BRIDGE

Context:

The Kerch Bridge, linking the Russian mainland to the Crimean Peninsula, suffered an attack by Ukrainian sea drones, leading to retaliatory actions by Russia.

About Kerch Bridge

- The **Kerch Bridge**, across the Kerch Strait, is 19 km long and has two parallel rail and roadways.
- It was **opened in 2018 by Russian President Vladimir Putin** with great fanfare, four years after Russia annexed Crimea from Ukraine through a contested referendum.
- It is also a symbol of Russia's control over Crimea, annexed in 2014.
- It holds symbolic importance for Russia, as it provides direct connectivity between the mainland and the annexed Crimea.

Significance of the Kerch Bridge for Russia

- **Establishing Connectivity:** Following the annexation of Crimea in 2014, the bridge was constructed to secure a —land bridge— between mainland Russia and Crimea.
- **Logistical Supply Link:** The bridge plays a critical role in facilitating logistical supplies to Russian troops in southern Ukraine.
- **Strategic Vulnerability:** The bridge remains within range of Ukrainian fire, making its security vital for Russia's military operations.



3. INDIA-AFRICA TIES

Context:

India's rise as a global player is inevitably linked to the kind of partnership it enjoys with Africa.

India-Africa ties - Background:

- India enjoys **historical, political, economic, and cultural connections** with the African continent for a long back.
- India's links with the struggle for freedom and justice in South Africa date back to the period during which **Mahatma Gandhi started his Satyagraha movement in South Africa.**
- India worked consistently to put the issue of apartheid on the agenda of the **UN, NAM, and other multilateral organisations.**

India-Africa ties - Current Status:

- **India's Technical and Economic Cooperation Programme (ITEC)** has been a useful medium for promoting cooperation in the development of human resources.
- In the past 15 years and especially since 2014, India-Africa relations have developed steadily **but more progress is achievable.**
- In this context, the **Africa Expert Group (AEG)** - established by the Vivekananda International Foundation, presented the '**India-Africa Partnership: Achievements, Challenges and Roadmap 2030**'.



Highlights of the India-Africa Partnership (Achievements, Challenges and Roadmap 2030):

- **Transitions unfolding in Africa:** It is slowly heading toward **regional integration** and is devoted to **democracy**, peace, and progress, even as countries (like Ethiopia, and Sudan) continue to battle insurgency, ethnic violence, and terrorism.
- **Sharpening competition among external powers:** Countries such as China, the US, Japan, Türkiye, and UAE are competing for strengthening their relations with Africa to ensure
 - Market access,
 - Gain energy and mineral security, and
 - Increase political and economic influence.

Challenges for India:

- No clear Strategy/Vision
- Africa is not the prime focus of India
- **Competing powers in Africa:** For example, China enjoys consistent and robust relations with the continent since 2000 and is currently its biggest economic partner.
 - China's role in Africa is recognised as 'the infrastructure developer', 'the resource provider', and 'the financier.'

Recommendations to strengthen India-Africa ties:

Political and diplomatic cooperation:

- It should be strengthened by **restoring periodic leaders' summits** through the medium of the **India-Africa Forum Summit** (not held since 2015).
- **A new annual strategic dialogue** between the chairperson of the African Union (AU) and India's External Affairs Minister should be launched.
- **Forging consensus among G-20 members** on the AU's entry into the G-20 as a full member.
- The MEA **should have a secretary exclusively in charge of African affairs.**

Defence and security cooperation:

- The government needs to **increase the number of defence missions deployed in Africa**, widen the footprint of maritime collaboration, and expand lines of credit to facilitate defence exports.
- More can be done to enhance cooperation on security and defence issues like **counter-terrorism, cyber security and emerging technologies.**

Economic and development cooperation:

- India-Africa trade of **\$98 billion in FY22–23** can go up if access to finance through the creation of an Africa Growth Fund (AGF) is ensured.
- **A special package of measures –**
 - To improve project exports and build up cooperation in the **shipping domain** has been suggested.
 - To promote trilateral cooperation and deepen S&T cooperation.

Socio-cultural cooperation:

- It should be increased through **greater interaction** between universities, think tanks, civil society and media organisations in India and select African countries.
- **Setting up a National Centre for African Studies** will be the right step.
- **ITEC and Indian Council for Cultural Relations (ICCR) scholarships** awarded to Africans should be named after famous African figures.
- **Visa measures** for African students should be liberalised and should also be given work visas for short periods.

Way ahead:

- A special mechanism for implementing the **'Roadmap 2030'**.
- Clear Strategy for African Development
- Continue the current focus on capacity building
- Harness Indian civil society organisations, NGOs, and the Indian diaspora
- Promote development-friendly private investments
- Timely completion of projects
- Address concerns about the academic experience in India
- Improve the experiences of Africans in India

Conclusion:

- To cater to the needs of a large continent like Africa, India must build partnerships with other countries along the lines of the **Asia-Africa Growth Corridor** - an economic cooperation agreement between India, Japan and multiple African countries.
- India has a substantive partnership with Africa and a rich fund of **goodwill**, but it is essential for New Delhi to review its Africa policy periodically and **place a razor-like focus on its implementation**.

4. SHANGHAI COOPERATION ORGANISATION (SCO) SUMMIT

Context:

The recent Shanghai Cooperation Organisation (SCO) summit, chaired by Prime Minister Narendra Modi, marked India's first time hosting the event as a full member.

Outcomes of the Summit (New Delhi Declaration):

Outcomes	Significance
Inclusion of Iran as the ninth member of the SCO	Expansion of the SCO's membership, bringing in additional regional dynamics. Note: Other 8 members of SCO are- China, India, Kazakhstan, Kyrgyzstan, Pakistan, Russia, Tajikistan and Uzbekistan
Agreement on countering radicalization	Cooperation among member states to address activities of terrorist, separatist and extremist groups, preventing the spread of religious intolerance, aggressive nationalism, ethnic and racial discrimination, xenophobia etc
Joint statement on digital transformation	Sharing of expertise and cooperation in digital technologies and payment systems
SCO Year of Environment	Members agreed to declare 2024 as the SCO Year of Environment.
Criticism of non-UN sanctions	Rejection of non-UN sanctions that negatively impact other countries
Exploration of national currencies for payments	Potential reduction of dependence on international dollar-based payments
India's Initiatives	
Five new pillars of Cooperation within SCO	Pillars include: Startups and Innovation, Traditional Medicine, Youth Empowerment, Digital Inclusion, and Shared Buddhist Heritage
Engagement with People	Enhancing engagement among people through SCO Millet Food Festival, Film Festival, International Conference on Shared Buddhist Heritage etc.
Culture	Varanasi was declared the first tourism and cultural capital of SCO
India's abstention from endorsing China's Belt and Road Initiative (BRI)	Reflects concerns over China's influence and projects in Pakistan-occupied Kashmir

Analysis:

India's decision to **join the SCO** was driven by its **economic significance**, regional security concerns, and the opportunity to engage with Central Asian markets and resources. However, the SCO summit initially planned as an **in-person event but later turned into a virtual summit**, may have been impacted by various factors, including the Prime Minister's U.S. State visit and concerns over tensions with China and Pakistan. With India's SCO chairpersonship ending, it is feared, there may be a sense of diminishing returns from its engagement with the SCO

Conclusion:

Despite the constraints of SCO, the present outcomes highlight the significance of India's chairing of the summit, the expansion of SCO membership, cooperation on key issues, and India's stance on regional security concerns

5. INDIA SIGNS THE US-LED ARTEMIS ACCORDS

Context:

During the Indian PM's state visit to the US, India signed the Artemis Accords.

About the Artemis Accords:

- They are a **US-led international partnership** (introduced in 2020 by NASA) - signed by 27 countries till now, including Japan, Australia, the UK, France, and Canada - on planetary exploration and research.
- They are a **set of 13 principles**, closely linked to the 2018 US **Artemis Program**, which aims to return astronauts to the **lunar surface**, build a space camp there, and carry out deep space exploration.
- They are a **non-binding bilateral arrangement** based on the political understanding of the participating countries.
- This means the Accords **do not have the status of a multilateral treaty or a contract** nor does it set out legal principles or rules by any stretch of imagination



Why were the Artemis Accords created by the USA?

- **The US domestic law** provides rights to private citizens to extract, own and bring back such asteroid or lunar resources they might commercially exploit.
- **However, such a law is inconsistent with the Outer Space Treaty**, which prohibits national appropriation of space resources by claims of sovereignty, by use, by occupation or by any other means.
- Therefore, the Accords enable the US to **seek international support and partners** for advancing the 2018 US Artemis Program, which aims **off-Earth exploration and commercial mining of planetary resources**.
- It is important to note that the **Accords document does not specifically refer** to the commercial exploitation or mining of lunar and asteroid resources.

How can signing the Artemis Accords benefit India?

- **The Accords could fast-track India's human space flight capabilities** and ambitions cost-effectively and via collaborations.
- **The Accords could help catalyse a strong NASA-ISRO collaboration.** For example, **India can contribute to the Gateway** - an upcoming NASA-led international lunar orbital station for Artemis astronauts. In return, India can get a crew seat.

- **This could help India shape the governance** of the extraction (of prospecting resources on the Moon) as and when it becomes a reality.
- **The Indo-Japanese LUPEX Moon rover mission** - targeted for launch in the 2026-2028 timeframe - will certainly feed into the critical data on which future crewed Artemis missions will depend.

Challenges for India:

- ISRO's upcoming space science missions have been facing delays due to **budget shortages**.
- The signing of the Accords means **India has completely sided with the West** regarding space exploration.

India's new space policy:

- It explicitly encourages ISRO to undertake missions on **in-situ resource utilisation, celestial prospecting, and other aspects of extra-terrestrial habitability**.
- This would allow India to sufficiently leverage the Accords for helping shape its future on the Moon.

Conclusion:

Space is all about geopolitics and international cooperation and mutual understanding are key pillars of international relations for every country. So, for India, it's not a case of siding with the US but to fulfil its national interest.

6. INDIA- FRANCE RELATIONSHIP

Context:

Indian PM will be the **Guest of Honour at France's Bastille Day parade in Paris**. The visit coincides with **25 years of strategic partnerships with France**.

Significance of the PM's visit to France:

- **Increasing investment:** The visit will help diversify France and European economic ties away from China
- **Boosting regional security:** The visit will help boost India's comprehensive national power and help India stabilise the balance of power in Asia

Current analysis of India-France relations:

- **Characteristics:** The relationship between the two countries is characterized by strategic autonomy, independent foreign policies, and a shared vision of a multipolar world.
- **Security objectives prominent:** Unlike Indo-German relations, which are focused on trade, India and France prioritize security objectives. o France has helped **India diversify its pool of arms suppliers beyond Russia and the US**, especially when sanctions were imposed on India in the past.
- **Balancing China:** The relationship aims to **balance China's influence** in the Indian Ocean and have a shared concern about Chinese expansionism.
- **Multi-dimensional:** The partnership between India and France has seen advancements through joint strategic visions, logistic support agreements, and military exercises in recent times

Dimensions of India-France Relations:

Dimensions	Description	Examples
Historical Relations	India and France had trade and cultural exchanges that can be traced back thousands of years. In the modern era, diplomatic relations between India and France were formally established in 1947 after India gained independence.	
Strategic Dialogue	France became the first country to engage in a Strategic Dialogue with India	

	following India's nuclear tests in 1998 . Unlike other nations, France chose not to impose bilateral sanctions on India and instead showed a deeper understanding of India's security concerns.	
Defence Cooperation	France was the second largest defence supplier for India in 2017- 2021.	• Induction of French Scorpene submarines and Rafale fighter jets • Joint military exercises like Varuna (navy), Garuda (air force), and Shakti (army). • Joint manufacturing: Tata Group tied up with Airbus to manufacture C-295 tactical transport aircraft in Vadodara, Gujarat.
Economic Cooperation	Collaboration in sectors like manufacturing, infrastructure, and technology	• Bilateral trade of over USD 12 billion in 2021-22. • France is the 11th largest foreign investor in India.
Civil Nuclear Cooperation	India and France inked a civil nuclear pact (2008) making France the first country to have such an agreement after the USA	• France's support in building six EPR (European Pressurized Reactors) nuclear power reactors (at Jaitpur, Maharashtra) Joint research and development in nuclear energy
Cooperation at International Forum	Collaboration on global issues and joint efforts in multilateral forums.	• France's support for India's bid for permanent membership in the UN Security Council and Nuclear Suppliers Group. • Alignment on climate change, sustainable development, and counter-terrorism. • Joint initiatives like the International Solar Alliance.
Maritime Cooperation	Partnership in ensuring a free, open, and inclusive Indo-Pacific region.	• India, France, UAE Trilateral Initiative is aimed at ensuring maritime domain awareness and security from the east coast of Africa to the far Pacific. • Indo-Pacific Trilateral Development Cooperation Fund (between India and France, September 2022)
Space Cooperation	Collaboration in space research, satellite technology, and exploration.	• Joint working group between ISRO and CNES for enhanced cooperation e.g., planned Joint Mars Mission • Collaboration on satellite launches, Earth observation missions, and space debris management • Planned Joint Earth Observation Mission
Education and Cultural Exchanges	Promoting educational, academic, and cultural exchanges between India and France.	• The agreement on mutual recognition of academic degrees and the follow-on Knowledge Summit
Environmental Cooperation	India and France launched the Indo-French Year of the Environment in January 2021 to strengthen cooperation on environmental issues. Indo-French initiatives on green hydrogen, blue economy , and environmental research.	

Challenges in the relationship:

India and France **do not have Free Trade Agreement**, which limits the potential for increased trade and economic cooperation. Also, there is a **trade imbalance in favour of France** (France exporting more to India). Also, France has many times expressed concern on India's stance at WTO, Climate summit and on **India's protection of intellectual property rights**

Conclusion:

While military cooperation remains important, the Indo-French relationship could expand beyond arms sales. Initiatives like the International Solar Alliance and **exploring minilateral and multilateral cooperation in the Indo-Pacific** could bring additional dimensions to their partnership.

7. INDIA'S ATTEMPT TO EXPAND G20 TO INCREASE GLOBAL SOUTH IMPRINT

Context:

G20 negotiators led by Indian Sherpa (Amitabh Kant) are discussing the draft "Leader's Declaration" for the Summit in Sept 2023.

What is the Indian government aiming for? Expand the imprint of the Global South in the G20.

How? India has inserted (in the revised draft) the proposal for the **African Union (AU) membership** in the G20.

Other additions in the revised draft are:

- Gender-led development,
- Digital public infrastructure and
- Green hydrogen transitions.

Significance of India's Push to Expand G20:

- **Divert attention from the global polarisation:** Over the war in Ukraine, that is holding up a joint statement at all India-led G20 events.
- **Will make G20 a truly global body:** With the AU joining the G20, **90% of the global population will be represented** by the grouping.
 - Also, African countries are among the **emerging market regions with the fastest-growing economies**

What is aiding India's push for G20 expansion?

- **The potential of developing nations:** The G20 hosted by India represents the first time that developing countries form the **troika** (hosts for 2022-2023- 2024) of Indonesia-India-Brazil.
- **Over-representation of Europe in G20:** A quarter of the grouping is made up of the UK, France, Germany, Italy and the EU (Spain is a permanent special invitee).

Challenges towards adding AU in the G20:

- **Competition from other contenders:** These include regional groupings like the ASEAN and the Community of Latin American and Caribbean States (CELAC), as well as countries like the Netherlands, Spain and Switzerland.
- **Paralyse decision-making:** Inducting the AU will also mean an exponential rise in the number of countries that can hold up the consensus over a G20 document, which is already paralysed by the Ukraine war.

Conclusion:

As India's legacy as G20 President is already hanging between whether it can forge a joint statement or gather all G20 leaders under one roof, the inclusion of African countries may prove to be compensation.

The African Union (AU):



- It is a continental body consisting of the 55 member states that make up the countries of the African Continent.
- It was officially launched in **2002 as a successor to the Organisation of African Unity (OAU, 1963- 1999).**

8. STRENGTHENING MULTILATERAL DEVELOPMENT BANKS: THE TRIPLE AGENDA

Context:

An Independent Expert Group (IEG) that was commissioned by the Indian G20 Presidency has released the ‘Strengthening Multilateral Development Banks: The Triple Agenda’ report.

What are Multilateral Development Banks (MDBs)?

- An MDB is **an international financial institution** consisting of member nations from developed and developing countries.
- **MDBs provide loans and grants** to member (especially poor/ developing) nations **to fund projects that support their social and economic development.**

The emergence of MDBs:

- **At the end of WWII**, delegates from 44 countries met in Bretton Woods (US) to agree upon a series of new rules for international cooperation and reconstruction.
- This led to the creation of the **IMF and World Bank Group (WBG)** in 1944.
- The WB was responsible for providing **financial assistance for the post-war reconstruction and economic development** of the less developed countries.
- **While the WBG is the oldest and the largest MDB**, there are ~15-16 prominent MDBs and Regional development banks (RDBs) today.

The role played by MDGs:

- MDBs have a key role to support the needed reforms and resources.
- **They work with governments and the private sector** to create the conditions for investment and transformation.
- They are the most effective institutions **to provide low-cost, long-maturity financing**, to mitigate and share risks (in the most efficient way) faced by private investors.

Challenges faced by MDBs:

- **No longer suited to address the emerging global challenges:** They lack resources, cultural ethos, methods and will to address the challenges like **climate change and pandemics**.
- **They are in a state of stagnation:** Trapped in their procedures, approach and methods of work and resistant to structural changes.
- Therefore, to transform development, the MDBs will have to transform themselves.

Triple agenda to harness the potential of MDBs:

The three elements of this agenda are:

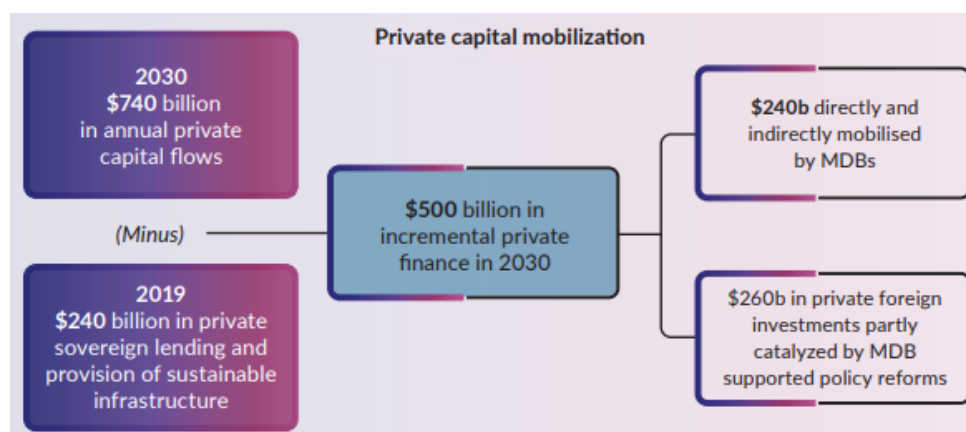
- Adopting a triple mandate of eliminating extreme poverty, boosting shared prosperity, and contributing to global public goods;
- Tripling sustainable lending levels by 2030; and
- **Creating a third funding mechanism** which would permit flexible and innovative arrangements for purposefully engaging with investors willing to support elements of the MDB agenda.

How can it be achieved?

- Effective implementation of the triple agenda **requires important changes in the ways that MDBs operate**.
- **MDBs must become effective agents** in all developing countries for integrating development and climate agendas.
- **They must work with governments and the private sector** to reduce, share and manage risks and thereby bring down the cost of capital.
- **They must change their culture**, become more client-responsive, and take more risks.
- **Timelines** for project preparation should be shrunk and **procedures** rationalised.
- They must also increase the scale and nature of their

Way ahead:

- One of the greatest opportunities for transformation is in **MDB's engagement with the private sector**.
- **The MDB system must become more than the sum of its individual entities**. Their strength has come from **heterogeneity**, which permits innovations in different parts of the system.



Conclusion:

While the reform agenda needs to be decisively put on track, there is a need for an independent monitoring group to encourage the full implementation of recommendations and report to G20 on progress.

ECONOMY

1. 6 YEARS OF GST

Context:

With the implementation of a Goods and Services Tax (GST) on July 1 2017, India took a huge step towards modifying its indirect taxation system.

About Goods and Services Tax (GST):

Types Of GST in India		Valid On	Collected By	VOTING STRENGTH Centre 1/3 VOTE IN COUNCIL States 2/3 WEIGHT IN COUNCIL DECISIONS NEED 75% VOTE SUPPORT	GST COUNCIL Chairperson Union finance minister Other Member From Centre Minister of state for finance Vice-chairperson One of the state finance ministers Members State finance ministers
1	CGST (<i>Central Goods and Services Tax</i>)	<i>Intrastate</i>	Central Government		
2	SGST (<i>State Goods and Services Tax</i>)	<i>Intrastate</i>	State Government		
3	ITGST (<i>Integrated Goods and Services Tax</i>)	<i>Interstate</i>	Central Government		
4	UTGST (<i>Union Territory Goods and Services Tax</i>)	<i>Union Territory (UT)</i>	Union Territory (UT Government)		

- It is an **indirect tax** (not directly paid by customers to the government) that came into effect on July 1, 2017, as a result of the **101st Amendment to the Indian Constitution**.
- It is imposed on both manufacturers and sellers of goods, as well as suppliers of services.
- For tax collection, it is divided into five tax slabs - **0%, 5%, 12%, 18%, and 28%**.

About GST Council:

- It is an **apex committee** to modify, reconciles or make recommendations to the Union and the States on GST, like the goods and services that may be subjected or exempted from GST, model GST laws, etc.

- **Article 279A** of the Indian Constitution empowers the President of India to constitute a joint forum of the Centre and States called the GST Council.

Need for GST:

- **The inclusion of several indirect taxes** at various levels of the supply chain **hampered the Indian tax system**.
- **This resulted in a complicated and fragmented tax framework** that included excise duty, service tax, VAT, central sales tax (CST), and other taxes.
- These led to tax **cascading (tax on tax)**, raising the entire tax burden on goods and services.
- Hence, the primary goal of GST is - **To simplify the tax system by substituting a single indirect tax for several indirect levies**
- Eliminating tax cascading by establishing a uniform tax structure success **but is still a new reform with the potential to witness phenomenal growth and harmonisation** in the coming years.
- **GST has shown immense promise**, reshaping the economy, and driving digitization while also confronting challenges and fraud.

2. INTERNATIONALISATION OF RUPEE: WHY AND WHAT ARE THE BENEFITS?

Context:

According to the RBI, with India remaining one of the fastest-growing countries and showing remarkable resilience in the face of major headwinds, **the rupee has the potential to become an internationalised currency**.

What does internationalisation of the rupee mean?

- **Internationalisation** is a process that involves **increasing the use** of the rupee in **cross-border** transactions - between residents in India and non-residents.
- It involves **promoting the rupee for import and export** trade and then other **current account transactions**, followed by its use in **capital account transactions**.
- Currently, the **US dollar, the Euro, the Japanese Yen**, and the pound sterling are the leading reserve currencies in the world.
- **China's** efforts to make its currency renminbi has met with only limited success so far.

Prerequisites:

The internationalisation of the currency, which is closely interlinked with the -

- Nation's economic progress.
- Further opening up of the currency settlement and a strong swap and forex market.
- **Full convertibility of the currency on the capital account** (allowing free movement of local financial investment assets into foreign assets and vice-versa) and
- Cross-border transfer of funds without any restrictions.

Current scenario:

- **India** has allowed only full convertibility on the current account as of now.
- **The US dollar** is said to enjoy an 'Exorbitant Privilege', supported by a range of factors, including the size of the US economy, a history of macroeconomic stability and currency convertibility, lack of viable alternatives, etc.
- **Chinese Renminbi** is the obvious challenger to the US dollar dominance. However, its ability to rival the US dollar will depend on the –
 - **Chinese economy** and its financial system to demonstrate the same long-term resilience,

- **Integrity, transparency, openness and stability**, which are characteristics of the US economy.

The RBI recommendations

Short term	Long term
Adoption of a standardised approach for examining the proposals on bilateral and multilateral trade arrangements	The inclusion of the rupee in IMF's SDR (special drawing rights) The SDR is an international reserve asset created by the IMF to supplement the official reserves of its member countries. The value of the SDR is based on a basket of five currencies - the U.S. dollar, the euro, the Chinese renminbi, the Japanese yen, and the British pound sterling.
Encouraging the opening of the rupee accounts for non-residents both in India and outside India	
Integrating Indian payment systems with other countries for cross-border transactions	
Strengthening the financial market by fostering a global 24×5 rupee market and recalibration of the FPI (foreign portfolio investor) regime	
A review of taxes on masala (rupee-denominated bonds issued outside India by Indian entities) bonds, international use of Real Time Gross Settlement (RTGS) for cross-border trade transactions and inclusion of Indian Government Bonds in global bond indices	

These recommendations are significant:

- **In light of the economic sanctions** imposed by the US on Russia for invading Ukraine and the growing clamour for finding an alternative to the US dollar for international transactions.
- While reserves help manage exchange rate volatility and project external stability, **they impose a cost on the economy.**

Advantages of internationalisation of the rupee:

- Cross-border transactions **mitigate currency risk** for Indian businesses by protecting them from currency volatility. This will - **Reduce the cost of doing business** and improve the chances for Indian businesses to grow globally.
- **Add weight to the Indian economy** and enhance India's global stature and respect.
- Internationalisation of the rupee **reduces the need for holding foreign exchange reserves.**
- Reducing dependence on foreign currency **will make India less vulnerable to external shocks.**

Challenges:

- **Very little international demand:** The daily average share for the rupee in the global foreign exchange market is ~1.6%, while India's share of global goods trade is ~2%.
- **India does not permit full capital account convertibility:** It is driven by past fears of **capital flight** (out-flow of capital from India due to monetary policies/ lack of growth) and exchange rate volatility, given significant current and capital account deficits.

Reforms needed:

- **Rupee must be made more freely convertible**, with a goal of full convertibility by 2060.
- **The RBI should pursue a deeper and more liquid rupee bond market**, enabling foreign investors and Indian trade partners to have more investment options in rupees.
- **Indian exporters and importers** should be encouraged to invoice their transactions in rupee.
- **Currency swap agreements** (as with Sri Lanka) would further allow India to settle trade and investment transactions.
- **Tax incentives to foreign businesses** to utilise the rupee in operations in India would also help.
- **The Tarapore Committees'** (in 1997 and 2006) recommendations must be pursued including - A push to reduce fiscal deficits lower than 3.5%,
- A reduction in gross inflation rate to 3%-5%, and
- A reduction in gross banking non-performing assets to less than 5%.

3. TAX ON ONLINE GAMING: WHAT THE GST COUNCIL'S DECISION SAYS, ITS IMPLICATIONS

Context:

The Goods and Services Tax (GST) Council, in its 50th meeting, decided to levy a uniform 28% tax on full face value for online gaming, casinos and horse racing.

Decision to levy 28% uniform tax on online gaming:

- Earlier, the ministerial panel had discussed the option of levying tax on gross gaming revenue or platform fee - the charge paid to avail the gaming services, **but this did not find favour.**
- **The uniform levy of 28% tax will be applicable on –**
 - **The face value** of the chips purchased in the case of casinos,
 - The full value of the bets placed with the bookmaker/totalisator in the case of horse racing, and
 - The full value of the bets placed in the case of online gaming.
- **The government will bring in amendments to the GST-related laws** to include online gaming and horse racing as taxable actionable claims - goods under the CGST Act, 2017.
- So far, lottery, betting, and gambling were classified as actionable claims.

How will the tax work in real life?

- At present, **most gaming companies were paying a tax of 18%** applicable on the platform fees.
 - **Let us assume that the platform fee is 10%.** So, for every Rs 100 deposited in the game, the platform makes Rs 10 and 18% GST on Rs 10 means that effectively, on every Rs 100, the GST is Rs 1.8.
- **Under the new structure**, a GST of 28% will be applicable on the entire face value of the bet or the consideration paid, and not the platform fee.
- Meaning that for every Rs 100 deposited, the GST on it will be Rs 28 - **an increase of around 15.6 times.**

How big is the online gaming market in India?

- The industry grew at a **CAGR of 38% between 2017- 2020**, as opposed to 8% in China and 10% in the US.
- It is expected to grow at a **CAGR of 15% to reach Rs 153 billion in revenue by 2024.**
- India's percentage of **new paying users (NPU)** in gaming has been the fastest-growing in the world.
- **Transaction-based games'** revenues grew 26% in India, with the number of paying gamers increasing by 17% from **80 million in 2020 to 95 million in 2021.**

Who gets impacted?

- Online gaming is perhaps the only segment of the internet economy that has multiple highly profitable companies. **For example**, Dream11 had a net profit of Rs 143 cr on revenues of Rs 3,841 crore in FY22.
- The decision has been **applied indiscriminately** to gaming and gambling platforms. This includes companies that have spent years in **lobbying efforts to create a distinction between a game of skill and a game of chance**/gambling platforms.

How have online gaming companies reacted?

- The government's move was "**extremely unfortunate**" as it will lead to "**a nearly 1000% increase in taxation.**"
- The GST Council's decision is "**unconstitutional, irrational, and egregious**" and will wipe out the entire Indian gaming industry and lead to **lakhs of job losses**.
- The only people benefitting from this will be **anti-national illegal offshore platforms**.

The government's intention:

- **The moral question:** The industry cannot be encouraged to such an extent over essential goods and services.
- **Gaming a speculative and addictive activity:**
 - Every week there is a story of **suicides** because of debts incurred due to online gaming.
 - The addiction has **mainly impacted children and teenagers** and along with higher taxes, the government needed to put in restrictions on the basis of age, income etc.

About Goods and Services Tax (GST):

- It is an indirect tax (not directly paid by customers to the government) that came into effect on July 1, 2017, as a result of the 101st Amendment to the Indian Constitution.
- It is imposed on both manufacturers and sellers of goods, as well as suppliers of services.
- For tax collection, it is divided into five tax slabs - 0%, 5%, 12%, 18%, and 28%.

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- Article 279A of the Indian Constitution empowers the President of India to constitute a joint forum of the Centre and States called the GST Council

4. TAX CHALLENGES ARISING FROM THE DIGITALISATION OF THE ECONOMY

Context:

138 members of the OECD/G20 Inclusive Framework on Base Erosion and Profit Shifting (BEPS) - representing over 90% of global GDP - agreed to an Outcome Statement.

BEPS:

- **It refers to corporate tax planning strategies** used by multinationals to shift profits from higher-tax jurisdictions to lower or no-tax jurisdictions.
- The OECD defines BEPS strategies as **exploiting gaps and mismatches in tax rules**. It erodes the tax base (costing countries USD 100-240 billion in lost revenue annually) of the higher-tax jurisdictions.
- **As developing countries** have a higher reliance on corporate income tax, they suffer from BEPS disproportionately.
- Working together within the **OECD/G20 Inclusive Framework on BEPS**, over 135 countries and jurisdictions are collaborating on –
 - The implementation of measures to tackle tax avoidance,
 - Improving the coherence of international tax rules and

- Ensuring a more transparent tax environment.

The objective of the Outcome Statement:

It delivered a package to further implement the Two-Pillar Solution to Address the Tax Challenges Arising from the Digitalisation of the Economy.

Two-Pillar Solution/ Global Anti-Base Erosion (GloBE) rules: These rules were agreed upon in 2021 by 137 countries and jurisdictions under the OECD/G20 Inclusive Framework on BEPS

KEY ELEMENTS OF THE TWO-PILLAR SOLUTION

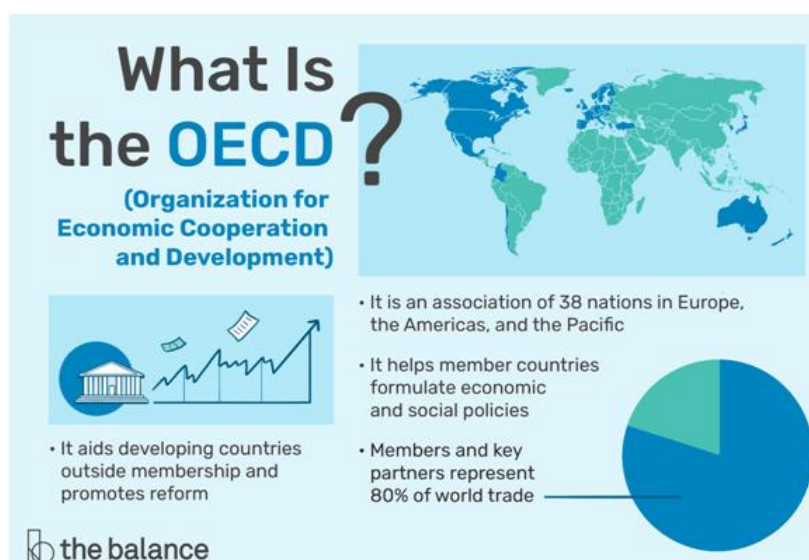
Pillar One	Pillar Two
Taxing rights over 25% of the residual profit of the largest and most profitable MNEs would be re-allocated to the Jurisdictions where the customers and users of those MNEs are located	Globe rules provide a global minimum tax of 15% on all MNEs with annual revenue over 750 million euros
Tax certainty through mandatory and binding dispute resolution, with an elective regime to accommodate certain low-capacity countries	Requirement for all jurisdictions that apply a nominal corporate income tax rate below 9% to interest, royalties and a defined set of other payments to implement the “subject to Tax Rule” into their bilateral treaties with developing inclusive Frame work members when requested to, so that their tax treaties cannot be abused.
Removal and standstill of Digital Services Taxes and other relevant, similar measures	Carve-out to accommodate tax incentives for substantial business activities
The establishment of a simplified and streamlined approach to the application of the arm’s length principle in specific circumstances, with a particular focus on the needs of low capacity countries.	

Significance of 2-Pillar Solution:

- It will define the multinational enterprises (MNEs) within the scope of the minimum tax.
- It will set out a mechanism for calculating an MNE’s effective tax rate on a jurisdictional basis.
- It will impose the top-up tax on a member of the MNE group in accordance with an agreed rule.
- **It will provide stability** for the international tax system, making it fairer and work better in an increasingly digitalised and globalised world economy.

The Summary of the Outcome Statement:

- **A text of a Multilateral Convention (MLC)** developed by the Inclusive Framework, which allows jurisdictions to reallocate and exercise a domestic taxing right over a portion of MNE residual profits
- **A proposed framework** for the simplified and streamlined application of the **arm’s length principle**.
- **The Subject-to-Tax Rule (STTR)** together with its implementation framework, will enable developing countries to update bilateral tax treaties to “tax back” income.
- **A comprehensive action plan** will be prepared by the OECD to support the swift and coordinated implementation of the Two-Pillar Solution.



- It is an **intergovernmental organisation** with **38** Member countries, founded in **1961** (under the Rome Treaties of 1957) to stimulate economic progress and world trade.
- It is a forum whose member countries describe themselves as **committed to democracy and the market economy**.

5. INDUSTRIAL CONCENTRATION IN INDIA

Context:

The biggest of India's big businesses seem to be thriving

Data regarding India's big businesses:

According to a former RBI Deputy Governor's report,

- **The share of assets** in the non-financial sectors owned by the **Big-5 business groups has risen** from 10% to 18% between 1991-2021.
- **Whereas the share of the next five has fallen** from 18% to less than 9%.

What causes this industrial concentration?

Functioning of markets: Given asset-income inequality and differential power among economic agents, markets do not promote competition but concentration and centralisation.

The dangers of such a rapid rise in industrial concentration:

- Stifles competition
- Contributes to inflation or profiteering, through the manipulation of costs and prices.
- **Influence institutions of democracy**, such as the capture of the media.
- Dilutes the role that civil society can play as a countervailing power.
- In time, **leads to undue corporate influence over political processes** and the formulation of policy.
- Tendencies of **state capture**.
- Fosters extreme asset and income **inequality**.

How can this be minimised? By **regulating markets** to physically prevent the growth of dominant businesses and excessively large conglomerates or even break up those that are seen as too big for comfort.

Challenges towards regulating markets:

- **The state is not independent of the influence of big businesses:** The distance between the state and private capital has narrowed hugely, leading to the current situation in which the state promotes big business rather than regulates or curbs the latter.

Three trends have signaled this narrowing of political distance:

- **The embrace of neoliberalism** by powerful voices within and outside the state.
 - This implied the adoption of the view that the role of the state is **not to regulate private capital but to facilitate its growth** to foster competition and all-around economic progress.
 - However, the reverse has happened. **Examples** are in areas such as telecommunications and civil aviation.
- The propagation of the view that the state must help strengthen domestic big business.
 - State policy, diplomacy and public resources had to serve as instruments for the purpose.
 - **While liberalisation opened up Indian markets**, and subjected much of Indian business to global competition, **state intervention (like subsidies) was modified to protect and promote sections of big business.**
- **The refusal to reduce the influence of money in politics.**
 - Over time, the policy has been changed to **legitimise corporate donations to political parties**, including through the infamous **electoral bonds scheme**.
 - Thus, big business has turned out to be a prerequisite for garnering the resources needed to **manage elections and win electoral support.**

What is frightening in the current situation?

- These tendencies have coalesced into a strategy of strengthening Indian business as part of promoting the **national interest**.
- Any dissent against centralisation and concentration is being suppressed by the state in the name of national interest.

Way ahead:

- **Democracies have battled** hard to force governments to maintain some distance from private capital in general and big business in particular.
- **A broad alliance of diverse classes** can push the state to take strong action against monopoly and stratification.
- Similar efforts were seen in India immediately after Independence - **License-Permit-Quota Raj**.

Conclusion:

Though License-Permit-Quota Raj of the pre-reform era is not possible in today's India, what new India needs is the equitable treatment of all businesses (irrespective of their size) to promote national interest in the long term.

6. A ROADMAP TO ELIMINATE POVERTY IN INDIA

Context:

India's current per capita income is **\$2,379 in 2022-23**. The goal is to raise it by almost six times **in the next 25 years**, leading to a higher standard of living and poverty eradication. To achieve this vision, understanding the challenges and taking appropriate actions are essential.

Current achievements of India in poverty reduction:

- **415 million** poor people moved out of poverty from 2005/2006 to 2019/2021 (from 645 to 230 million). (Global MPI)
- India has registered a **decline** in the number of multidimensionally poor from **24.85% in 2015-16 to 14.96% in 2019-2021**. (National MPI)

Challenges that the country will face in economic development and subsequent poverty reduction:

On the global front:

- **Ukraine-Russia conflict:** The overall climate for peace, which is necessary for growth, has deteriorated after the conflict.
 - **Supply disruptions** of critical imports like oil can cause a severe setback not only to developing countries but also to developed countries.
- **The attitude of some countries towards global trade:** Rich countries that earlier preached to the developing countries to adopt a free trade model, are putting restrictions on imports.
 - This is happening when developing countries like India are reaching the stage of being able to compete in the world market.

At the domestic:

- **State of Indian economy:**
 - In the past 75 years, India has built a reasonably strong and diversified economy.
 - Though India is today the 5th largest economy, it is **ranked (2022) 149 out of 194 countries in per capita terms**.
- **Export-led growth strategy:** Several countries (South Korea, China, etc) achieved high growth over several decades by focusing on exports.
 - **This export-led growth strategy may not work for India**, particularly in the context of a changed global trade situation.
- **Adoption of new technologies:** India's ability to absorb new technologies like **Artificial Intelligence (AI)** will have ramifications for the industrial structure and employment.
 - **AI can result in increasing productivity and output but not necessarily jobs.**
- **Impact on output because of environmental considerations:** Bringing down pollution can have an output effect. In this context, **a high annual growth rate of 8% may have to be ruled out**.
- **Provision for basic income:**
 - In an uncertain world, the need for the provision of basic income becomes even more urgent.
 - However, there are many issues connected with basic income (**level and coverage**) which need to be resolved.

Actions India needs to overcome these challenges:

- **A multi-dimensional strategy:**
 - The emphasis should be on agriculture and related activities, manufacturing and exports.
 - India needs to preserve its achievements and move forward in the services area.
- **Raising the per capita income:** By almost six times from \$2,379 in 2022-23 over the next 25 years.
- **Reorienting the educational system:** This will enable students to acquire the required skills.
- **Identify labour-intensive economic activities.**
- **For implementing the provision of basic income**, beneficiaries have to be determined considering certain normative considerations.

Potential implications of the above actions:

These will enable people to have a higher **standard of living**, reduce, **inequality and eliminate poverty**.

Conclusion:

Despite challenges, a 6 to 7% sustained growth and better job prospects are still possible if the growth strategy is correct and if an appropriate investment climate can be created.

7. ISSUES FACED BY GIG WORKERS IN INDIA

Context:

A parliamentary panel has asked the Ministry of Labour and Employment (MoL&E) to formulate and implement welfare schemes for gig and platform workers and unorganised sector workers at the earliest.

Why?

Since such workers do not come under the purview of the Employees' Provident Fund and Miscellaneous Provisions Act, appropriate/ specific welfare schemes for them need to be put in place by the government.

What is a gig economy?

- **It is a labour market** that relies heavily on temporary and part-time positions filled by independent contractors and freelancers rather than full-time permanent employees.
- **Gig workers gain flexibility and independence but little or no job security.**

Gig workers	
Gig workers refer to workers outside of the traditional employer-employee relationship. There are two groups of gig workers.	
Platform workers	Non-platform workers
When gig workers use online algorithmic matching platforms or apps to connect with customers, they are called platform workers.	Those who work outside of these platforms are non-platform workers, including construction workers and non-technology-based temporary workers.

Gig economy in India:

According to the NITI Aayog estimates, **nearly 23.5 million workers** will be engaged in the gig economy by **2029**.

Issues faced by gig workers:

- Since the gig economy **falls outside the scope of traditional, full-time employment**, gig workers usually **lack basic employment rights** such as
 - Minimum wages,
 - Overtime pay,
 - Medical leave, and
 - A statutorily bound resolution of employer-employee disputes.
- Gig workers display **characteristics of both employees and independent contractors** → as a result fall outside the ambit of statutory benefits under –
 - the Minimum Wages Act 1948, EPF Act 1952 and the Payment of Bonus Act 196 (for **employees**)
 - the Contract Labour (Regulation and Abolition) Act 1970 (for **contract labourers**)

What is the proposed law for gig workers?

- **The Code on Social Security 2020**, which has proposed social security schemes for gig workers and platform workers on matters relating to –
 - life and disability cover,

- accident insurance,
- health and maternity benefits,
- old age protection, etc.
- However, the Code is yet to come into force.

Other efforts:

A MoU has been signed between the MoL&E and the NLSIU (Bangalore) for assistance in framing a new scheme for the gig and platform workers as well as workers in the unorganised sector.

Concerns:

- Out of the four new labour codes proposed, **gig work finds reference only in the Code on Social Security**.
 - Hence, they **cannot create legally recognised unions and access a national minimum wage** that applies to all forms of employment.
 - They also remain **excluded from accessing the specialised redressal mechanism** against their employers.
- Gig workers are excluded from the category of ‘unorganised workers’ or ‘wage workers’.
- They also do not have the **right to collective bargaining** - a fundamental principle of modern labour law.
- All the above leads to the violation of their fundamental rights under **Articles 14 and 21** and comes within the meaning of **forced labour under Article 23**.

Best practices:

- **The Rajasthan Platform-Based Gig Workers (Registration and Welfare) Act 2023:** Rajasthan has become the first state in the country to pass a law for the welfare of lakhs of gig workers earning their livelihood through online platforms (Ola, Swiggy, etc).
- **Germany’s** Temporary Employment Act provides for equal pay and equal treatment of gig workers.
- **Singapore** has also proposed legislative changes to extend work injury insurance and pension coverage to such workers.

Conclusion:

A specific scheme for such workers, as recommended by the Standing Committee on Labour, Textiles, and Skill Development may resolve the above concerns.

8. INDIA’S RICE EXPORT BAN

Context:

IMF chief economist Pierre-Olivier Gourinchas stated that India’s decision to restrict exports of certain types of rice could contribute to food price inflation and should be reversed.

Previously, **India has implemented restrictions on non-basmati white rice exports** to ensure **sufficient availability in the domestic market** at reasonable prices. The export ban is also intended to support the **ethanol-blending program**, reduce costly oil imports, and benefit the animal husbandry and poultry sectors by **lowering animal feed costs**.

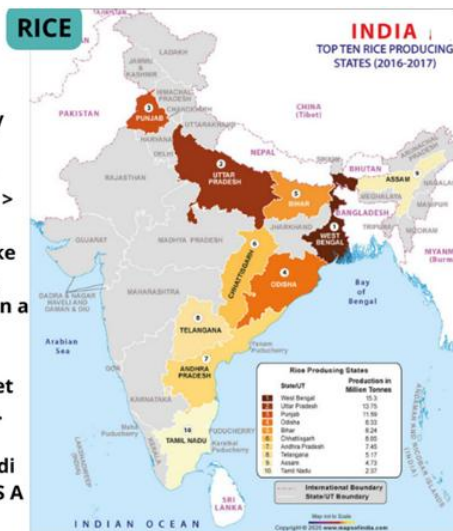
India’s status in rice exports:

India is the **second-largest producer of rice** in the world, after China. India has become the **largest rice exporter globally**, accounting for **nearly 40% of global rice exports in 2022/23**. Non-basmati white rice constitutes **approximately 25% of the total rice exported from the country**.

Impact of the ban:

- IMF predicts a potential **rise of 10-15% this year** in international rice prices.
- **Countries in Asia and Sub-Saharan Africa**, which heavily rely on India as a major supplier of rice, may face vulnerability due to potential disruptions in the rice market.

- **Temperature:** 22-32°C (high humidity)
- **Rainfall:** Around 150-300 cm.
- **Soil Type:** Deep clayey and loamy soil.
- **Top Rice Producing States:** West Bengal > Punjab > Uttar Pradesh > Andhra Pradesh > Bihar.
- **Aus, Aman and Boro:** In states like Assam, West Bengal and Odisha, three crops of paddy are grown in a year.
- **India is the leading exporter of Basmati Rice** to the global market and accounts for 2/3rd of supply.
- **Major Export Destinations for Basmati Rice (2021-22):** Iran, Saudi Arab, Iraq, United Arab Emirates, U S A and Yemen Republic.



9. FOREIGN PORTFOLIO INVESTMENT (FPI)

Context:

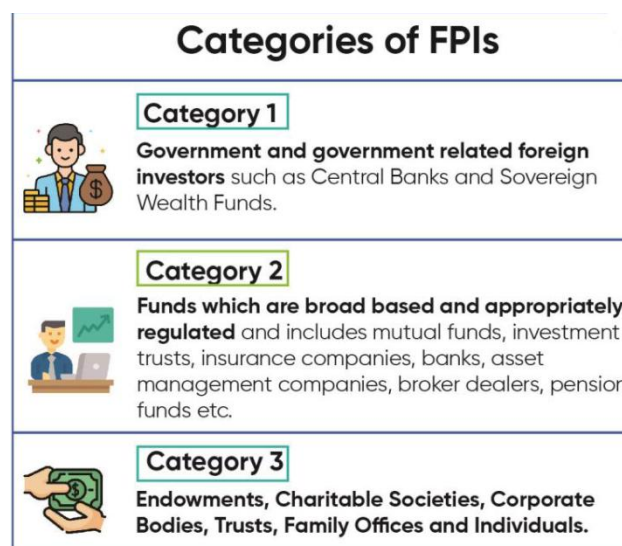
The Securities and Exchange Board of India (SEBI) released the Consultation Paper on a framework for mandating **additional disclosures from identified high-risk Foreign Portfolio Investors (FPIs)**.

More on News

- This has been done to **enhance trust in the Indian securities markets** by mandating additional disclosures around ownership of, and economic interest in, **high-risk FPIs**.
- To **minimise any inconvenience** to the FPI ecosystem, **only a limited number of objectively identified high-risk FPIs** will be mandated to provide such additional disclosures.

About FPI

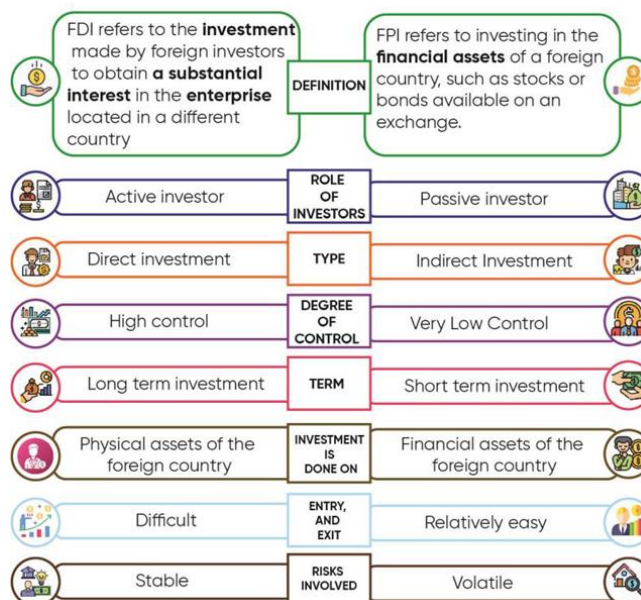
- **Meaning:** The FPI regime came as a harmonized route of foreign investment in India, **merging the two existing modes of investment**, that is, Foreign Institutional Investor ('FII') and Qualified Foreign Investor ('QFI').
- **Status of FPI in India:**
 - **Fluctuating nature:** FPI in India has fluctuated drastically in the past decade.
 - **Magnitude:** In 2022-23, the net FPI in India was to the tune of **Rs. 1.65 lakh crore (close to 0.6% of the GDP)**.



Existing Provisions for FPIs in India

- **Regulated by SEBI:** under SEBI (Foreign Portfolio Investors) Regulations, 2019 ('FPI regulations').
 - SEBI has **prescribed certain limits on the investment** that FPIs can make in Indian securities.
- **Legislative provision:**
 - **Foreign Exchange Management Act, 1999 (FEMA)** is the primary legislation governing FPI in India.
 - **Prevention of Money Laundering Act, 2002 (PMLA)** and the Prevention of Money Laundering (Maintenance of Records Rules), 2005 (PML Rules).

Comparison of Foreign Direct Investment (FDI) and Foreign Portfolio Investment (FPI)



Issues identified with FPIs

- **Concentrated investments:** Some FPIs have been observed to concentrate a substantial portion of their portfolio in a single company/ company group.
 - It raises the concern and possibility that promoters of such corporate groups, or other investors, could be using the **FPI route to circumvent regulatory requirements** such as maintaining Minimum Public Shareholding (MPS).
 - It also increases the **risk of price manipulation** of listed companies.

- **Circumvention of Press Note 3 (PN3) stipulations:** PN3 requires that an **entity of a country** that **shares a land border** with India **can invest only under the Government route**.
 - Since PN3 does not apply to FPI investments, the **FPI route could potentially be misused to circumvent the stipulations of PN3**.
- **Failure to disclose Related Party Transactions (RPTs):** RPTs are arrangements or deals between entities with a common interest or a relationship – by companies. Recently, the Hindenburg report raised the concern of nondisclosure of RPTs.
 - The framework for **FPI allows indirect circumventing** of the RPT disclosure requirements.

SEBI's proposal for FPI regulation

- **Categorisation of FPIs:** FPIs may be categorised as:
 - **Low-Risk FPIs:** Government and related entities such as central banks, sovereign wealth funds, etc.
 - **Moderate-Risk FPIs:** Pension Funds or Public Retail Funds with widespread and dispersed investors in such funds.
 - **High-Risk FPIs:** All other FPIs.
- **Enhanced transparency measures for high-risk FPIs:** For fully **identifying all holders of ownership**, disclosure of economic, and control rights may be mandated for certain objectively identified high-risk FPIs.
- **Additional Disclosure:** For requiring additional disclosures, the above risk categorisation is to be coupled with either the quantum of **concentrated investments by FPIs** or the **size of the overall Assets Under Management (AUM)**.
 - High-risk FPIs holding **more than 50% of their AUM in a single corporate group** would be required to comply with the additional disclosure requirements.
 - High-risk FPIs with an **overall holding in Indian equity markets of over Rs 25,000 crore** will also be required to comply with new disclosure requirements

10. CORPORATE DEBT MARKET

Context:

Recently, SEBI released a framework for rolling out the Corporate Debt Market Development Fund (CDMDF).

About CDMDF

- **Fund:** CDMDF, established as an **alternate investment fund**, will purchase **investment-grade corporate-debt securities** during **market stress**.
 - **Alternate Investment Fund (AIF)** refers to any privately pooled fund established or incorporated in India for investing. (These funds are collected from sophisticated investors such as Angel investors, Venture capitalists etc.)
 - **Investment grade** refers to the quality of a company's credit.
 - ✓ The company must be rated at 'BBB' or higher to be considered an investment grade issue.
- **Objective:** During market stress, the Debt Market faces redemption pressures in the open market (especially schemes with long maturity periods). CDMDF will help the market by providing liquidity access in such times.
 - The fund aims to emulate the RBI's liquidity support for the banks in the context of the Corporate Debt Market.
- **Contribution:** Contribution to the fund shall be mandatory for specified debt-oriented MF Schemes and Asset Management Companies (AMCs).

- **Tenure:** Initially **15 years**, it can be extended as per SEBI's mandate

Credit Rating

- A credit rating is an **opinion of a particular credit agency regarding the ability and willingness of an entity** (government, business, or individual) to fulfill its financial obligations.
- It **evaluates a debtor's credit rating by analysing its qualitative and quantitative attributes**.
- **Types of Credit Ratings** include eight broad categories, e.g.
 - **AAA:** the **highest degree of safety** regarding **timely servicing of debt obligations**.
 - **BBB:** have a **moderate degree of safety**.

Corporate debt market

The **debt market**, also called the bond market, fixed-income market, or credit market—is the collective name given to all trades and issues of debt securities. The market can be broadly divided into Government Debt Market and **Corporate Debt Market**.

- **Issue:** Companies issue **corporate bonds** to finance current operations, expand product lines, or open new manufacturing facilities.
- **Nature:** Corporate bonds usually describe longer-term debt instruments that provide a maturity of at least one year.
- **Regulation:** SEBI has jurisdiction over the **corporate debt market**.
 - The **regulatory jurisdiction between the SEBI and RBI** was clarified in 2000 by an amendment to the **Securities Contract (Regulation) Act 1956**. Under this, **RBI's regulatory jurisdiction** includes **money market** and **government securities**.
- **Status of the Market in India: Outstanding Corporate bonds in India**, as a percentage of GDP, stood around 17% in March 2022.
 - The same figures for other emerging Asian economies are much higher: **South Korea (>80%)**, **Malaysia (>50%)**, **China (~ 40%)**

Significance of Corporate debt market

- **Investment needs:** To shift from a **consumption-driven to an investment-led economy**, as emphasised by the **Economic Survey 2018-19**.
- **Efficient allocation of resources:** Additional avenues for corporates to raise funds cost-effectively and reduce reliance on bank finances.
- **Health of corporate balance sheet:** Reduce corporate reliance on External Commercial Borrowing (ECBs), which is subject to volatility in the international market.
- **Financial inclusion of SMEs:** It can lower the cost of capital for SMEs and ensure transparency in their functioning due to greater external scrutiny.
- **Financial stability:** Address **asset-liability mismatch of banks** concerning long-term capital finances and **spreading credit risk** across the economy.

Issues with the Corporate debt market in India

- **Credit rating:** Systemic flaws in the credit rating process by Credit Rating Agencies (CRAs), such as lack of standardisation, transparency, etc.
 - It often results in **opportunistic rating shopping** by issuers and the **loss of trust of retail investors** to invest in the bond market.
- **Mode of issuance:** Most corporate bonds are issued for select market participants and are not open to the public. Thus, hindering the penetration of the Corporate Debt Market.

- **Liquidity constraints:** Limited issuer and investor base, **absence of standardised market indicators** etc., result in the absence of a liquid corporate bond market.
- **Dominance of government securities:** According to Clearing Corporation of India (CCI) and SEBI, in March 2022, outstanding corporate debts were just around 30% of the outstanding Government securities.

Way Forward

- **Transform Credit Rating Agencies and credit rating process to ensure greater transparency:**
 - All entities offering credit rating as a service must be registered as a CRA.
 - All credit ratings, once obtained, must compulsorily be published to **avoid rating shopping** by issuers.
- **Improve the availability of market information:**
 - Encourage trusted issuers, such as banks, financial institutions, etc., to issue bonds across maturities.
 - **Develop debt market index** on the lines of equity indices like BSE Sensex and Nifty 50.
- **Broaden investor base:**
 - **Encourage participation** of retail investors, qualified institutional investors (QII), among others, by providing additional tax breaks on interest income, etc.
 - Streamline banks' and financial institutions' bankruptcy and insolvency resolution process to boost investor confidence.

11. THE MINES AND MINERALS (DEVELOPMENT AND REGULATION) AMENDMENT BILL, 2023

Context:

Recently, the Parliament passed the Mines and Minerals (Development and Regulation) Amendment Bill, 2023.

More on the news

- It will **amend the Mines and Minerals (Development and Regulation) (MMDR) Act, 1957**.
- MMDR was comprehensively **amended in 2015** to bring several reforms in the mineral sector, such as establishing the **District Mineral Foundation** and **National Mineral Exploration Trust**.
- The Act was further **amended in 2016, 2020 and 2021** to bring further reforms in the sector, such as:
 - **Removing the distinction** between captive and merchant mines,
 - **Removing the restrictions** on the transfer of mineral concessions.

Need for further reforms

- **Increasing the exploration and mining of critical minerals.**
 - Critical minerals have gained significance given **India's commitment towards energy transition** and achieving netzero emissions by 2070.
- **FDI received** in the mining sector is **limited**.
 - This is despite the automatic route allowing 100% foreign direct investment (FDI) in the mining and exploration sector.

Know the term

- **Critical Minerals:** These are minerals that are **essential for economic development and national security**.
- **Deep-Seated Minerals:** These minerals are gold, silver, copper, zinc, lead, nickel, cobalt, platinum group of minerals, diamonds, etc. which are **deposited deep in Earth's crust**.

Key Features of the Bill

I. Introduction of exploration licence for deep-seated and critical minerals

- **Licence:** to undertake **reconnaissance and prospecting operations** for critical and deep-seated minerals.
- **Auction:** The Exploration Licence (EL) will be **granted through an auction** for minerals specified in the **Seventh Schedule** of the MMDR Act.
 - The **Seventh Schedule** contains **29 minerals**, including **lithium-bearing, copper-bearing, potash, and zinc-bearing minerals**.
- **Validity of EL: Issued for five years.**
 - Request for an **extension of up to two years** can be applied to the state government.
- **Mining Lease:** The blocks explored by the licensee would be **auctioned for mining lease** within the prescribed timeline, which will fetch better revenue to the State Governments.
 - The exploration agency shall be entitled to a **share in the auction premium** payable by the mining lease holder.

II. Omission of 6 minerals from the list of 12 atomic minerals

- **Omission of Minerals:** From the list of 12 atomic minerals specified in **Part-B of the First Schedule** to the MMDR Act, it proposes to **omit six minerals (refer infographic)**.
 - These minerals have various applications in the space industry, electronics, communications etc. and are **critical in the net-zero emission commitment of India**.
- **Opening to Private Sector:** The inclusion of minerals in the list of atomic minerals **reserves their mining and exploration to government entities**.
 - Upon removing these minerals from the said list, exploration and mining of these minerals will also be opened up for the private sector.

III. Empowering Central Government to exclusively auction mineral concessions for critical minerals

- **Role of Central Government:** The amendment empowers the **Central Government to exclusively auction mining leases and composite licences for certain critical minerals** listed in new Part-D of the First Schedule to the MMDR Act.
 - **Part D of the First Schedule includes critical minerals** such as tungsten, cadmium, minerals of the “rare earth” group, fertilizer minerals, and minerals being removed from the list of atomic minerals.
- **Role of State Government:** Even though the Central Government would conduct the auction, the mining lease or composite licence for these minerals to the successful bidders will **only be granted by the State Government**.
 - The auction premium and other statutory payments shall continue to be received by the State Government.



Implications

- **Foreign investment and entrepreneurship:** This amendment is expected to provide a conducive legal environment for attracting FDI and junior mining companies in the country.

- **Private sector participation:** The proposed exploration licence would facilitate, encourage and incentivise the private sector in mineral exploration for critical and deep-seated minerals.
 - The involvement of private agencies in exploration would also bring **advanced technology, finance and expertise** in exploration.
- **Speeding up the process:** Only 19 blocks of these minerals have been auctioned by the State Government, viz. out of 107 blocks handed over to the various State Governments.
 - Authorising the Central Government to auction concession for these critical minerals would **increase the pace of the auction and early production** of the minerals.
- **Reduced import dependency:** in the long run, most of these minerals are largely import dependent.

Conclusion

Given the importance of critical minerals for economic growth, climate action and national security, its exploration and judicious use are non-negotiable for the idea of Atmanirbhar Bharat

12. TWIN BALANCE SHEET PROBLEM

- Finance Minister stated that the **Indian economy has moved away from the twin balance sheet problem.**
- The twin balance sheet issue refers to **earlier problematic balance sheets of both companies and banks.**
 - **Companies had excessive debt and insufficient funds** to repay it.
 - And **banks were burdened with significant nonperforming assets (NPAs)**- reached almost 12% in 2016-17.
- A twin balance sheet **problem follows a standard path.** Their **companies expand during a boom**, leaving them with **obligations they cannot repay.**
 - So, **they default on their debts**, impairing bank balance sheets and **limiting their ability to lend.**
- However, as per **RBI's recent Financial Stability Report**, banking and corporate sector **balance sheets have strengthened**, and India might be on the **cusp of a twin balance sheet advantage.**
 - **The gross NPA ratio** fell to a **10-year low of 3.9%.**
 - **Corporate balance sheet** is also at its **healthiest in 10 years.**

Steps taken to solve twin balance sheet problem



13. PROJECT WAVE

- Indian Bank has unveiled new services under its digital transformation initiative 'Project WAVE (**World of Advance Virtual Experience**)'.
 - It has been introduced in collaboration with **National E-Governance Services Ltd.**
 - Under it, an **electronic bank guarantee (e-BG)** service has been introduced to ease traditional paper-based processes.

14. EXPORT PREPAREDNESS INDEX (EPI) 2022

- NITI Aayog released the **third edition of 'The Export Preparedness Index (EPI) 2022'.**

- EPI, by NITI Aayog in association with Institute for Competitiveness, presents a **comprehensive analysis of India's export** performance in FY22, along with its **sector-specific and district-level** merchandise export trends.
 - EPI includes four pillars –Policy; Business Ecosystem; Export Ecosystem; Export Performance.
 - States are classified as coastal, landlocked, Himalayan, and UTs/small states.
- Key findings**
 - Most 'Coastal States' performed well, with **Tamil Nadu, Maharashtra, and Karnataka being top performers**.
 - ✓ **Haryana, Uttarakhand and Goa** topped under landlocked, Himalayan, and UTs/small states categories.
 - Over 99% of districts** are covered under the 'One District One Product' scheme.
 - Ten commodities** (engineering goods, petroleum products etc.) account for **nearly 80% of India's total exports**.
 - Only 100 districts** are responsible for **nearly 87% of exports**.
 - 49% of India's exports** go to only **ten destinations**.
 - Challenges identified:** absence of air connectivity in several regions, lower performance in R&D, lack of capacity-building workshops for exporters, absence of reliable statistics etc.



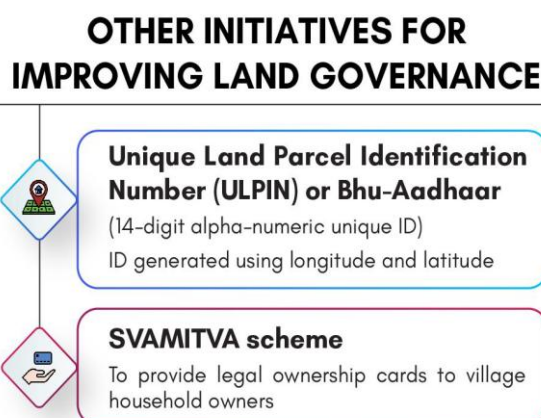
15. PRODUCTION LINKED INCENTIVE (PLI) SCHEME 2.0 FOR IT HARDWARE

- Guidelines for **Operationalisation of PLI Scheme 2.0 for IT Hardware** approved.
- Guidelines have been approved by the **Ministry of Electronics and Information Technology (MeitY)**.
- PLI scheme, launched in 2020, aims to **make domestic manufacturing globally competitive** and create global manufacturing champions.
 - PLI scheme is **available in 14 manufacturing sectors**, such as medical devices, food products, textile products, pharmaceuticals, etc.
 - PLI scheme for IT hardware was **first notified in 2021**.
- PLI 2.0 for IT hardware** aims at **broadening and deepening the IT hardware manufacturing ecosystem** in the country.
 - Target Segment includes** laptops, Tablets, All-in- One PCs, Servers, and Ultra Small Form Factor manufactured in India.
 - Semiconductor design, IC manufacturing, and packaging** are included as incentivized components of PLI 2.0.
- Key Guidelines**
 - Base Year:** FY 2022-23 for computation of net incremental sales of manufactured goods.
 - ✓ The scheme shall extend an average incentive of around **5% on net incremental sales** (over a base year).

- **Eligible Product:** Goods manufactured in India and covered under the target segment.
- **Empowered Group of Secretaries (EGoS)** will monitor the Scheme.
- **Incentive Period:** 6 years.
- **Eligibility Criteria for Incentive Claims:** Incentives shall be given on the sales of Target Segment Goods.

16. BHOOMI SAMMAN AWARD 2023

- **Ministry of Rural Development** presented Bhoomi Samman Award 2023.
- Nine state secretaries have received Bhoomi Samman awards for their achievements in implementing the
- **Digital India Land Records Modernization Programme (DILRMP).**
- DILRMP (erstwhile National Land Record Modernization Programme) is a **Central Sector Scheme** since 2016.
 - Nodal Ministry: **Ministry of Rural Development.**
 - **Objective:** To develop a modern, comprehensive, transparent land record management system.
 - DILRMP has been **extended for five years, i.e., 2021-22 to 2025-26.**
- **Significance of modernisation of land records**
 - **Reduce interface** between citizens and Government functionaries and will **increase transparency.**
 - Clear land titles facilitate the **supply of capital and credit for agriculture.**
 - **Reduce the massive pendency of court cases** involving land disputes.
 - Helpful to central and state governments in **bringing out land reforms.**



17. STANDING COMMITTEE ON STATISTICS (SCOS)

- **Ministry of Statistics and Programme Implementation (MoSPI)** has replaced the **Standing Committee on Economic Statistics (SCES)** with **SCoS**.
- SCoS will have a **broader mandate to review the framework and results of all surveys** conducted under the National Statistical Office.
 - It has **ten official members and four non-official members** who are eminent academics.
 - Its terms of reference include **finalisation of survey results and better use of administrative data.** Besides survey design improvements, **SCoS will identify data gaps and strategies to plug them.**
 - **National Statistical Commission** will have **ultimate authority to approve** the publication of survey results.

18. LOCAL CURRENCY SETTLEMENT SYSTEM (LCSS)

Context:

India and the United Arab Emirates (UAE) signed a Memorandum of Understanding (MoU) to establish **Local Currency Settlement System (LCSS)** for using local currencies, **the Indian rupee (INR), and the UAE Dirham (AED), for cross-border transactions.**

- LCSS will promote **the use of INR and AED for current accounts and permitted capital account transactions between the two countries.**
- India-UAE trade was approx **USD 85 billion in 2022.** UAE is **India's third-largest** trading partner while India is UAE 2nd largest trading partner.

What is a Local Currency Settlement System (LCSS)?

The Local Currency Settlement System (LCSS) is a mechanism that enables **cross-border transactions between two countries** to be conducted in their respective domestic currencies.

- It allows **exporters and importers to invoice** and make payments in their local currencies, reducing the reliance on a third-party currency such as the US dollar.

For example,

Let us consider a scenario where a **company in India exports goods** to a company in the United Arab Emirates (UAE). With the LCSS in place, the Indian exporter can issue an invoice in Indian rupees (INR), and the UAE importer can make the payment in UAE dirhams (AED).

Advantages:

Advantages	Examples
Reduction in foreign exchange costs	An Indian exporter can invoice in INR, and a UAE importer can pay in AED , eliminating the need for currency conversion to a third-party currency like USD.
Mitigation of exchange rate risks	Companies can hedge exchange rate risks by transacting in local currencies, limiting losses caused by fluctuations in exchange rates.
Improved transaction efficiency	Transaction processes can be streamlined as parties can invoice and settle payments in their domestic currencies , reducing complexities and time delays.
Enhanced trade and investment opportunities	The use of LCSS promotes bilateral trade and investment between India and UAE by facilitating easier and more efficient cross-border transactions.
Optimized remittances	Indian residents in the UAE can send remittances in INR , benefiting from lower transaction costs and faster settlement times.

Other agreements between India and UAE:

- The two countries agreed to **link India's Unified Payments Interface (UPI) with UAE's Instant Payment Platform (IPP).**
- The two countries agreed to **link their respective Card Switches** vis-a-vis RuPay switch and UAESWITCH to enable **mutual acceptance of domestic cards** and processing of these card transactions.
- **India's Structured Financial Messaging System (SFMS)** will be linked with messaging system in UAE to ease their financial messaging.
- Also, India will establish an **IIT-Delhi campus in Abu Dhabi**, which would be the second IIT abroad after Tanzania.

INTERNAL SECURITY

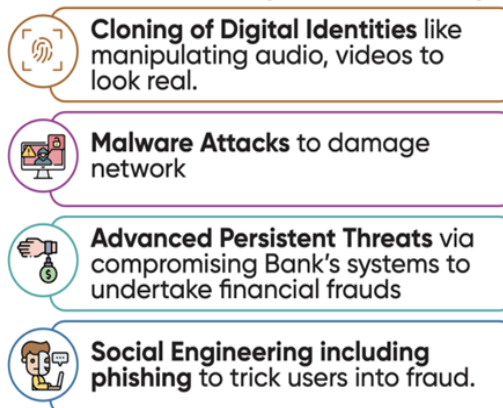
1. CYBER SECURITY

Context:

Recently, the Standing Committee on Finance released a report about cyber security and the rising incidence of cyber/white-collar crimes.

Need for Strengthening cyber security ecosystem

- **Lacunae in the legal framework**
 - The Committee observed that the **existing regulatory landscape for cyber security involves multiple agencies and bodies**, each with distinct roles and responsibilities.
 - ✓ This approach **disperses regulation and control and thus hinders unified direction** to combating cyber threats.
 - Also, **most of the service providers have their data centres outside the country**. Hence, seeking data from them remains a challenge.
- **Technological challenges**
 - **Emerging technologies:** With the advent of artificial intelligence, IoT, and powerful generative AI tools new problems, such as deep fake have emerged as a major cybersecurity threat.
 - **Malware and botnets allows** criminals to avoid technical control such as antivirus software and internet filters.
 - **Large Data:** Financial systems are the prime targets for hackers as they deal with a large amount of Personal data and financial data.

Threats of Cybersecurity**Existing Framework for Cyber Security**

- **Information Technology Act 2000:** To provide a legal framework for transactions carried out by means of electronic data.
- **Indian Computer Emergency Response Team (CERTIn):** National agency for incident response under Section 70B of the Information Technology Act, 2000.
- **National Cyber Security Policy 2013:** To protect information infrastructure in cyberspace.
- **National Centre of Excellence in Cyber Security (NCoE):** To build a sustainable cyber security technology and industry development momentum across the country.
- **Indian Cyber Crime Coordination Centre (I4C):** To handle issues related to cybercrime.
- **National Critical Information Infrastructure Protection Centre (NCIIPC):** For the protection of critical information infrastructure.
- **Cyber Swachhta Kendra:** For providing detection of malicious programmes.
- **Information Security Education and Awareness Project (ISEA):** To raises awareness and provides research, education and training in the field of Information Security.
- **National Cyber Security Strategy 2020:** To ensure a safe, secure, trusted, resilient and vibrant cyberspace for nation.

- **Misuse of the Internet:** Due to easy access and extensive use of cyberspace, citizens especially women and children are more likely to experience various forms of cybercrimes.
 - **Increase in cyber-attacks:** Indian Computer Emergency Response Team (CERT-In) highlights that India encountered a considerable number of cybersecurity incidents in 2022, with a total of 13.91 lakhs reported cases.
 - ✓ **The top three industries affected** by malware in India in 2022 were banking, government, and manufacturing.
 - ✓ **Increased Ransomware Attacks:** There is a 53% increase in Ransomware incidents reported in 2022 Year over Year.
 - IT & ITeS was a majorly impacted sector followed by **Finance and Manufacturing**.
 - ✓ **Lack of skilled human resources:** Last year, the cyber security industry had a 37% gap in the supply of skilled professionals," according to Team Lease Digital.

Way forward

- **Key recommendations of the committee**
 - Empower a **centralized Cyber Protection Authority (CPA) for cyber security** that can work with all digital ecosystem participants.
 - Formulate **fairer and more responsive consumer grievance redressal** and compensation mechanism
 - Strengthen **central and state cyber security enforcement capabilities**.
 - **Achieve closer global cooperation** and other leading countries.
- **Capacity building:** Creating a robust innovation ecosystem to not only strengthen India's cybersecurity capabilities but also deliver cutting-edge cyber solutions to the world.
- **Strengthening private partnerships:** The PPP model should be explored for security in the regions and industry sectors.
 - Government should promote R&D in the private industry through active government support.
- **Dedicated officer:** All government organizations and private enterprises can have a designated Chief Information Security Officer (CISO) who would be responsible for cyber security.
- **Awareness:** The government can establish an informative environment in the country against possible cyber threats (including cyber terrorism).

International Convention

- **Budapest Convention on Cybercrime, 2001**
- It deals with issues **such as infringements of copyright, computer-related fraud, child pornography, and violations of network security**.
- This convention of the **Council of Europe is the only binding international instrument** on this issue that addresses Internet and computer crime
- **India is not yet a member**

Related News

CERT-In "Guidelines on Information Security Practices" for government entities

- These guidelines are issued under the powers conferred by **section 70B of the Information Technology Act, 2000**.
- It applies to all Ministries, Departments, and Offices specified in **the First Schedule to the Government of India (Allocation of Business) Rules, 1961**.
- **Key guidelines**
 - Report security breaches within **six hours of being noticed**
 - Mandatory **cyber security audits every six months**
 - **Employees to be logged out** when inactive for more than 15 minutes
 - Admin access to the system only with the approval of the **chief information security officer**

Citizen Financial Cyber Fraud Reporting and Management System (CFCFRMS)

- According to the Ministry of Home Affairs (MHA), **Rs 570 crore has been saved using CFCFRMS**.

- CFCFRMS was operationalised **in 2022 as a national helpline** to report all sorts of **financial frauds and immediately prevent the stealing** of funds by cheats.
- It has been made **operational by Indian Cyber Crime Coordination Centre (I4C)**, under MHA, **to integrate Law Enforcement Agencies and Banks and Financial Intermediaries**.
- It **leverages new-age technologies** for sharing online fraud-related information and **taking action in almost real time**.

2. EXERCISES IN NEWS

- **JIMEX 23:** 7th edition of the bilateral **Japan-India Maritime Exercise 2023**, hosted by the Indian Navy, is being conducted at/ off Visakhapatnam.
- **SALVEX:** The Seventh edition of the **Indian Navy – US Navy, Salvage and Explosive Ordnance Disposal (EOD) exercise**, SALVEX, was conducted recently in Kochi.
- **Operation Southern Readiness – 2023:** It is an annual **multinational exercise** (India, USA, Italy, UK, Seychelles) conducted by Combined Maritime Forces.
- **Nomadic Elephant – 2023:** It is a joint military exercise between **India-Mongolia**

SCIENCE & TECHNOLOGY

1. CHANDRAYAAN-3

Context:

Chandrayaan-3 is India's upcoming lunar mission, which aims to be the world's first mission to soft-land near the lunar south pole.

What is Chandrayaan-3 Mission?

Chandrayaan-3 is **India's third moon mission** and is a follow-up of Chandrayaan-2 (2019) which aimed to land a rover on the **lunar South Pole**. The Mission will have three major modules- the

- **Propulsion module** (will carry the lander and rover configuration till 100 km lunar orbit)
- **Lander module** (capability to soft land and deploy Rover)
- **Rover** (will carry out in-situ chemical analysis of the lunar surface)

Challenges of landing on the South Pole:

- Previous spacecraft have mostly landed near the equatorial region of the Moon, a few degrees latitude north or south of the lunar equator. Landing near the equator is **easier and safer due to the hospitable terrain**, smooth surface, absence of steep slopes, and ample sunlight for solar-powered instruments.
- The lunar south pole, on the other hand, presents a challenging terrain with extreme temperatures and areas that are in permanent shadow, **receiving no sunlight**.

Why ISRO wants to explore the Moon's south pole?

- **Water Resources:** The south pole region is believed to have **water molecules in substantial amounts**, possibly trapped as ice in the permanently shadowed craters.
 - Exploring and confirming the presence of water is essential for future human missions and the potential utilization of lunar resources.

- **Scientific Discoveries:** The extreme environment and the presence of permanently shadowed regions provide a **preserved record of the Moon's history and the early Solar System**.
- **Clues to Earth's History:** The Moon is thought to have formed from debris generated by a giant impact between a **Mars-sized object** and the early Earth.
 - By studying the lunar south pole, scientists can gain insights into the materials and conditions that existed during the formation of the Earth-Moon system.
- **Global Collaborations:** ISRO-NASA successfully confirmed the presence of water from the data taken by Chandrayaan-1. Indo-Japan collaboration, **LUPEX** aims to send a lander and rover to the Moon's south pole around 2024.
- **Technological Advancements:** By undertaking missions to this region, ISRO can develop and demonstrate innovative technologies **for soft landing, navigation, resource utilization, and long-duration operations** that can be applied in future space missions.

Comparison of Chandrayaan-1, 2 and 3

Mission	Chandrayaan-1	Chandrayaan-2	Chandrayaan-3
Launch Year	2008	2019	Scheduled for 2023
Objectives	Study lunar surface	Study the lunar surface and land rover on the lunar South Pole	Demonstrate landing capabilities for Lunar Polar Exploration Mission
Components	Orbiter, Moon Impact Probe	Orbiter, Lander (Vikram), Rover (Pragyan)	Propulsion module, Lander, Rover
Findings	Confirmed presence of lunar water, lunar caves, tectonic activity, faults, and fractures	Building on the evidence of water molecules shown by Chandrayaan-1	-
Communication	Communication issues after 312 days of operation	Lander crash-landed; rover unable to operate	-
Launch Vehicle	PSLV	GSLV-Mk 3	LVM3
Landing Site	-	Lunar South Pole	Lunar South Pole
Major Partners	-	-	Japan (for Lunar Polar Exploration Mission)

2. KLOTHO

Context:

A new study has revealed that Injecting ageing monkeys with a '**longevity factor**' protein that can **restore levels of Klotho**, can improve their cognitive function, a study reveals.

What is Klotho?

Klotho is an enzyme that in humans is encoded by the KL gene and produced in Kidney. Circulating levels of soluble Klotho decrease with age and the Klotho gene is associated with increased risk of age-related diseases.

Significance of the findings: The findings could lead to new treatments for neurodegenerative diseases.

Previous research on mice had shown that **injections of klotho can extend its lives and increase synaptic plasticity** (the capacity to control communication between neurons, at junctions called synapses).

3. BRUCELLOSIS

Context:

A seven-year-old student from Kollam, India, has **tested positive for Brucellosis**, a bacterial infection that can **spread from animals to humans**.

- The girl was admitted to the hospital with symptoms including **severe fever, increased platelet count, and a swollen face**.

About Brucellosis:

Brucellosis is **commonly found in cattle, and humans can contract the infection through close contact with animals or animal products**. If not treated promptly, the **infection can be life-threatening**.

4. GUILLAIN-BARRE SYNDROME

Context:

Peru has declared a state of national emergency due to a surge in cases of **Guillain-Barré syndrome, a neurological disorder that can lead to paralysis**.

- The country has witnessed an “**unusual increase**” in cases, prompting concerns about the **strain on health services**.

The health minister expressed concerns about a potential **shortage of immunoglobulin, a standard treatment for Guillain-Barré syndrome**.

About Guillain-Barré syndrome:

Guillain-Barré syndrome is a **rare disorder where the immune system mistakenly attacks the peripheral nervous system**. It can range from **mild weakness to severe paralysis**. **The causes are still unknown**. Also, there is **no known cure**. However, treatments can help alleviate symptoms and complications.

5. INDIAAi

Context:

INDIAAi is an initiative under **Digital India Corporation**, and Meta, India, has signed an MoU to foster collaboration in the **field of Artificial Intelligence (AI)** and Emerging Technologies

What is INDIAAi?

- It is a joint venture between the Ministry of Electronics and Information Technology (**MeitY**), the National e-Governance Division (**NeGD**), and **NASSCOM**. It is a knowledge portal, research organization, and ecosystem-building initiative focused on preparing the nation for an AI-driven future.

Objectives:

- To establish a framework for **cooperation and to make Meta’s open-source AI models** available for use by the **Indian AI ecosystem**.
- To advance **research and development in AI and Emerging Technologies**, seeking breakthroughs in AI technology and its applications.
- Establishing a **Centre of Excellence to nurture the startup ecosystem of AI** and other Emerging Technologies.
- Building **datasets in Indian Languages** to enable translation and large language models, prioritizing **low-resource languages** to foster social inclusion and improve government service delivery.

- **Enhance accessibility to AI compute resources** for researchers, startups, and organizations with limited resources.

6. SAGAR SAMPARK

- **Indigenous Differential Global Navigation Satellite System (DGNSS)** – “SAGAR SAMPARK” was **inaugurated** by the Ministry of Ports, Shipping and Waterways (MoPSW).
- DGNSS is a terrestrial-based **enhancement system** which **corrects errors and inaccuracies in Global Navigation Satellite System (GNSS)**, allowing for more accurate positioning information.
 - GNSS refers to a **constellation of satellites providing signals from space** that transmit positioning and timing data **to GNSS receivers** to have Global coverage.
 - **Major GNSS are: GPS (USA), GLONASS (Russia), Galileo (Europe), BeiDou (China), NAVIC(India).**
- DGNSS involves **having reference stations** at precisely known locations that **provide real-time corrections for**
- **GNSS signals.**
 - DGNSS systems **provide shore-to-ship services.**
- **Significance of DGNSS**
 - **Providing safe navigation and reducing the risk of collisions**, groundings, and accidents in port and harbour areas.
 - **Fulfilment of international navigation obligations** of the International Maritime Organisation (IMO), Safety of Life at Sea (SOLAS) and International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA).
 - **GPS error correction accuracy improved** from 5 to 10 meters **to less than 5 meters** for 100 Nautical Miles from Indian coastlines.
 - **Will enhance the capability of the Directorate General of Lighthouses and Lightships (DGLL)** in Radio Aids to Marine Navigation.
 - ✓ DGLL, a **subordinate office under MoPSW**, provides General Aids to Marine Navigation along the Indian coast.

IMO: UN specialized agency with responsibility for safety and security of shipping and prevention of marine and atmospheric pollution by ships.

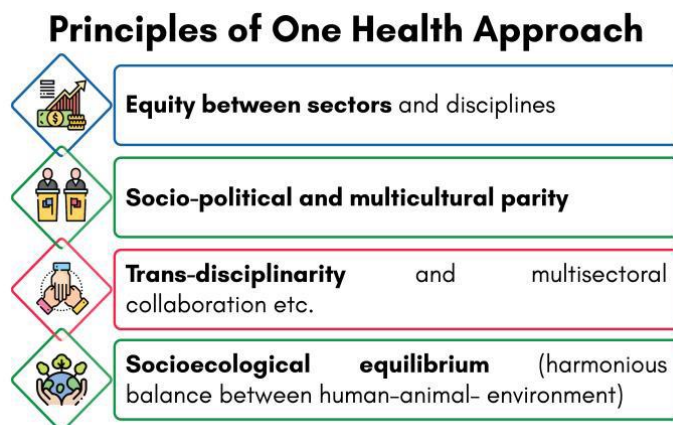
SOLAS Convention in its successive forms is related the safety of merchant ships. First version was adopted in 1914, in response to Titanic disaster

IALA: Established in 1957, it is a non-profit, international technical association

7. ANTIMICROBIAL RESISTANCE (AMR)

- **One Health Priority Research Agenda** for Antimicrobial Resistance (AMR) was **released**.
- It was released by FAO, UN Environment Programme (UNEP), WHO and World Organisation for Animal Health (WOAH) to **better advocate for increased research and investment in AMR**.
 - AMR occurs **when bacteria, viruses, fungi and parasites change over time and no longer respond to medicines** making infections harder to treat and increasing the risk of disease spread, severe illness and death.
 - Earlier, **WHO also launched a global research agenda for AMR** in human health in 2023.
- **Agenda presented a five-pillar based one health approach** to tackle the growing threat of AMR, including:
 - **Transmission:** Focuses on **environment, plant, animal, and human sectors** where AMR transmission, circulation and spread occur.
 - **Integrated surveillance:** To identify **cross-cutting priority research questions** to improve common **technical understanding and information exchange** among One Health stakeholders.

- **Interventions** aimed at preventing, containing, or reducing AMR incidence, prevalence, and spread.
- **Behavioural insights and change:** across various groups and actors involved in the development and spread of AMR at the One Health interface.
- **Economics and policy:** consider the costeffectiveness of an AMR investment case, financial sustainability, and long-term financial impact.



8. EUCLID MISSION

- **ESA's (European Space Agency) Euclid mission** lifted off.
- Euclid aims **to investigate cosmic mysteries of dark matter and dark energy**. It will make a **3D map of the Universe** by observing billions of galaxies.
 - Universe composed of: 68% dark energy, ~27% dark matter, and ~5% normal matter.
- Euclid has a **reflecting telescope** that feeds the two instruments: a **visible-wavelength camera (VIS)** and **Near-Infrared Spectrometer and Photometer (NISF)**.
- It will travel **towards Sun-Earth Lagrange point 2**.

9. e-SARAS MOBILE APP

Context:

- The Deendayal Antyodaya Yojana-National Rural Livelihoods
- Mission (DAY-NRLM) has launched the **eSARAS mobile app** to support the marketing of products made by **women in self-help groups (SHGs)**.
- The app aims to **provide a platform for the marketing of authentic handicrafts and handlooms**. The initiative aims to promote local products and enhance livelihood opportunities for SHG members.
- **Usage:** The example can be used in e-governance/Governance questions related to SHGs.

10. BHARAT 6G ALLIANCE

Context:

The **Bharat 6G Alliance (B6GA)** has been formed as a **collaborative platform involving public and private companies, academia, research institutions, and standards development organizations**.

- The alliance aims to **foster international collaboration, forge coalitions with global 6G alliances, and drive the design, development, and deployment of 6G technologies in India**.

Objectives of B6GA:

- To enable India to **become a leading global supplier of intellectual property**, products and solutions of **affordable 5G and 6G and other future telecom solutions**.
- To deploy **6G technologies to act as a powerful force multiplier for India by 2030**.
- To understand the **business and societal needs of 6G** beyond technology requirements.
- To develop **recommendations for Bharat 6G Vision implementation readiness in India**.

Other initiatives launched

- Two agreements were signed for projects under **Telecom Technology Development Fund (TTDF)**. TTDF scheme was launched by **Universal Service Obligation Fund (USOF)** in 2022.
- USOF is a body under DoT. **5% of annual collections from USOF are available for TTDF for funding R&D in rural-specific communication technology applications** and form synergies among academia, start-ups, and industry to build and develop a telecom ecosystem.

11. GRAVITY HOLE

Context:

A recent study suggests that the **colossal and mysterious “Gravity Hole” in the Indian Ocean** may be the **remnants of an ancient sea that disappeared millions of years ago**.

What is Gravity Hole?

A “Gravity Hole” refers to a **large gravity anomaly**, an area where gravity is significantly different from the surrounding regions. It is characterized by a substantial decrease in gravitational pull compared to the expected value based on the Earth’s normal gravitational field.

The causes of gravity holes can vary, **including geological structures, variations in mass distribution, or other factors that affect the gravitational field** in a particular area.

The phenomenon is estimated to have **formed approximately 20 million years ago and is expected to endure for millions more**.

More about the News:

The Gravity Hole is a **massive region in the Indian Ocean**, about 1,200 kilometres southwest of the southernmost tip of India, and has such a **low pull of gravity that the sea level of the Indian Ocean over the “hole”** is around 106 metres below the global average. This pronounced dip in the ocean is called **Indian Ocean geoid low (IOGL)** and was discovered in 1948

- Known as the **Indian Ocean geoid low (IOGL)**, this vast depression spans **over 2 million square miles and lies more than 600 miles beneath the Earth’s crust**.
- The study proposes that the **IOGL consists of slabs from the Tethys Ocean**, which was a sea that separated the supercontinents of Gondwana and Laurasia.
- The Tethys Ocean is believed to have **influenced the African Large Low Shear Velocity province**, generating **plumes beneath the Indian Ocean**.

12. MALARIA VACCINE

- 18 million doses of the **first-ever malaria vaccine RTS, S/AS01**, were allocated to 12 African countries for 2023-25 by WHO, GAVI and UNICEF
 - **RTS,S/AS01 (RTS,S) malaria vaccine** can be used for prevention of **P. falciparum malaria**.
 - Known by the name **Mosquirix**, it is a **recombinant protein vaccine (RPV)**.
- RPVs are a **type of Recombinant Subunit Vaccines (RSVs)** that **use protein as antigen**.

- RSVs rely on the capacity of **one or multiple defined antigens** (a subpart of a pathogen like proteins, peptides, DNAs, etc., that causes the formation of antibodies) to induce **immunity against the pathogen**.
- RPVs are considered **safer as compared to vaccines derived from live viruses** as they are **nonreplicating** and **lack any infectious components** of viral particles.
- **About Malaria**
 - It is a **life-threatening vector-borne disease** caused by **Plasmodium (parasite)**.
 - **Vector:** Female Anopheles mosquito.
 - **Symptoms:** High fevers, shaking chills, and flu-like illness.
 - **Four kinds of malaria parasites infect humans:** P. Falciparum, P. vivax, P. ovale, and P. malariae.
 - In addition, P. knowlesi naturally infects macaques in Southeast Asia, also infects humans (**zoonotic malaria**).
 - Illness and death from malaria are both **preventable** as well as **curable**.
- **About Global Alliance for Vaccine and Immunization (GAVI)**
 - It was set up as a **Global Health Partnership in 2000**
 - **Core partners:** WHO, World Bank, UNICEF, and Bill & Melinda Gates Foundation
 - It is critical to strengthen primary health care and bring us closer to the **Universal Health Coverage (SDG 3)**.

13. ZOMBIE DRUG

- **Xylazine**, also known as “**tranq**,” “**tranq dope**”, and “**zombie drug**”, has sedative-like symptoms such as **extreme sleepiness**.
 - Tranq is known for its ability to induce a "zombie" like stupor and cause flesh rot near injection sites.
 - When combined with opioids like fentanyl, xylazine **increases the life-threatening effect of respiratory depression (slowing or stopping breathing) caused by opioids**, increasing the risk of overdose and death.
 - Zombie drugs can **cause raw wounds on the user's skin**. It starts with ulcers, hardens to dead skin called eschar, and, if left untreated, can result in amputation.
 - It is usually **used as a tranquilliser on cows and horses**.

14. BLUE SKY PROJECT

- **Recently**, The Government has released a **draft R&D roadmap for the green hydrogen ecosystem** in India, which **stresses on developing fuel cells for long-range travel**, particularly for the road transport sector.
- The roadmap has proposed three key approaches for promoting R&D: **mission mode, grand challenge projects and blue-sky projects**.
- **Blue-sky projects are projects having a long-term (0 -15 years) horizon** would be taken up with a focus on establishing global IP and competitive advantage for the Indian industry.
 - Blue Sky projects will aim to develop capabilities of the Indian R&D sector within an array of subjects like **the development of 3rd generation electrocatalysts, reversible Solid Oxide Electrolysers (SOECs) and Solid Oxide Fuel Cells (SOFCs), thermo chemical water splitting for hydrogen production etc.**
- **Mission mode projects are projects with short-term (0- 5 years) impact horizon**. It is also known as ‘earlystage research action’.
- **Grand challenge projects are projects with a mid-term (0 - 8 years) impact horizon**. They are also known as
- ‘**Demonstration Actions**’ for encouraging start-ups and industries to grow.

15. DIRECT METHANOL FUEL CELLS (DMFCs)

- **An alloy of Cobalt and Platinum** doped with Manganese has been found to be **an effective catalyst in DMFCs**.
- DMFC is an **electrochemical energy conversion device** that directly converts liquid methanol's chemical energy into electrical energy.
- DMFCs have a **high energy density, high efficiency** and **low operating temperature** and are **safer to operate** as they deal with liquid fuel (methanol).
- **Application:** an alternate power source for small vehicles, such as battery chargers for mobile phones, digital cameras, laptops, and other small electronic gadgets etc.

ENVIRONMENT**1. ISSUES WITH THE AIR POLLUTION CONTROL MEASURES IN INDIA****Context:**

According to a CSE analysis, air pollution impacts villages and cities almost equally but pollution control measures target only urban India.

Findings of the analysis:

- **Particulate matter (PM) 2.5** is an extremely potent air pollutant that can penetrate deep into the lungs and trigger a range of diseases including fatal ones.
- In 2022, the annual average of the most toxic air pollutant - **ultrafine particulate matter (PM) 2.5**, was as poor in rural India as in urban India (~46 microgrammes against the national limit is 40 microgrammes).
- The rural PM 2.5 pollution was found to be **significantly high in Delhi** (87 microgrammes) and states like Bihar, Haryana, UP, Rajasthan and West Bengal.
- **The rural population suffers more than its urban counterpart** when it comes to the length of losing life span due to exposure to the toxic pollutant.

Steps taken - The National Clean Air Plan (NCAP):

- It was declared in 2019, with a tentative national level target of 20-30% reduction of PM 2.5 and PM 10 concentration by 2024.
- So far it has released around **Rs 9,000 crores mainly for 131 cities** - called non-attainment ones - consistently going above the national air pollution limits.

Takeaways from the findings:

- They put under scanner the **Union government's policy of only investing in selected urban areas** of the country for controlling toxic air pollution.
- Most rural areas **do not even have any on-ground pollution measuring mechanism**; forget about combating it.

Way ahead:

- Air pollution is a transboundary problem that knows no borders.
- There is **an urgent need to track pollution levels** and develop policies for rural regions.
- **A larger network of high-spatial-resolution** systematic, robust and continuous air pollutants monitoring over the rural and non-urban regions is the need of the hour.
- Instead of selected cities, the **air shade arrangement model** needs to be pursued.

Conclusion:

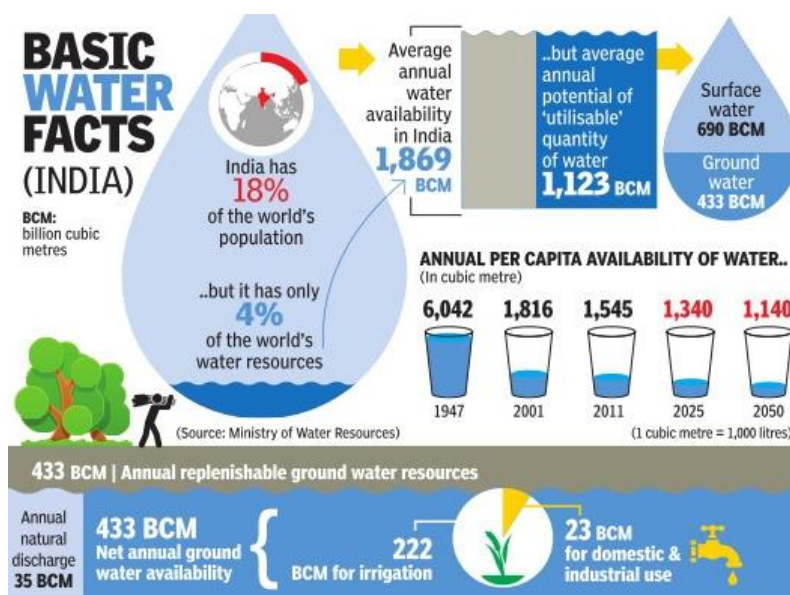
The air pollution issue in the country in the recent decade would not be resolved unless the rural parts are considered. Therefore, the time is ripe for formulating policy and action in rural India as well.

2. CHECKING INDISCRIMINATE USE OF GROUNDWATER FOR IRRIGATION

Context:

There is a need to urgently address the pressure on groundwater resources, starting with irrigation water use.

Groundwater situation in India:



Concerns:

- **India is the largest user of groundwater in the world**, extracting more than the two largest economies, the United States and China, together.
- **Growing domestic, industrial and agricultural demand** is increasing the stress on groundwater resources. For example,
 - India is dangerously falling under the category of a water-scarce country.
 - **India gets 1,486 cubic metres** (1 cubic metre = 1,000 litres) **per capita** of freshwater every year.
 - A country is officially water-scarce when the per capita availability is less than 1,000 cubic metres per annum.
- **Climate change is adding to the problem** and may have far-reaching implications, including threats to food security, increased conflicts, and mass migration, if not addressed timely.

The Interplay between groundwater stress and Agriculture:

- **Over 60% of irrigation requirements are met by groundwater.**
 - Since the 1980s, **around 77% of the total addition** to irrigation in the northwestern plains has come from **tube wells**.

- **This has introduced new crops (water-guzzlers) in non-traditional areas**, for example, paddy in Punjab (the area under rice increased from **47 to 80%** of the total cropped area between 1970s-2019) and Haryana.
- **This has also increased cropping intensity** by expanding cultivation in the largely dry winter and summer seasons.

Implications of changing crop patterns:

- **Created a crisis by depleting groundwater at an alarming rate** and deteriorating soil-human health.
- Affecting crop diversity. **For example**, paddy in Punjab has practically wiped-out oilseeds and pulses, maize and cotton.

What is aiding this? Water and electricity policies (subsidy) are often considered the main drivers of growth in the area under rice.

Way ahead:

- **Storing and using rainwater:** India receives 4,000 billion cubic metres (BCM) of freshwater annually through precipitation, but only 1,123 BCM is used currently.
- **Effective management of surface water resources** in regions where surface irrigation is available.
- **Energy and water pricing** can be an effective policy remedy for diversifying cropping patterns and checking depleting groundwater.
 - However, this may be less effective, as farmers may switch to **alternative energy** sources (solar pumping).
 - Also, irrigation water pricing in India is **non-volumetric** and mainly applies to canal-sourced systems, depending on the area and type of crops grown.
- **Encouraging farmers** to sell surplus solar energy by increasing the tariff.
- **Using water metres** for irrigation water pricing to assess the actual volume of water used. This will encourage water conservation through its efficient use.

3. INDIA'S ETHANOL PUSH

Context:

At a G20 Energy Ministers' meeting, the Indian PM stated that India **has rolled out 20% ethanol-blended petrol this year** and aims to cover the entire **country by 2025**.

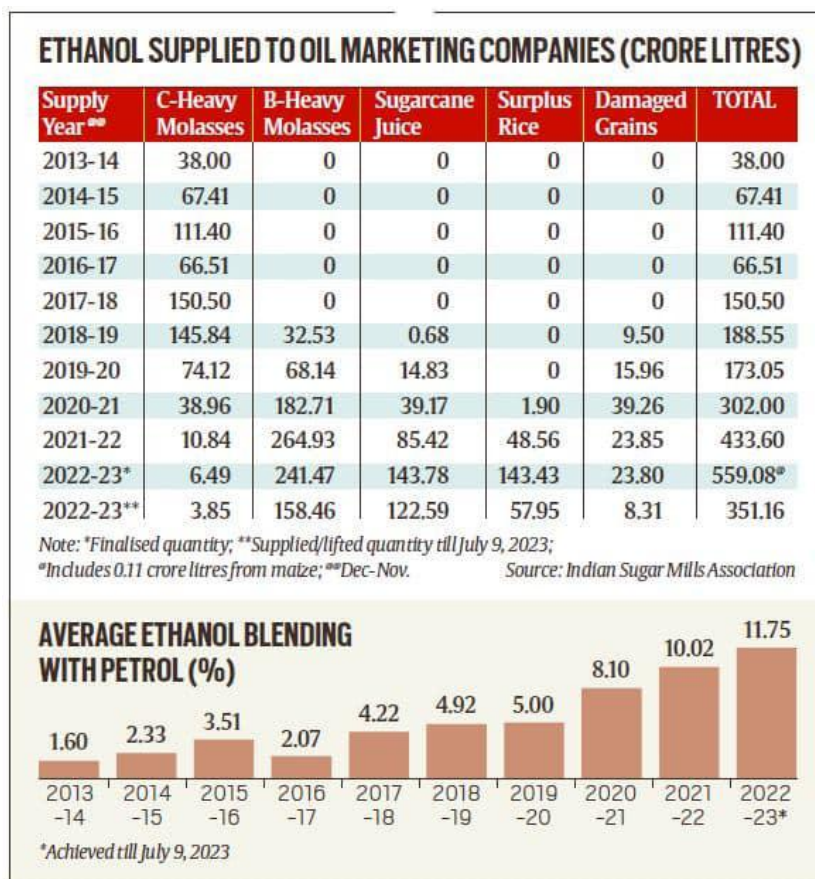
Ethanol:

- Ethanol is basically **99.9%** pure alcohol that can be blended with petrol.
- It is different from the 94% rectified spirit (having applications in paints, and pharmaceuticals) and 96% extra neutral alcohol that goes to make potable liquor.

India's ethanol production programme:

It has come a long way in the past five years, both in terms of the quantities supplied by sugar mills/distilleries to oil marketing companies (OMCs) and the raw material used.

Raw material used:



What does it mean?

- **India's ethanol programme is no longer reliant on a single feedstock or crop.**
- It has diversified only from molasses and cane to rice, maize and other grains as well.

Implications of diversification of feedstocks:

- It will **minimise supply fluctuations and price volatility** on account of any one crop.
- The incorporation of new feedstocks **can create new demand for grains**. For example, if UP (a major sugarcane grower) and Bihar (maize) could supply rice, barley, and millets to distilleries, they can “fuel India” the way Punjab, Haryana or MP “feed India”.

How was this diversification made possible?

- **Differential pricing:** Till 2017-18, the OMCs were paying a uniform price for ethanol produced from any feedstocks.
 - From 2018-19, the government began fixing higher prices for ethanol produced from B-heavy molasses and whole sugarcane juice/syrup.
 - **This gave flexibility and incentive** for mills/ distilleries to use multiple feedstocks.
 - **This has given stimulus to ethanol production**, which can be seen from its all-India average blending with petrol touching 11.75% in 2022-23, as against 1.6% in 2013-14.
- **Byproduct benefits:**
 - The liquid effluent (spent wash) generated during alcohol production in distilleries can pose **serious environmental problems** if discharged without proper treatment.

- The new molasses-based distilleries have MEE (multi-effect evaporator) units, where the spent wash is concentrated to about 60% solids.
- The concentrated wash is used as **a boiler fuel along with bagasse** (the fibre remaining after crushing sugarcane).

While the ethanol program has numerous benefits, there are also some concerns. Increased demand for grains for ethanol production may impact food supply and prices. Additionally, distilleries' liquid effluent can pose environmental challenges, but advancements such as multi-effect evaporator units have enabled the utilization of spent wash as boiler fuel and the production of fertilizer and animal feed as by-products.

Conclusion:

Overall, the ethanol program holds promise for reducing dependence on fossil fuels, promoting sustainable practices, and providing opportunities for farmers and industries.

4. ALL INDIA TIGER ESTIMATION 2022

Context:

On the occasion of Global Tiger Day (July 29), a detailed report on the All-India Tiger Estimation 2022 was released

Highlights of the report:

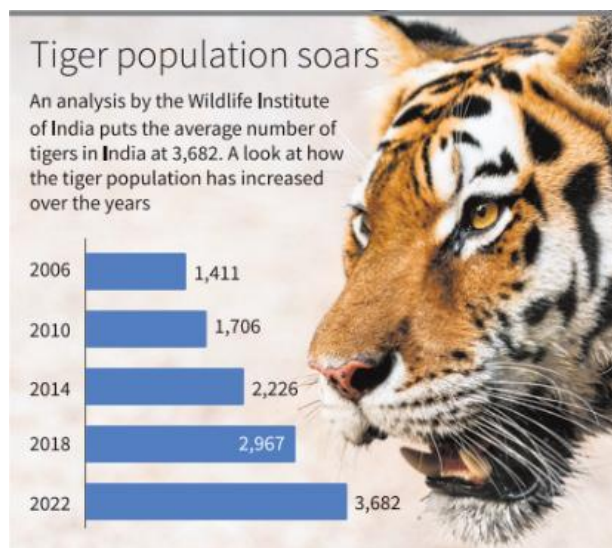
- According to the Wildlife Institute of India's (WII) 5th quadrennial tiger census, **India's tiger population increased to 3,682 in 2022.**
- The numbers in the report, revised from 3167 earlier, **reflect a commendable annual growth rate of 6.1% per annum.**
- **The largest tiger population of 785 is in MP**, followed by Karnataka (563) and Uttarakhand (560), and Maharashtra (444).
- **The tiger abundance within the Tiger Reserve is highest in Corbett (260)**, followed by Bandipur (150), Nagarhole (141), Bandhavgarh (135), Dudhwa (135), etc.
- **Central India and the Shivalik Hills and Gangetic Plains** witnessed a notable increase in tiger population, **while the Western Ghats experienced localised declines**, necessitating targeted monitoring and conservation efforts.
- Some states, including **Mizoram, Nagaland, Jharkhand, Goa, Chhattisgarh and Arunachal Pradesh**, have reported disturbing trends with small tiger populations.

Efforts to conserve the species:

- **Global Tiger Day (July 29):** It was instituted in **2010** at the **Tiger Summit** in St Petersburg, Russia when the 13 tiger range countries came together to create **Tx2** - the global goal to double the number of wild tigers by the year 2022.
- **Project Tiger of India:**
 - It was launched by the Central government on **April 1, 1973**, at the Jim Corbett National Park of Uttarakhand to promote the conservation of the tiger.
 - It didn't just focus on the conservation of the big cats but also **ensured the preservation of their natural habitat as tigers are at the top of the food chain.**
- **National Tiger Conservation Authority (NTCA) of India:** It was established in 2005, following a recommendation of the Tiger Task Force, to reorganise the management of Project Tiger and India's many Tiger Reserves in India.
- **Management Effectiveness Evaluation (MEE):**

- It was adopted from the framework of the IUCN World Commission on Protected Areas.
- Since its inception in **2006**, MEE has been jointly conducted by the NTCA and the WII and has paved the path for a successful evaluation of national tiger conservation efforts in India

The success story of India's conservation efforts:



- Today, there are 54 tiger reserves across India, spanning 75,000 sq km.
- Nearly 75% of the global tiger population (in the wild) can today be found in India.

Challenges for the world and India:

- **Overall**, the designated year (2022) for achieving the goals of Tx2 saw uneven progress. **For example**, the countries in Southeast Asia struggled to control population decline.
- **For India**,
 - The tiger population of the country **cannot be increased at the same pace** because that will result in an increase in conflict with human beings.
 - **Action on key agendas** like carbon capture and climate change, fund flow as well as village relocation **has been the weakest performing area for Indian tiger reserves.**

Way ahead:

- **There is a need to strongly continue the eco-friendly development agenda**, minimise mining impacts, and rehabilitate mining sites.
- Vital steps to protect the country's tiger populations include –
 - Fortifying protected area management,
 - Intensifying anti-poaching measures,
 - Employing scientific thinking and technology-driven data collection, and
 - Addressing human-wildlife conflict.



5. NEW METHANE SOURCE

Context:

Climate change is causing **groundwater springs to release methane in the Arctic** as retreating glaciers expose **these methane-rich springs**, according to a study published in Nature Geoscience.

- The groundwater springs found in Svalbard, an archipelago in the Arctic, **could be emitting over 2,000 tonnes of methane annually**, which is **equivalent to 10% of Norway's methane emissions from its oil and gas industry**.
- The presence of methane near **shale rocks suggests a geologic or thermogenic source of gas that moves upward through fractures in the rocks and accumulates beneath the glacier**.

As global warming continues and glaciers retreat further, **the release of methane from glacial groundwater springs is expected to increase, highlighting the need to assess the risk and impact of these emissions**.

6. MICROPLASTICS

Context:

A report by the **Food and Agriculture Organization (FAO)** highlights the significant impact of **microplastics and nano plastics on human and animal gut microbiomes and the environment**.

Findings:

- Exposure to plastic has been **observed to cause intestinal inflammation and gut dysbiosis, altering the gut microbiome and microbiota**.
- Microplastics and nano plastics are known to **affect soil microorganisms and can enter the food chain**. Evidence suggests that these particles have been **found in human lung tissue, placenta, stool, blood, and meconium**.
- Most studies in the report indicate **alterations in the host due to microplastic exposure, including changes in gene markers, biochemical markers, mucus layer, gut permeability, oxidative stress, immune response, and liver function**.

About Microplastics:

Microplastics are **plastic particles less than 5mm in diameter**. They are of two types,

- **Primary Microplastics:** They are tiny particles designed for **commercial use and microfibers shed from clothing and other textiles**. E.g., microbeads found in personal care products, plastic pellets, and plastic fibres.
- **Secondary Microplastics:** They are formed from the **breakdown of larger plastics such as water bottles**

7. SHELF CLOUD

Context:

A viral video on social media shows the formation of spectacular clouds known as **shelf clouds or Arcus clouds** during **heavy monsoon rains** in Haridwar, India.

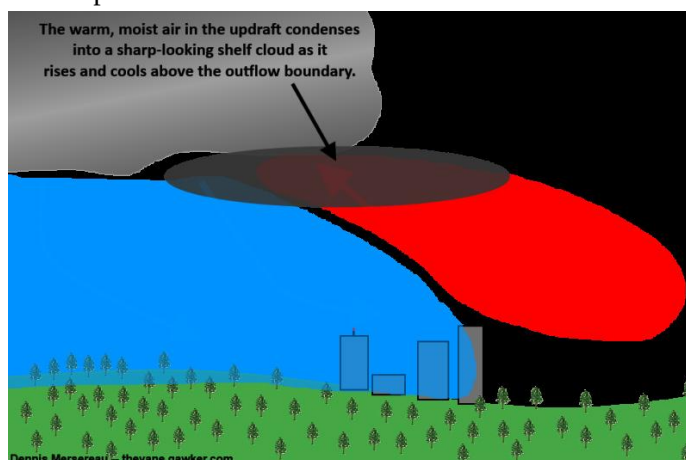
- The video, shared on Twitter, depicts a **towering wall of clouds with a horizontal rotation**. The authenticity of the video has not been independently confirmed.

About Shelf Clouds:

Shelf clouds are **wedge-shaped formations that appear on the leading edge of storms**. They occur when **cold and dense air is forcefully driven into a warmer air mass during the downdraft of a thunderstorm**.

How it is formed?

Shelf clouds form **when warm, moist air is lifted rapidly by an advancing thunderstorm or cold front**. As the warm air rises, it cools and condenses, forming a cloud. The rising air creates a boundary between the cool, downdraft air from the storm and the warm, updraft air ahead of it. The shelf cloud is usually dark and ominous-looking due to the condensation and the presence of rain or hail within the storm.



8. UREILITE

Context:

A recent study suggests that **Madhya Pradesh's famous Dhala impact crater** was created by an extraordinarily rare and ancient meteorite known as **Ureilite**.

About the meteorite:

Meteorites are **extra-terrestrial rocks or metallic objects that survive** their journey through **Earth's atmosphere and land** on the planet's surface. They originate from **asteroids, comets, or other celestial bodies in space**.

What are Ureilites?

These are a **rare class of primitive meteorites** that consist of **silicate rock with olivine and pyroxene**, along with **less than 10% of carbon, metal sulphides**, and fine-grained silicates.

The Ureilite that created the Dhala crater was approximately one kilometre in diameter and crashed into Earth's atmosphere at an extraordinary speed of 15 km/s about 2500 to 1700 million years ago.

Significance:

With this discovery, **scientists hope to uncover more secrets about the rare meteorite crater** and its potential role in **Earth's early history**, including its impact on **bringing water to the planet** and the development of life.

- The Dhala crater is **Asia's largest and the world's seventh-largest impact crater**.

In India, three meteor impact craters are found:

- Ramgarh in Rajasthan
- Lonar in Maharashtra
- Dhala in MP

9. DUDHWA TIGER RESERVE

Context:

Four tigers died within two months in the **Dudhwa Tiger Reserve in Uttar Pradesh**, India.

Dudhwa Tiger Reserve:

- The Dudhwa Tiger Reserve is a **protected area in Uttar Pradesh located on the India-Nepal border**.
- It stretches mainly across the **Lakhimpur Kheri and Bahraich districts**.
- It is the only place in Uttar Pradesh where **both Tigers and Rhinos can be spotted together**.
- It is one of the finest examples of **exceedingly diverse and productive Terai ecosystems**.

Terai Arc Landscape (TAL) is composed of **14 Indian and Nepalese trans-border protected ecosystems of the Terai** and nearby foothills of the Himalayas and encompasses 14 protected areas of Nepal and India.



10. STEEL SLAG ROADS

Context:

India has developed the world's latest Steel Road technology by using steel slag.

What is Steel Slag Road?

Steel slag is a **byproduct of steelmaking**, and is produced during the **separation of molten steel from impurities in steel-making furnaces**. Steel slag roads are roads constructed using steel slag. Instead of discarding this waste material, **it is processed and used as an aggregate in road construction**. The steel slag is mixed with other materials and technologies to create a **durable and sustainable road surface**.

Developed by: The technology, **pioneered by CSIR-Central Road Research Institute (CRRI)**, allows for the **large-scale utilization of waste steel slag** from steel plants in road construction.

Benefits:

- It is part of the **“Waste to Wealth” initiative** and addresses environmental degradation caused by waste steel slag.
- **Steel slag roads** are well-suited to India's terrain, offering **cost savings of 30%** and three times the lifespan of traditional roads.
- It is **resistant** to weather conditions.
- The success of steel slag roads has been demonstrated in various projects, including in **Surat, Arunachal Pradesh, and on National Highway NH-66**.

11. CICADA SPECIES

Context:

A cicada species commonly found in **several parts of South India** has been identified as a **new species and named Purana cheeveeda** (after its Malayalam name Cheeveedu).

- Previously, it was mistaken for **Purana tigrina**, a species described in Malaysia in 1850. The Association for Advancement in Entomology has corrected this **long-standing error in taxonomic identification, distinguishing Purana cheeveeda from the Malaysian species**.
- The team noticed **differences in the structure of the male genitalia and operculum**, leading to the reclassification



12. BIOLOGICAL DIVERSITY (AMENDMENT) BILL, 2023

Context:

Recently, both houses of Parliament passed the Biological Diversity (Amendment) Bill, 2023, amending the Biological Diversity Act of 2002.

Biological Diversity Act 2002

- The Act was implemented to help India meet the objectives of the **United Nations Convention on Biological Diversity (CBD) 1992**.
- The Law was enacted with the aim to:
 - **Conserve biodiversity.**
 - Promote the **sustainable utilisation of its elements.**
 - **Ensure just and fair distribution** of the advantages arising from the use of biological resources.
- **Act provides for a decentralised three-tiered mechanism** for regulation.
 - **National Biodiversity Authority (NBA)** at the national level,
 - **State Biodiversity Boards (SSB)** at the state level, and
 - **Biodiversity Management Committees (BMC)** at the local body level.
- **Act provides for sharing benefits with biodiversity conservers** and holders and creators of associated knowledge.
 - Benefits may be shared in various forms, such as **monetary compensation**, sharing of **intellectual property rights**, or **technology transfer**.



United Nations Convention on Biological Diversity (CBD)



About: An internationally legally binding multilateral treaty.



Objectives: Drafted in 1992 with 3 Goals-

- Conservation of biological diversity.
- Sustainable use of its components.
- Fair and equitable sharing of benefits arising from genetic resources.



Membership: 196 parties, including India.



Core Agreements: India has ratified all 3 Protocols-

- Nagoya Protocol on Benefit Sharing
- Cartagena protocol on Biosafety
- Nagoya-Kuala Lumpur Supplementary Protocol on Liability



Other Key Information:

- CBD's governing body is the **Conference of the Parties (COP meets every 2 years)**.
- Convention covers biodiversity at all levels: **ecosystems, species and genetic resources**.

Significance of Bill

Reduce the pressure on wild medicinal plants by encouraging cultivation of medicinal plant



Encourage Indian system of medicine



Facilitate fast-tracking of research, patent application process, transfer of research results



Bring more foreign investments in the chain of biological resources without compromising the national interest.



Key changes made in the Biodiversity Amendment bill

Provision	Biological Diversity Act 2002	Biological Diversity (Amendment) Bill 2023
Extension of Exemptions	Act requires prior approval or intimation to the regulatory authority for accessing biological resources.	It exempts AYUSH registered practitioners, local people and communities of the area, including growers and cultivators of biodiversity, from giving prior intimation to SBB for accessing biological resources for commercial utilization.
Property Rights (IPR)	Act specifies that approval of NBA is required before applying for IPR involving biological resources obtained from India.	Amendment changes the requirement and now the approval will be required before the actual grant of the IPR and not before the application
Benefit Sharing	Act requires users of biological resources and associated knowledge to share benefits with local communities.	Bill exempts users of “codified traditional knowledge” from this requirement.
Offences and Penalties	- Offences like failure to take approvals - from the authorities for various activities which were punishable up to 5 years or a fine or both.	- Bill decriminalises the offences and makes offences punishable with a penalty between Rs 1 lakh and Rs 50 lakh. Continuing contravention may attract an additional penalty of up to 1 crore rupees (Here, the adjudicating officer should not be below the rank of Joint Secretary).
Expansion of NBA	- Act requires NBA to have 10 ex-officio members apart from the Chairman. 5 non-official members to be appointed from amongst specialists (including legal) and scientists.	16 ex officio members representing the Ministries like Tribal Affairs, Biotechnology etc. 4 representatives from SSB. 5 non-official members amongst specialists (including legal) and scientists. 1 Member-Secretary (must have experience in biodiversity conservation), who will be the chief coordinating officer of the NBA.

Know the term:

Access and Benefit Sharing: It refers to the way in which genetic resources may be accessed, and how the benefits that result from their use are shared between the people or countries using the resources (users) and the people or countries that provide them (providers)

Key issues with the Bill

- **Ambiguity in the definition of codified traditional knowledge:** The CBD's Nagoya and Cartagena protocols do not define this term.
- **A broad interpretation** of this term might exempt almost all traditional knowledge from benefit-sharing requirements.
 - **Local communities may have little say in benefit sharing:** Bill removes the direct role of **local bodies and benefits claimers** in determining mutually agreed terms.
- **Issues in offences and penalties:**
 - A wide range of penalties can be levied, between one lakh rupees and one crore rupees. There needs to be **legislative guidance** to the adjudicating officer on assessing the penalty within this range.
- **Large companies may evade the requirement for prior approval or sharing the benefits:**
 - **Most AYUSH** firms are registered under the name of the practicing AYUSH doctors, and excluding them could also
 - exempt their companies.
 - **A company under foreign management but registered in India** wouldn't need to seek permission from the NBA
- to use a specific resource and develop a product from it. Without **the NBA's cognisance**, any monetary benefits
- from the product's sale **might not reach the local communities**.

Conclusion

There is a need to address the abovementioned concerns to ensure that India's rich biological diversity and associated traditional and contemporary knowledge systems be preserved without compromising the objectives and **hindering their growth and usability**.

13. FOREST CONSERVATION (AMENDMENT) BILL, 2023

Context:

Both the houses passed the Forest Conservation (Amendment) (FCA) Bill 2023.

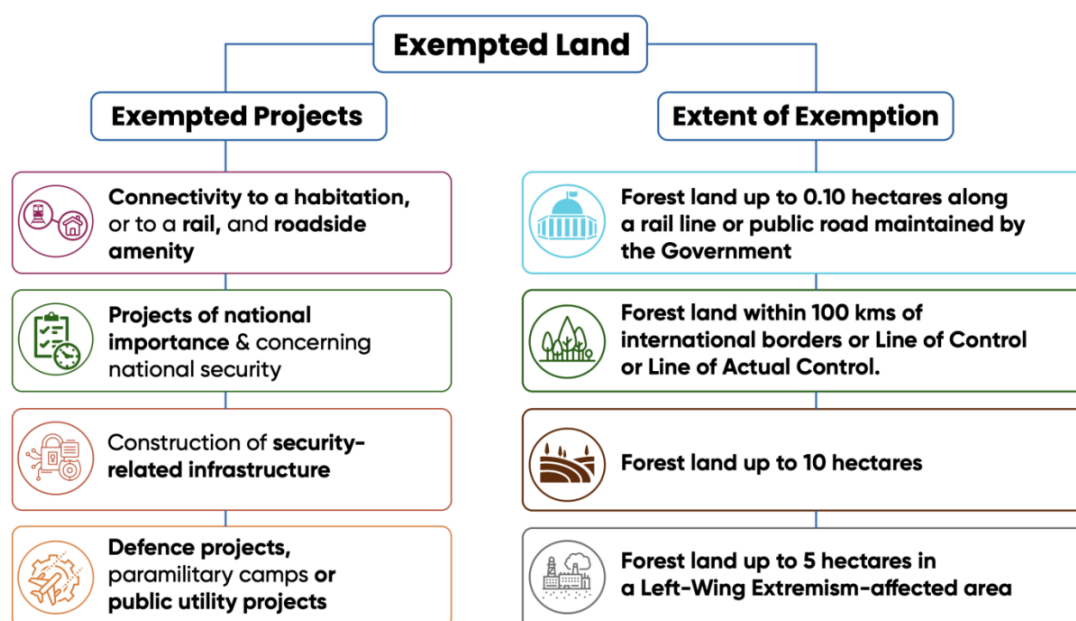
About Forest Conservation (Amendment) (FCA) Bill, 2023

- It will amend **Forest (Conservation) Act 1980**.
 - **Forests** is a subject under the **Concurrent List** in the **Seventh Schedule** of the Constitution of India, empowering the Parliament of India to enact a law on it.
- **Forest (Conservation) Act, 1980:** puts **several restrictions on the de-reservation of forests or use of forest land for non-forest purposes** and specifies penalties for contravention of any of its provisions.
 - The Act has been given a new name through the amendment–
- **'Van (Sanrakshan Evam Samvardhan) Adhiniyam'** (Forest (Conservation and Augmentation) Act), 1980.
- Bill will enable India to **increase its forest/tree cover**; achieve national and **international targets**; Fast track Strategic & security-related projects; etc.

- **T.N. Godavarman Thirumulpad vs Union of India Case (1996)**
- Till 1996 concerned authorities used to apply the provisions of the Act only to the forests notified under the Indian Forest Act of 1927.
- The Supreme Court judgment, in this case, expanded the definition of “forest” covered under the Act to include:
 - All areas **recorded as “forest” in any government** (Union and State) record, irrespective of ownership, recognition and classification.
 - All areas that conformed to the “**dictionary**” meaning of forest.
 - Areas are **identified as “forests”** by an expert committee constituted by the Supreme Court following the 1996 order.

Key Amendments

- **Rationale:** Clarifies the scope of applicability of the Act after the ambiguity created by the Supreme Court judgment in the **T.N. Godavarman case (1996)**.
- **Addition of Preamble:** It encompasses **India’s Nationality Determined Contribution and other National targets**, such as Net Zero Emission by 2070, creating a carbon sink of an additional 2.5 to 3.0 billion tons of CO2 equivalent by 2030.
- **Coverage:** Land covered under the provisions of the Act includes:
 - Land **declared/notified as a forest** under the Indian Forest Act, 1927 or other laws.
 - **Land recorded in Government records** (records held by Revenue Department/Forest Department of the State/UT Governments etc.) **as forest**, as on or after **1980**.
 - ✓ This does not include **land which has been officially changed from forest use to use for non-forest purposes** on or before 1996.
- **Exempted Categories of Land:** Certain categories of land have been kept outside the purview of the Act (see image).
 - Further, **tree, tree plantation or reforestation** raised on lands **not explicitly covered under the Act** is allowed.
- **Addition of activities into the array of forestry activities:** Following activities have been excluded from the definition of non-forest purposes:
 - establishment of **zoos and safaris** under the Wild Life (Protection) Act, 1972, in forest areas other than **protected areas**;
 - **eco-tourism facilities** included in plans of the area;
 - **silvicultural operations**, including regeneration operations; and
 - any other purposes specified by the Central Government.
- **Uniformity in the Assignment/leasing of forest land:** State governments now require **prior approval of the central government** before assigning of forest land by way of lease or otherwise to **government entities as well** (earlier needed for only private entities).
- **Central government have been further empowered to:**
 - **Specify terms and conditions for treating any survey**, such as reconnaissance, prospecting, investigation or exploration, including seismic survey, **as non-forest purposes**.
 - **Provide terms and conditions for exempted lands**, including **planting trees to compensate felling of trees**.
 - **Issue directions** to any government authority or organisation for implementation of the act.



Concerns regarding the Bill

- **Contrary to the spirit of FCA, 1980:** Excluding more activities for non-forest purposes may promote large-scale deforestation.
- **Invalidates SC's 1996 Judgement:** Placing **non-recorded forests** out of the **purview of the Act** leaves large areas of forests unprotected.
 - For example, the sacred forest Mangar Bani in Haryana is unrecognised.
- **Dilutes Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights Act), 2006:** Exemptions to forest lands are provided without consent or clearance by any authorities such as the Gram Sabha.
- **Compromises Federalism:** The state government needs to take prior approval from the Central government for assigning forest land on lease to government authorities.
- **Threatens Ecologically Fragile Areas:** Blanket exemptions across international borders can threaten biodiversity in most ecologically fragile areas, such as the Northeast.
- **Plantations vs Natural forests:** Plantations cannot substitute for the large gamut of ecological services offered by natural forests.

Conclusion

The Amendment Act aims to promote the conservation of forests and fulfill India's international commitments. A comprehensive survey of the extent of all forest land in the country can be conducted to address the concerns. Further, any diversion of forest land should be done to protect the ecological integrity of the region and ensure sustainable development.

14. GAMBUSIA AFFINIS (G AFFINIS)

- **Andhra Pradesh released Gambusia fish into the state's water bodies** to combat mosquito-borne diseases like malaria and dengue.
- Gambusia affinis is **native to the southeastern United States**.
 - Fish, **also known as mosquitofish**, is widely used as a **biological agent for controlling mosquito larvae**.
- **Multiple countries, including India, have listed Gambusia as invasive species.**
 - Fish has a **high breeding capacity**.

- They are **known to eat the eggs** of **competing fishes and frog tadpoles**.

15. CRYPTOBIOSIS

- Scientists brought **microscopic worms back to life** after they were **frozen in the Siberian permafrost for 46,000 years** by entering in to state called cryptobiosis
- **About Cryptobiosis**
 - **Cryptobiosis is the state of an organism** when it shows **no visible signs of life** and when its **metabolic activity becomes hardly measurable** or comes reversibly to a standstill.
 - In this state, **organisms can survive the complete absence of water and oxygen and withstand extreme conditions**.
 - Since metabolism is a **defining characteristic of life**, cryptobiosis can be termed as a **temporary death** of an organism.

16. BAHU BALLI CATTLE FENCE (BAMBOO FENCE)

- **Ministry of Road Transport & Highways** is planning to implement the Bahu Balli Cattle Fence along highways in India.
 - **It will prevent cattle** from crossing the road and causing dangerous accidents.
- **About Bahu Balli Cattle Fence**
 - **Bamboo is treated with creosote oil** and coated with recycled **High-Density Poly Ethylene (HDPE)**, making it a **stronger alternative to steel**.
 - Fence has a **fire rating of Class 1**, ensuring safety and addressing **environmental concerns**.

17. SALSOLA OPPOSITIFOLIA DESFONTANIA

- **It is a new species**, discovered recently, belonging to the Amaranthaceae family.
- It is a **perennial shrub that grows in saline, arid, to semi-arid environments** of Gujarat's Kutch district (Khadir Bet and Bela region).
 - It is **prostrate** (woody plant) and, unlike other species of Salsola, **does not have any hairs**.
- **Other species of the Salsola genus discovered in India:**
- Salsola kali, Salsola hatmanii, Salsola monoptera, Caroxylon imbricatum (Salsola baryosma) and Halogeton glomeratus (Salsola glomerata).
- Plants of the Salsola genus **have salty juice stored in their leaves**, are **used in manufacturing soaps** and **are rich in pharmacological properties**.

18. HOLOBIONTS

- **Animals and plants** are **no longer** heralded as **autonomous entities**, but rather as biomolecular networks composed of **the host plus its associated microbes, i.e., "holobionts."**
 - In short, **it is a host, and all its microbes living as a unit in symbiosis**.
 - E.g., **Bacteria present in the roots of legumes** benefit from the sugars produced by the plant and favour plant growth by supplying nitrogen.
- As such, their **collective genomes forge a "hologenome,"**.