

CURRENT AFFAIRS

WEEKLY

WEEK: 4
AUGUST
2022

MAINS

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- THE MAKING OF 'GREATER INDIA' IN SOUTHEAST ASIA
- ROHINGYA AND REFUGEE POLICY FOR INDIA
- ASSESSING 'LEGALITY' IN BILKIS BANO CASE
- DRAFT INDIAN PORTS BILL, 2022
- DIGITAL CURRENCIES IN GOVERNANCE: THE BALANCE BETWEEN PRIVACY AND TRANSPARENCY
- INITIATIVES FOR INDIA'S LABOUR REFORMS SINCE INDEPENDENCE

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- PRIVATIZATION OF PUBLIC SECTOR BANKS (PSBS) IN INDIA
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- Scientists planning to 'resurrect' the extinct Tasmanian Tiger
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- 'Tomato flu' in India
- Artemis: NASA to announce sites on Moon

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- Landmark Judgments that changed India's Polity

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The current affairs articles are segregated from prelims and mains perspective, such separation is maintained in terms of structure of articles. Mains articles have more focus on analysis and prelims articles have more focus on facts.

However, this doesn't mean that Mains articles don't cover facts and PT articles can't have analysis. You are suggested to read all of them for all stages of examination.

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SECTION: A
(MAINS)

CURRENT AFFAIRS

THE MAKING OF 'GREATER INDIA' IN SOUTHEAST ASIA

CONTEXT:

As part of his visit to Thailand for the ninth India-Thailand joint commission meeting, External Affairs Minister S. Jaishankar visited the 'Devasthan' in Bangkok. The visit emphasized the long history of cultural contact between India and Thailand.

◎ INDIA-THAILAND RELATIONS (BACKGROUND)

The Early Years:

- In the post-India independence period, Indo-Thai relations had remained lukewarm with neither the King nor the Prime Minister of Thailand during 1947-76, to pay a State visit to India.
 - ▶ The major reason for these limited high-level visits could be political, as Thailand witnessed six Prime Ministers between 1973-76.
 - ▶ The Thai government was not able to take steps to strengthen Indo-Thai relations.

Approach towards building the Relations

- The **Southeast Asia Treaty Organization (SEATO)** was an international organization created by the Southeast Asia Collective Defence Treaty.
- Pakistan being a member of **the Southeast Asia Treaty Organization (SEATO)**, established for the collective defence in Southeast Asia.
 - ▶ Pakistan enjoyed the support of Thailand on many international platforms, but the situation changed when Pakistan and the United States wanted to stop the Indian action in support of the independence of Bangladesh, but Thailand gave its support to India by opting for a neutral stance.
 - ▶ This action by Thailand signalled a new phase for renewing the bilateral ties.

About 'Farther India':

- A French scholar named **George Coedes**, was the first person to do an in-depth study of the process of 'Indianisation' in Southeast Asian countries.
- He published his work on the subject in the book "**The Indianized states of Southeast Asia**".
- He coined the term '**Farther India**' to refer to those states that experienced "the civilising activity of India".

- Geographically, it refers to **Vietnam, Cambodia, Laos, Thailand, Myanmar and the Malay states.**

◎ ANALYSIS

How the Southeast Asian countries were '**Indianized**'?

- **Role of Sea Voyages and Trade:** The **Sanskrit, Buddhist, and Jain texts** indicate that interactions between the two regions go back more than two thousand years ago, mainly through sea voyages and that trade played an important role.
 - ▶ The traders of those times had brought along with them Indian religion, culture, traditions and philosophy along with them to the shores of Southeast Asia.
- **Spread of religion and Culture Exchange:** Brahmin priests, Buddhist monks, scholars and adventurers played an important role in the transmission of Indian culture to the natives of Southeast Asia.
- **Marital Alliances:** Some of the merchants and Brahmin priests married the local girls and were often employed by the local rulers.

The first Indian kingdom to come up in Southeast Asia was Funan, which is the predecessor of modern Cambodia and Lin-yi in southern Vietnam, both of which came up in the second century CE.

Do we have evidences present till today?

- **Language similarities:** Many local languages in the region, including Thai, Malay, and Javanese contain words of Sanskrit, Pali and Dravidian origin in significant proportions.
 - ▶ The Thai language is written in a script derived from the Southern **Indian Pallava alphabet.**
- **Religious Influences:** **Shivaism, Vaishnavism, Theravada Buddhism, Mahayana Buddhism and later Sinhalese Buddhism** are practised in the region.

- ▶ **For example**, the Thai king is considered as an **incarnation of Vishnu**.
- **Architectural Evidence:** Monuments like **Borobudur Stupa** in Java, the **Angkor Vat temple** in Cambodia, and the **My Son temple** in Vietnam are some of the best examples of Indian influence in the region.

What is the Present Status of India-Thailand Relations?

- With regular political exchanges, and growing trade and investment, India's ties with Thailand have now evolved into a comprehensive partnership. Both countries are important regional partners linking South and Southeast Asia and they cooperate closely on many international platforms:
 - ▶ ASEAN
 - ▶ East Asia Summit (EAS)
 - ▶ Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC)
 - ▶ Mekong Ganga Cooperation (MGC)
 - ▶ Asia Cooperation Dialogue (ACD)
 - ▶ Indian Ocean Rim Association (IORA)
 - ▶ Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS)
- **Trade relations**
 - ▶ In 2021, Thailand became India's fourth largest trading partner in ASEAN.
 - ▶ In 2021-22, Thailand was India's 22nd top trade partner, with a total trade of US\$ 6.6 billion.
 - ▶ Bilateral trade during the current year is poised to surpass US\$12 billion despite the pandemic. ASEAN India Trade in Goods Agreement (AITIGA) and the **Early Harvest Scheme** between India and Thailand have played an

important role in the growth of bilateral trade and investment.

- ▶ Reducing import duty charges through bilateral engagements will be essential for expanding trade and investments.
- **Tourism:**
 - ▶ Before the pandemic struck, and travel restrictions were imposed, Indians travelling to Thailand generated the US \$24.9 million in profits.
 - ▶ India is an important tourist destination for the Thais as well. Thai Buddhists visit Lumbini, Bodh Gaya, Sarnath, and Kushinagar in India for their religious trips.
- **Defence cooperation:**
 - ▶ The MoU on Defence Cooperation between India and Thailand was signed on 25 Jan 2012.
 - ▶ Since 2015, India is participating in **Ex-Cobra Gold**, the largest Asia Pacific Military exercise in the 'Observer Plus' category.
- **India-Thailand Counter-Terrorism Cooperation:**
 - ▶ In the area of counter-terrorism according to the MOU, both sides resolved to significantly enhance bilateral cooperation in combating terrorism, including in restricting transnational movement and unauthorized stay of known terrorists in each other's countries.

◎ CONCLUSION:

In 2022, India-Thailand celebrated 75 years of bilateral ties. The 75th anniversary of India-Thailand relations presents new opportunities to further collaborations in different spheres. India's 'Act East' Policy strongly compliments Thailand's 'Act West' Policy and we are significantly contributing to growing India-Thailand bilateral ties.

ROHINGYA AND REFUGEE POLICY FOR INDIA

CONTEXT:

India's approach towards refugees, in general about the Rohingyas has raised several questions about India's policy on the Rohingyas.

◎ BACKGROUND

- India allowed Rohingya refugees to enter the country in 2012 and considered the eruption of violent conflicts between Rakhine Buddhists and Rohingya Muslims in Rakhine State as an "internal affair".
- Myanmar has classified them as "resident foreigners" or "associate citizens". They were forced to leave Myanmar in large numbers after several waves of violence, which first began in

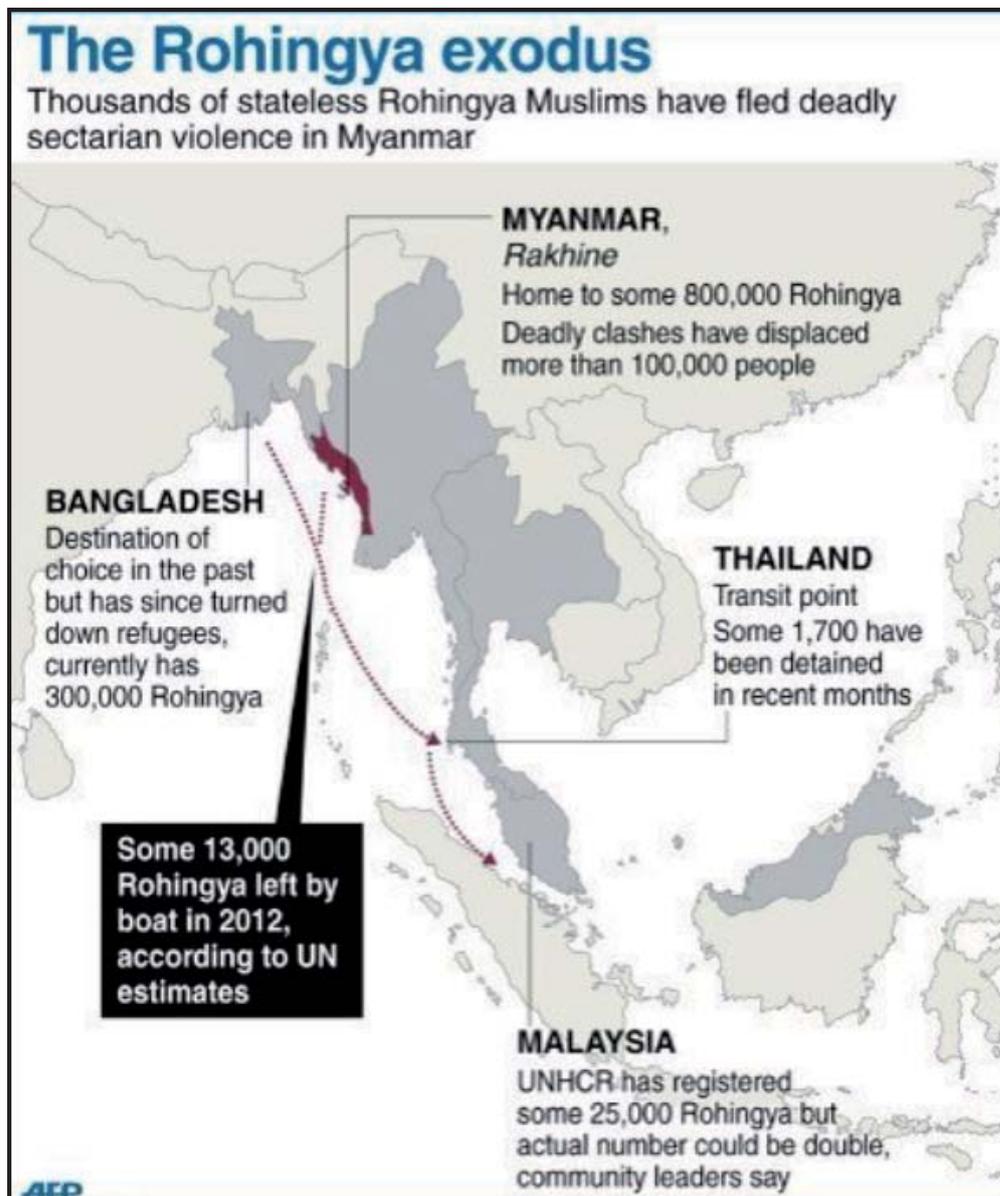
2012.

- Officially, about 1,200 Rohingya have been identified as among the first batch to have arrived in Delhi in 2012.

◎ ANALYSIS

Who are Rohingya?

- The Rohingya people are a stateless Indo-Aryan ethnic group who predominantly follow Islam



and reside in Rakhine State, Myanmar (previously known as Burma).

- Rohingyas are prescribed by the United Nations as the **most persecuted minority in the world**.
- They **fled their homes in 2017** to escape an alleged crackdown by Myanmar's military.
- To escape discrimination and violence in Myanmar, minority Rohingya Muslims have for decades **fled from the Buddhist-majority country to neighbouring Bangladesh** and other countries, **including India**.

What is the issue?

- In June 2021, a fire ravaged one of the Rohingya camps, and after the incident displaced Rohingyas were moved to an empty plot nearby that belonged to the **Zakat Foundation of India, an NGO**.
- It was later decided by the Delhi government to shift all Rohingya families to **EWS flats** and would be put under constant police watch.
- Nature of assistance provided to Rohingyas in the detention camps:
- Relief assistance is provided by the Centre that includes **monthly cash dole, subsidized ration, clothing materials, utensils, cremation and shradh (last rites) grants, and infrastructure facilities** in camps.

What is India's stand on refugees?

- **India is not a signatory** to the **1951 UN Convention relating to the Status of Refugees** and the **1967 Protocol**.

Foreigners Regional Registration Office (FRRO) is responsible for tracking foreigners and their visas. The FRRO is under the administrative control of the MHA. Since Delhi is a Union Territory, law and order are under the Central government, it has erupted the matter of managing the refugee issues pertaining to Rohingyas is between the Delhi Government and the Central Government.

- All **foreign undocumented nationals are governed** as per the provisions of:
 - ▶ The Foreigners Act, 1946
 - ▶ The Registration of Foreigners Act, 1939
 - ▶ The Passport (Entry into India) Act, 1920
 - ▶ The Citizenship Act, of 1955
- **Foreign nationals who enter the country without valid travel documents** are treated as **illegal immigrants**.

- **There is no national law on refugees at present.** Only Standard Operating Procedures are issued by the MHA to deal with foreign nationals in India, who claim to be refugees.

The citizenship issue

- Indian Constitution defines the citizen of the country and the subsequent laws do not deal with refugees.
- In legal terms, a person living in India can be either a citizen or a foreigner defined under the **Foreigners Act, of 1946**.
- India has also not been a signatory of the **1951 UN Convention or the 1967 Protocol** - both relating to the Status of Refugees and included in the UNHCR statute.

According to the UNHCR, a refugee is a person living in another country following persecution on his own on the grounds of "race, religion, nationality, membership of a particular social group or political opinion."

What can be done further to improve their conditions?

- **Making for them sustainable living conditions:** In order to minimize the risk of disease and infection, large-scale vaccination programs have been launched to try to minimize the risk of disease.
- **Legal and Social backing:** By legislating a universal or national law on Refugees can help a lot in their management.
- **Improved facilities:** To improve sanitation and public health conditions with better employment opportunities.

◎ CONCLUSION:

India doesn't have a National Law on refugees at present and it was made clear by **Mr. Rijju (Minister of Law and Justice)** in an address to the Lok Sabha. It is creating a vacuum, leaving enough legroom for political parties to turn the issue into a politicized one.

Given the importance of India's internal security, the issue of refugees require immediate attention as any reconciliation procession takes time. Ironically, there is no enthusiasm to frame a refugee policy, this must change to adopt a non-discriminatory refugee policy.

ASSESSING 'LEGALITY' IN BILKIS BANO CASE

CONTEXT:

Eleven men, convicted of life imprisonment for gang-raping Bilkis Bano and murdering her family members during the 2002 Gujarat riots, walked out of Godhra sub-jail after a panel approved their application for remission.

◎ BACKGROUND (THE BILKIS BANO CASE)

- The accused in the case were arrested in 2004 and the trial began in Ahmedabad. Later, the apex court transferred the case to Mumbai.
- On 21 January 2008, the Special CBI Court sentenced 11 accused to life imprisonment on the charges of **conspiring to rape a pregnant woman, murder**, and unlawful assembly under the Indian Penal Code.
- In 2019, the Supreme Court awarded compensation of **Rs.50 lakh** to Bilkis — the first such order in a case related to the 2002 riots.
- This latest decision is now criticized as a “tragic reflection of India’s halting progress in addressing violence against women”.

This brief aims to dissect the legality of the premature release of convicts while tracing the development of the law of remission in India.

◎ ANALYSIS

Determining the 'legality' of the grant of remission to the convicts

- Is the Gujarat Government the “appropriate government” as per Section 432(7) of the CrPC to grant remission?
 - ▶ The Supreme Court, in **Radheshyam Bhagwandas Shah v. the State of Gujarat**, held that the “appropriate government” was the one where the offence took place.
- Is the Centre’s concurrence necessary in cases of remissions?
 - ▶ **Section 435** of CrPC states that in a case where an investigation is carried out under any Central Act by a central agency (such as CBI in the present case), no order of remission can be passed by the State Government unless concurrence has been produced by the Central Government.
 - Section 435 makes consultation with the centre mandatory.

What are the other areas of concern?

- **Overruled the Supreme Court:** One of the convicts had obtained an order from the Supreme Court in May 2022, **under which Gujarat, the State in which the crime occurred**, was held to be the appropriate government to consider his premature release.
- **Violating Remission norms:** Under the 2014 norms, a person convicted for gang rape and murder cannot be released prematurely.
 - ▶ As the life sentence normally means that a convict has to spend the natural life in prison.
 - ▶ The Code of Criminal Procedure (CrPC) permits premature release in the form of **remission or commutation**, but it should be based on a **legal and constitutional scheme**, and not on one’s discretion.

What is remission?

- Remission implies **reducing the period of a sentence** without **changing its character**.
- Indian laws provide pardoning power sourcing from **statutory** and **constitutional** authorities.
- As per law, there are three kinds of remissions
 - ▶ Constitutional
 - ▶ Statutory
 - ▶ Those earned in accordance with jail manuals
- **Sections 432 and 433** of the Code of Criminal Procedure (CrPC) lay down rules for the State governments to suspend or remit sentences.

What are the Constitutional Provisions related to remission?

- While **Article 72** of the Constitution empowers the President to grant remission, **Article 161** vests similar power with the Governor.

Prison is a subject under the **State List of the Seventh Schedule of the Constitution**, and the management and administration of jails fall under State governments.

Legal Provision related to remission:

- **Section 432** of CrPC empowers the '*appropriate government*' to suspend or remit the sentence of a prisoner.
- **Section 433A** of CrPC which deals with the **power to commute sentences**, however, states that a prisoner shall not be released before 14 years of undergoing sentence in the case of two kinds of life convicts:
 - ▶ those found guilty of an offence punishable with death.
 - ▶ those whose death sentences were commuted to life imprisonment under Section 433.
- **Section 435** states that in certain cases, the States have to act in consultation with the Central government.
 - ▶ These include cases investigated by the **Delhi Special Police Establishment**, or by any agency that has investigated an offence under a Central Act other than the CrPC.

The Powers of remission, commutation, and Pardon in the hands of the state government are applicable only to **Convicted persons** and not in **trial cases**.

Are State Governments permitted to release convicts?

- **Section 432** of the **Code of Criminal Procedure** allows state governments to grant remission to convicts, which means, a State government can release a prisoner prematurely if it so desires.
- This provision is legal because, in cases of remission, only the way the sentence is carried out is changed.
- Thus, remission only means that the execution of a sentence is handled differently and it does not imply that a person's conviction is overturned.
- It is pertinent to note, however, that the **exercise of the power of remission is in itself subject to judicial review**.

Implications:

- **On the Victim related to the case:** The victim (in this case) **Bilkis Bano**, has not only suffered the assault of rape but also the loss of her child. It may shake her faith in justice, and the ripple effect may set in motion affecting other women who are struggling in courts for justice.
 - ▶ Her safety and well-being may get compromised due to the release of the convicts.
- **On Convicts:** The 11 people who got released by the Government may transfer a wrong message to society and can create further hatred against the minority communities.
- **In society at large:** Society will affect the most by the incident, as the rights and sex-based violence in the country may be provoked further.
 - ▶ It is possible that, technically, the government is within its rights to release murderers and rapists, but it goes against the spirit of the Centre's current guidelines

Associated Challenges:

- **Political Interests:** Political interest linked to the convict's remission is a prominent provision in the political dynamics of the country.
- **Nepotism:** Many times, nepotism is found as one of the key reasons for remission and other grants in India.
- **Flexible consultation provisions:** The state governments without consultation with the Union government are allowed to provide remission but under specified reasons and without violating the Article 14 norms.
- **Ineligible for premature release:** As in most States, Gujarat's current remission policy (it adopted a new and revised remission policy for prisoners in 2014), makes those convicted of rape ineligible for premature release.
- **Inconsistencies in remission policies:** The inconsistencies observed while processing remission pleas of the convicts highlight the sense of inequality perceived by the victims.

CONCLUSION

It is an event of concern for India's democracy and it also questions equal and fair Justice to all, as the release of convicts challenges the rights of minorities, promotes Gender-related crimes, and even against the fundamental Rights of an individual.

DRAFT INDIAN PORTS BILL, 2022

CONTEXT:

The Draft Indian Ports Bill, 2022 has been put for stakeholder's consultation. The draft Indian Ports Bill, 2022 ("IP Bill 2022") has been prepared to consolidate and amend the laws relating to ports.

◎ BACKGROUND

- Ministry of Ports, Shipping, and Waterways issued the Draft Indian Ports Bill. The bill seeks to amend the Indian Ports Act, 1908.
 - ▶ The **Indian Ports Act, 1908 ("Act")** is more than 110 years old.
 - ▶ It has become imperative that the Act is revamped to reflect the present-day frameworks, incorporate India's international obligations, address emerging environmental concerns, and aid the consultative development of the ports sector in the national interest.

India has a 7,500 km long coastline, 14,500 km of potentially navigable waterways, and a strategic location on key international maritime trade routes. About 95% of India's trade by volume and 65% by value is done through maritime transport facilitated by ports.

About the Draft Indian Ports Bill, 2022

- The Bill will incorporate **State Maritime Boards** in the national framework.
- Additionally, **Maritime State Development Council** will ensure cooperative federalism where the Centre and State/UT Governments will work together towards preparing a progressive road map for the country.
- The redundant provisions of the Act have been deleted or replaced with contemporaneous provisions.
- Existing penalties in the Act which are outdated have been updated concerning amounts and offenses relevant to the present-day scenario.
- It aims to change port laws with respect for the
 - ▶ prevention and containment of pollution at ports
 - ▶ to ensure compliance with the country's obligation under the maritime treaties and international instruments to which India is a party
 - ▶ take measures for conservation of ports
 - ▶ to empower and establish State Maritime Boards for effective administration, control, and management of non-major ports in India

- ▶ provide for adjudicatory mechanisms for redressal of port-related disputes and to establish a national council for fostering structured growth and development of the port sector
 - to ensure optimum utilization of the coastline of India, as may be necessary
 - to provide for matters ancillary and incidental thereto, or connected therewith.

What are the key international obligations addressed under the bill?

The new Bill incorporates several international instruments to which India is a party, in the national legislation namely,

- International Ship and Port Facility Security (ISPS) Code 2004
- International Convention for the prevention of pollution from ships (MARPOL) 1973
- International Convention for the Control and Management of Ships Ballast Water and Sediments (Ballast Water Management Convention) 2004

Significance of the Draft Bill

- This bill will help in instilling confidence among more players thereby increasing their participation and promoting healthy competition in the maritime sector.
- This will lead to increased economic activity, wider markets, and a significant increase in associated employment possibilities.
- It will help in achieving the vision of **Atmanirbhar Bharat**.

Status of Ports in India

- India has 12 major and 205 notified minor and intermediate ports.
- Under the National Perspective Plan for Sagarmala, six new mega ports will be developed in the country.
- The Indian ports and shipping industry plays a vital role in sustaining growth in the country's trade and commerce.

- India is the sixteenth-largest maritime country in the world with a coastline of about 7,517 km. The Indian Government plays an important role in supporting the ports sector.
- It has allowed Foreign Direct Investment (FDI) of up to 100% under the automatic route for port and harbor construction and maintenance projects.
- It has also facilitated a 10-year tax holiday for enterprises that develop, maintain, and operate ports, inland waterways, and inland ports.

Greening of Ports

- The government of India is committed to reducing the emissions from the shipping sector and promoting the development of net zero and low-emission solutions.
- By 2030, all the Major Ports are to be made fully self-sustainable on electricity

- All the energy requirements of the port are to be met through renewable sources.
- The initiative also includes Green Warehousing utilizing green/ natural solutions such as natural light or energy efficiency lighting, automated and compact storage systems, rooftop solar, using HVLS fans, and rainwater harvesting.

◎ WAY FORWARD

The concerns of the respective states should be considered on a priority basis. Decentralization is required for the best outcomes under federalism. So steps should be taken in that direction instead of centralization of power.

The ongoing developments and committed investments (public and private) in ports need to be aided by scientific and consultative planning, with a keen focus on ever-increasing safety, security, and environmental issues.

DIGITAL CURRENCIES IN GOVERNANCE: THE BALANCE BETWEEN PRIVACY AND TRANSPARENCY

CONTEXT:

A recent report by the United Nations (UN) stated that over seven percent of India's population own digital currencies. The adoption of digital currencies has increased challenges in terms of the need to balance accountability, privacy, and transparency.

◎ BACKGROUND

- Digital currencies are often cited as a tool for financial inclusion which has the potential to change global financial infrastructure.
- Recent developments have heightened global awareness of the opportunities, challenges, and risks posed by new forms of digital currency.
- And as new technologies in the space cut across traditional lines of jurisdictional responsibility, coordination among the public and private sectors, both domestically and internationally, is increasingly required.

Digital Currencies in Governance:

- The Indian government is trying to explore the idea of a national digital currency, and its integration within the governance.
- If digital currencies owned by central banks are authorised, then the **central banks will be able to watch over and control every transaction.**
- The introduction of **central bank digital currency (CBDC)** is expected to bring transparency to the industry.

What is the need for cryptocurrency governance?

- **Privacy is a big area of concern** and to eliminate the scope for regulatory arbitrage there is a **need for cryptocurrency regulation.**
- As new payment methods appear, appropriate regulatory frameworks become critical.
- Well-placed legislation can go a long way in helping the agencies targeting financial crimes.

What is Digital Currency?

- Digital currency is a form of currency that is available only in digital or electronic form.
- All cryptocurrencies are digital currencies, but not all digital currencies are cryptocurrencies.

What are the present challenges regarding digital currency?

- Privacy and transparency
- Cyber fraud
- Chances of execution of unauthorized trades which don't come under any regulatory framework.
- Concerns over money laundering, terror financing, tax evasion, etc with private cryptocurrencies like Bitcoin, Ether, etc.

How the present challenge around cryptocurrency can be minimized?

- Businesses can practice vigilance against such threats through the application of security measures and the **maintenance of blockchain records.**
- Protection of networks through the **setup of firewalls** and **encryption of information** will minimize the risk of cyber criminals, who intend to gain access to confidential information.
- **Proper regulatory legislation** will help especially those which target financial crimes.
- **Introduction of National Digital Currency:** Indian government seeks to explore the idea of a **national digital currency**, and its integration within the governance.
 - ▶ If digital currencies owned by central banks are authorized, central banks will be able to watch over and control every transaction.
 - ▶ The introduction of central bank digital currency (CBDC) is expected to bring transparency to the industry.

Important government initiatives to stop illegal practices around digital currency

- The central government **announced to launch of its digital currency (CBDC).** RBI has been examining use cases and working out a phased implementation strategy for the introduction of CBDC with little or no disruption.
- The government had been planning at the time to introduce a Bill in Parliament that would prohibit **"all private cryptocurrencies in India"** with **"certain exceptions"**.

- In India, **legal enablers for a digital currency** have been put in place via the Finance Bill, 2022. it proposes that the CBDC “should also be regarded as bank notes”.
- Other measures include decisions related to regulation, improving efficiency, resilience, and competitiveness of payment systems.
- Policymakers are also assessing how to support responsible digital currency innovation while safeguarding or promoting financial stability, financial inclusion, and consumer protection.

► The amendment to the Reserve Bank of India Act, 1934 will enhance the scope of the definition of ‘bank note’ to include currency in digital form.

International Initiatives to tackle challenges of digital currency

- Although international bodies have been working on assessing risks and appropriate policy responses to the rise of cryptos, there has been no internationally coordinated regulation of cryptocurrencies.
- The **Digital Currency Governance Consortium (DCGC)** was launched under the aegis of the World Economic Forum.

Central Bank Digital Currency (CBDC)

- CBDC is the **legal tender** issued by a central bank in a digital form. They are issued and controlled by the central bank of a nation.
- They are pegged to the value of that **country’s fiat currency**.
- The digital fiat currency or CBDC can be transacted using wallets backed by blockchain.
- CBDCs enable the user to **conduct both domestic and cross-border transactions** which do not require a third party or a bank.
- RBI had **proposed amendments to the Reserve Bank of India Act, 1934**, which would enable it to launch a CBDC.

Digital Currency Governance Consortium

- The Digital Currency Governance Consortium (DCGC) was **launched in early 2020** under the aegis of the World Economic Forum.
- The Digital Currency Governance Consortium is **composed of more than 80 organizations** representing numerous sectors and geographies.

See figure below:



- **DCGC members represent the public sector, private sector, and civil society** spanning 33 countries across Africa, Asia, Europe, the Middle East, North America, and Latin America/Caribbean.

© WAY FORWARD

The territorial differences, while offering jurisdictional arbitrage opportunities, create uncertainties and

an increased compliance burden for businesses operating in the sector. This is exacerbated by the absence of common standards and terminologies.

For a truly global coordinated approach, countries and international organizations must work together, leveraging best practices and learnings from each other. In addition to risk assessments and the establishment of common standards, there is also a pressing need to leverage the technology itself to develop fit-for-purpose and inclusive solutions, through public-private collaboration.

INITIATIVES FOR INDIA'S LABOUR REFORMS SINCE INDEPENDENCE

CONTEXT:

Mahatma Gandhi's vision of India with no social divides existing in the country remained a thought as after 75 years of Independence there are several issues arise due to social inequality in the country. Labour reforms are one among such issue.

◎ BACKGROUND

- In 2020, there were around **501 million workers in India**, the second largest after **China**. Out of which, the agriculture industry consists for 41.19%, industry sector consists of 26.18% and the service sector consists of 32.33% of **total labour force**.
- The Labour force in India can be divided into **organised** and **unorganised sectors**. The major socio-economic problem of India is that the majority of its citizens are struggling to earn a good living.
- It is not just employment that causes their problems, but the **poor quality of that employment: insufficient and uncertain incomes, and poor working conditions**, regardless of where they work.

◎ ANALYSIS

What are the present norms for labours in India?

- **Constitutional Framework:**
 - Under the Constitution of India, Labour as a subject is in the **Concurrent List** and, therefore, both the Central and the State governments are competent to enact legislations subject to certain matters being reserved for the Centre.
 - **Article 14:** It provides for equality before the law or equal protection of the laws within the territory of India.
 - **Article 16:** It talks about the right of equal opportunity in the matters of public employment.
 - **Article 39(c):** It specifies that the economic system should not result in the concentration of wealth and means of production to the detriment of the entire society.
- **Judicial Interpretation:**
 - In the case of **Randhir Singh vs Union of India**, the Supreme Court stated that even though the principle of '**Equal pay for Equal work**' is not defined in the Constitution of India, it is a goal which is to be achieved through **Article 14, 16 and 39 (c)** of the Constitution of India.

- **Legislative framework:** There have been several legislative and administrative initiatives taken by the government to improve working conditions and simplify labour laws. The most recent is the consolidated sets of 4 labour codes which are yet to be implemented.
 - Code of Wages, 2019
 - Industrial Relations Code, 2020
 - Social Security Code, 2020
 - Occupational Safety, Health and Working Conditions Code, 2020
 - The implementation process is delayed as states are yet to finalise their rules under these codes.

What were the reforms introduced by the Government?

- The new codes have thrown light on the role of an "**Inspector-cum-Facilitator**" who has the responsibility of checking for compliance as well as facilitating businesses in achieving that compliance.
 - ▶ The "facilitator" role seems to be a new element and this role could clash with the traditional responsibilities of an "inspector".
- This would enable companies to introduce **arbitrary service conditions** for their workers.

Do they justify the demands of Labours in India?

- Left-Out Gig workers
- Small Start-ups and Informal Sector Left-out From Social Security Coverage
- Migrant workers, self-employed workers, home-based workers, and other vulnerable groups in rural areas are not covered under social security benefits.
- Non-Inclusion of Charitable or Non-Profit Based Establishments

Who are Invisible workers?

Invisible labour is the part that goes unnoticed and unrecognised and is thus unregulated. Generally, unpaid work is called Invisible labour.

Reforms Delayed



Govt no longer pursuing rules under labour codes

Not pushing states to hasten the process in their domain

Focus, both at Centre and states, now on handling Covid crisis

Employers lobbying to defer implementation

Says rollout will mean additional cost burden

WHAT WILL THIS MEAN?

Workers to be deprived of national floor-level minimum wage

Social security cover for gig workers may not come now

Rationalisation of wage structure may not happen

What can be the possible Implications?

Pros	Cons
<ul style="list-style-type: none"> • Simplification of the Complex laws • Easier Dispute Resolution • Ease of Doing Business • Gender Parity 	<ul style="list-style-type: none"> • Lack of reducing social inequality • Exclusion of small sector labours • No provisions for Gender-based incentives

Required measures

- **Vocational Training:** There is a need to develop a framework to interlink vocational training and academic education in order to facilitate the inter-stream movement of students and vocational trainees.
- **Social Security:** There is also a need for welfare services for unorganised workers such as

compensation for accidents at work, death, and old age pension in the 'risk cover mode'.

- **Employment Information Service:** To support the new initiatives to provide employment guarantees in backward districts, employment information services need to be provided through e-governance.
- **Integrating Problem Solving with Forward Looking Approach:** Most of the provisions of the Codes address the past demands and discrepancies, acting as restorative justice for the past harms.

◎ CONCLUSION

It is essential that we should adopt a futuristic approach when it comes to protecting workers and handling disputes regarding Automation and Robotics, AI-powered workforces, and bioengineering, which may hamper workers' rights in the future.

CONTEXT:

Recently India observed the 53rd anniversary of bank nationalisation where on the other hand in the Union Budget 2021-22, the government announced its decision to privatise two public sector banks.

◎ BACKGROUND

- Over the past decade, India's public sector banks have struggled with high levels of **non-performing assets (NPAs)**.
 - ▶ NPAs are loans that the borrower fails to pay back to the bank. Predictably, high levels of NPAs erode a bank's profitability.
- In the case of many PSBs, even the RBI, which is the banking sector regulator, had to restrict the normal functioning of the banks and forced them to improve their financial performance metrics before being allowed to resume normal banking activities.
- High levels of NPAs, and the ensuing actions, meant that PSBs struggled to finance India's growth needs.

This brief aims to analyse the need and pros & cons of privatization of PSBs.

◎ ANALYSIS

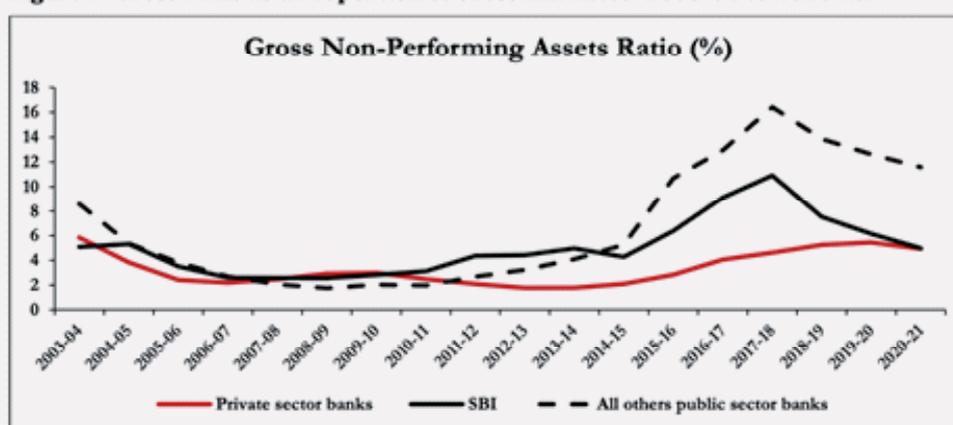
What ails the need for Privatisation?

- **Degrading Financial Position of Public Sector Banks:** Many of the banks have higher levels of stressed assets than private banks, and also lag the latter on profitability, market capitalization and

dividend payment record. This makes a case for considering them for privatisation.

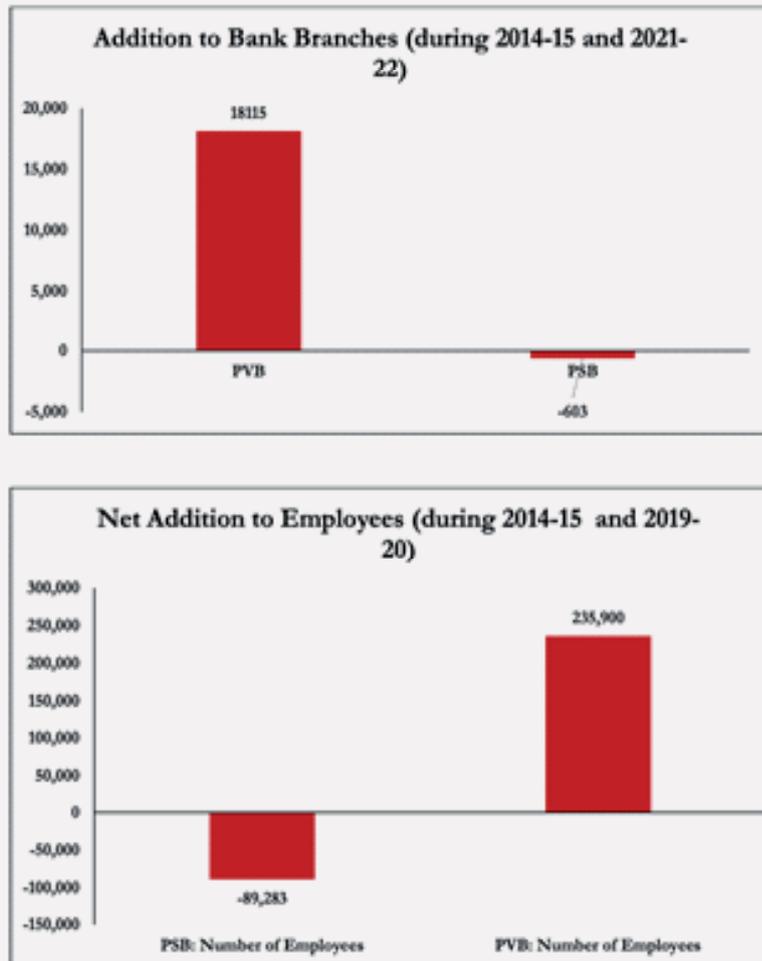
- ▶ **Private sector banks (PVBs)** are far more efficient, far more productive and far less corrupt than the PSBs. This is evident in the figure given below, where the red line indicates lower NPSs for the Private sector banks.
- **Part of a Long-Term Project:** This will free up the government, the majority owner, from continuing to provide equity support to the banks year after year.
- **Strengthening Banks:** The government is trying to strengthen the strong banks and also minimise their numbers through privatisation to reduce its burden of support.
- **Private sector Banks are creating more employment:** Private banks have not only added more branches but have also created new jobs while the public sector banks saw declines on both counts.
- **Recommendations of Different Committees:** Many committees had proposed bringing down the government stake in public banks below 51%:
 - ▶ The Narasimham Committee proposed 33%.
 - ▶ The P J Nayak Committee suggested below 50%.

Figure 9: Gross NPAs as a Proportion of Gross Advances: 2003-04 to 2020-21



Source: Reserve Bank of India statistical tables.

Figure 7: The Change in Employment and Bank Branches in PSBs and Private Banks



Source: RBI, Handbook of statistics on Indian Economy, Money and Banking, Bank Group wise distribution of Employees of Scheduled Commercial Banks.



Does India require Privatization of all PSBs?

- According to a recent paper released, all PSBs should be privatised. But they also realise that this might be a tad too drastic for any government in India to do and they suggest privatising all except the **State Bank of India**.

Banking Laws (Amendment Bill 2021)

- The Bill aims to amend **banking companies' acquisition and transfer laws of 1970 and 1980** and the **Banking Regulation Act, 1949** to achieve the privatisation of two PSBs to meet disinvestment targets as stated by the finance minister in the **Union Budget 2021-22**.
 - These laws had **led to the nationalisation of banks**, so relevant provisions of these laws **have to be changed to pave the way for privatisation**.

- This move will bring down the **minimum government holding in the PSBs from 51% to 26%**.

Pros and Cons of privatization of PSBs:

Pros	Cons
<ul style="list-style-type: none"> Strengthening Banks: The government is trying to strengthen the strong banks and also minimise their numbers through privatisation to reduce its burden of support. 	<ul style="list-style-type: none"> Job Losses: The privatisation will also result in job losses, branch closures and financial exclusion.

<ul style="list-style-type: none">• Creation of Big Banks: One of the objectives of privatisation is also to create big banks.• To reduce risks: Big size banks and Privatization can reduce the risk associated with NPAs as the Private sector has stringent norms for loans.	<ul style="list-style-type: none">• Financial Exclusion of Weaker Sections: The private sector banks concentrate on the more affluent sections of the population and the urban areas, leading to the financial exclusion of weaker sections of the society, particularly in the rural areas.• Governance Issues: Private sector banks run at the mercy of several groups of people and not by public consensus.
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Public sector banks which got privatized:

- The **four banks** that were placed on the initial list for privatisation were;
 - ▶ Bank of Maharashtra
 - ▶ Bank of India (Bank of India),
 - ▶ Indian Overseas Bank and;
 - ▶ Central Bank of India

⊙ **CONCLUSION:**

The governance and management of PSBs have to improve. The way to do this was outlined by the PJ Nayak committee, which recommended distancing between the government and top public sector appointments (everything the Banks Board Bureau was supposed to do but could not).

CENTRE TWEAKS OVERSEAS INVESTMENT RULES

CONTEXT:

In a bid to promote ease of doing business, the finance ministry notified the consolidated rules for overseas investment by Indian entities.

- The Foreign Exchange Management (Overseas Investment) Rules, 2022 will subsume extant regulations pertaining to Overseas Investments and Acquisition and Transfer of Immovable Property Outside India Regulations, 2015.

◎ BACKGROUND

- The Central Government in consultation with the Reserve Bank of India has framed **Outward Investments Rules**.
 - ▶ These are in line with the amendment in the **Foreign Exchange Management Act 2015**.
- The new rules have included overseas investment in International Financial Services Centre (IFSC) by person resident in India.

◎ ANALYSIS

How Overseas investments are governed?

- An **overseas investment by a person resident in India** is governed by the **Foreign Exchange Management (Transfer or Issue of Any Foreign Security) Regulations, 2004** and the **Foreign Exchange Management (Acquisition and Transfer of Immovable Property Outside India) Regulations, 2015**.

What are the new tweaks in overseas investment norms?

- **Submission of APR:** Any resident in India acquiring **equity capital** in a foreign entity or **overseas direct investment (ODI)**, will have to submit an Annual Performance Report (APR) for each foreign entity, every year by December 31.
 - ▶ No such reporting shall be required where a person resident in India is holding less than 10% of the equity capital without control in the foreign entity and there is no other financial commitment other than equity capital or a foreign entity is under liquidation.
- Any resident individual can make ODI by way of investment in equity capital or overseas portfolio investment (OPI) subject to the overall ceiling under the **Liberalised Remittance Scheme (LRS)** of the Reserve Bank.

Currently, the LRS permits \$2,50,000 outward investment by an individual in a year

Opening Up

Non-financial entities can now buy stakes in foreign fintech cos

<p style="text-align: center; font-weight: bold;">Until now only NBFCs in India were allowed to buy such stakes</p>	<p style="text-align: center; font-weight: bold;">Move to help new entrants in the sector</p>
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Transfers of foreign shares between relatives as gift allowed	
<p style="text-align: center; font-weight: bold;">Earlier such transfers needed RBI approval</p>	<p style="text-align: center; font-weight: bold;">Move to help various restructuring of family businesses</p>

The earlier case: Technology entrepreneurs and angel investors were mostly not eligible for NBFC licence. Also, financial services entities in India are subject to high compliance requirements, hence even the eligible ones were not keen on becoming an NBFC.

- ▶ The new rules have permitted Indian entities **not engaged in financial services activities** but with a three year net profit track record to invest in **overseas entities** involved in financial services activities.
- **New portfolio route:** The government also created a new portfolio route through which such investors will now be able to buy less than **10%**

stake in foreign companies without having to float a joint venture.

- ▶ Until now, there was only one route of investment - **overseas direct investment (ODI)** and this route was primarily meant for those domestic entities that wanted to form a wholly owned subsidiary (WOS) or joint venture (JV) overseas.
- ▶ In such entities, the Indian investor will exercise some amount of control.

Prohibition

- Any Indian resident, who has been classified as a **wilful defaulter** or is under investigation by the CBI, the ED or the Serious Frauds Investigation Office (SFIO), will have to obtain a **no-objection certificate (NOC)** from his or her bank, regulatory body or investigative agency before making any overseas "financial commitment" or disinvestment of overseas assets.

Need of the move	Significance of revised regulatory framework
<ul style="list-style-type: none"> • Evolving needs of businesses in India • Increasingly integrated global market • Increasing need of Indian corporates to be part of the global value chain 	<ul style="list-style-type: none"> • Easy investment: These norms make it easier for domestic corporates to invest abroad. • Simplification of the existing framework for overseas investment. • Alignment with the current trend: Aligned with the current business and economic dynamic. • Promoting ease of doing business

THE 'OPENSEA' TALE ON THE FUTURE OF NFTs

CONTEXT:

Due to a fall in the crypto markets after a meteoric rise last year, the crypto exchanges are struggling to stay solvent. Non-fungible tokens or NFTs which belong to the same ecosystem have also taken a hit.

What is OpenSea's place in the sector?

- OpenSea is a **decentralized marketplace** that allows users to buy and sell non-fungible tokens. OpenSea is said to be one of the largest NFT marketplaces in existence.
- OpenSea is an **online marketplace** that allows users to **purchase, sell, and trade non-fungible tokens** via its website.
- It is based on **Ethereum blockchain data** and was used by two million traders who transacted at least once on the network.

NFTs are **digital assets** whose **ownership is verified** through **transaction records stored on blockchains**. Artwork, digital avatars, and accessorized monkeys are some of the most commonly traded NFTs.

The Collapse of Crypto-Bubble:

- The **sales of digital goods on OpenSea jumped to a high in August 2021** as a result of bitcoin and Ether hitting their all-time high.
- Later, OpenSea's monthly volumes soared between December 2021 and January 2022 and appeared to be **replicating the rise in the monthly volume for Ethereum**, which shot over \$4.8 billion.
- But it **experienced a nosedive after its partner coin 'LINA' collapsed** and wiped off billions of dollars from the market in May 2022.
- As a result, **both Bitcoin and Ether fell to half of their values** in the first six months of 2022. Daily transactions on OpenSea have been gradually declining since then.

Trust issues of users with OpenSea:

- OpenSea users complain of excessive downtime on the platform.
- There have also been reports of breaches and security vulnerabilities.
- OpenSea users were targeted by an alleged phishing attempt.
- There are also ethics-related issues.
 - A number of artists have complained that OpenSea users frequently **steal their work**, mint them as NFTs, and **begin profiting from them without their consent**.

- These artists have condemned the NFT platform for **not doing enough to combat art theft** and also for **making the stolen art takedown process troublesome** for non-crypto users.

Future of OpenSea:

- Uncertain Future:** At this time, it is difficult to derive any conclusion from the rise and fall of the Open Sea. The crypto run and the NFT boom, both had translated into the **hiring spree in order to scale the operations at a rapid pace**.
- Hibernate for resilient recovery:** The market is entering into an unprecedented combination of crypto winter and broad macroeconomic instability. It is time to prepare the platforms for a prolonged downturn.
- Optimistic Approach:** Many might have concluded that the era of NFTs is over and it's time to exit their positions and give up their creations, but there are enough in the world of crypto who believe that panic sellers are giving them generous discounts. The NFT market might be volatile, but there's enough underlying potential too.
 - Volatility allows investors to develop strategies** like buying low, and selling high, which creates the possibility for astronomic returns.

Future of NFTs and their Marketplaces:

- Changing Employment Landscape:** Digital transformation and adoption of blockchain technology are manifesting in the changing employment landscape.
 - More people are already working on NFTs, blockchains, and cryptocurrencies than ever before.
- Interoperability Will Be Essential:** As NFTs and metaverses develop, so will the complexity of their use, and interoperability between metaverses will be as important as their utility in real life.
 - Creating new economies and digital spaces for people to explore and participate in will be the course many companies take going forward.
- Greater Ease of Adoption:** Web3 is a chance to reinvent and reimagine the undesirable parts of Web2.0.

- ▶ When there are hacks or attacks, users have complete control over their data and funds, and there will be no intermediaries to turn to.
- ▶ In Web3, security is a primary priority and doesn't set back growth and development.
- **Metaverse:** The metaverse has become a fast-growing industry and it is the **NFTs that will become the building blocks of these digital worlds**, and encoded utilities will unlock experiences such as VIP events or unique discounts.
- **Creating fluid socio-cultural interactions:** The integration of borderless virtual worlds and interoperability will expand the possibilities for utility, bringing a seamless experience and higher value for users.

DAM MANAGEMENT IN INDIA

CONTEXT:

Recently, the outer part of the “Karam Dam”, which is being built on the Karam River, a tributary of the Narmada, collapsed.

- With the increasing events of Dam failures in India, questions the policy regarding Dam management and its accountability.

◎ BACKGROUND

- A dam is defined as a barrier built across a stream, river or estuary to confine and check the flow of water for such uses as human consumption, irrigation, flood control and electric-power generation.
- Lately, dams are seen more as hydropower generators with flood mitigation, irrigation and drinking water supply only being added benefits.
- However, globally about 2.2% of dams built before 1950 have failed mainly due to flooding, inadequate spillway capacity, bad workmanship etc.
- India ranks third globally with 5264 large dams in operation and about 437 are under construction. But India too has had its share of dam failures. There are more than 36 reported failure cases so far.
- The first failure was recorded in Madhya Pradesh in 1917 when the **Tigra Dam** failed due to overtopping.

Examples of floods in India exacerbated by dams:

- There are numerous instances of this kind, including the floods in Uttarakhand (June 2013), Tehri (September 2010), Hirakud (2009, 2011, 2014), Damodar dams (multiple years), Krishna basin dams (2006, October 2009), Ukai (August 2006), Chennai floods (December 2015), Bansagar dam (August 2016), Kurichu dam in Bhutan (2004, 2016, others), and Ranganadi (2017) and Doyang (2018), among other dams, where flawed operation of the dams created or worsened flood disasters in the downstream areas.

◎ ANALYSIS

Need for Dam Safety in India

- Over 75% of the country's dams are over 25 years old and about 164 dams are more than 100 years old.

- With the increasing number of dams becoming older and older, dam failures are more expected now.
- Ensuring Dam Safety is essential for safeguarding huge investments in infrastructure.
- It is also crucial for safeguarding human life, and the properties of the people living downstream of the dams.

What are the concerns associated with the present system of Dam Management?

- Varied structural deficiencies
- Shortcomings in operation and monitoring facilities,
- Structure does not meet the present design standard- both structurally and hydrologically
- States have been failing to provide sufficient budgets for maintenance and repair of the dam.
- Many States also lack the institutional and technical capacities for addressing dam safety issues.
- Lack of systematic assessment and monitoring
- Real-time inflow forecasting systems are not in place even in important reservoirs
- Dam design drawings or drawings as constructed are not available
- Dam Safety Organizations (DSO) in states are short of adequate manpower

Government Initiatives

- Dam Rehabilitation and Improvement Project (DRIP):** Launched in 2012, with World Bank to improve safety and operational performance of selected dams, along with institutional strengthening with system wide management approach.

In 2018, the government approved the extension of the DRIP Project for two more years with the revised scheduled closure in June 2020. Presently **198 dam** projects are being rehabilitated under the DRIP Project.

- **Dam Health and Rehabilitation Monitoring Application (DHARMA):** It is a web-based software package to support the effective collection and management of Dam Safety data in respect of all large dams in India.
 - ▶ The software is designed for users at the Central, State and Dam level, with user permission rights governed by their respective licenses.
- **Seismic Hazard Mapping along with the development of Seismic Hazard Assessment Information System (SHAISYS):** It is also web-based interactive application tool being developed in CWC under Dam Safety Organisation (DSO) to estimate the seismic hazard at any point in the Indian region.
 - ▶ The SHAISYS shall be capable of estimating seismic hazard using the deterministic as well as probabilistic approach.
- **Other Initiatives** – Other important activities include Design Flood Review, publication of important Guidelines as well as Manuals dealing with Dam Safety Management, preparation of O&M Manuals, and Emergency Action Plans.

Dam Safety Act, 2021

- **Dam Safety Act 2021** aims at surveillance, inspection, operation and maintenance of all specified dams across the country.
- The Act applies to all specified dams in the country i.e., those dams having a height of over 15m and between 10m and 15m with certain design and structural conditions.

- **Functions:** Functions of the committee will include formulating policies and regulations regarding dam safety standards and prevention of dam failures, analysing the causes of major dam failures, and suggesting changes in dam safety practices.

It constitutes two National Bodies:

- **National Committee on Dam Safety:** Its functions include evolving policies and recommending regulations regarding dam safety.
- **National Dam Safety Authority (NDSA):** Its functions include implementing policies of the National Committee, and resolving matters between State Dam Safety Organisations (SDSOs), or between an SDSO and any dam owner in that state.

◎ CONCLUSION

A risk-based approach is necessary for making sound decisions on dam safety. Dam failure analysis is fundamental to a risk-based approach to dam safety. Some of the technological and institutional foundations for building a robust risk-based decision-making system for this sector are already in place. A few changes in policy, and leveraging already built resources (E.g.: WRIS, and MoEF environmental clearance portal) can enable India to build a bear, safer dam sector.

'FOREVER CHEMICALS' CONTAMINATING RAINWATER GLOBALLY

CONTEXT:

According to a recent study, rainwater from many places across the globe is contaminated with “per- and polyfluoroalkyl substances,” (PFAs), which are called “forever chemicals” because of their tendency to stick around in the atmosphere, rainwater and soil for long periods of time.

What are Per- and polyfluoroalkyl substances (PFAs)?

PFAS are used in a wide range of consumer products due to their ability to repel both grease and water, including:

- In paper and cardboard food packaging (e.g. takeaway containers, popcorn bags, pizza boxes, ready-made cakes etc.)
 - In non-stick cookware
 - In textiles (e.g. waterproof outdoor clothing and equipment, carpets, mattresses etc.)
 - In cosmetics (e.g. hair conditioner, foundation cream, sunscreen etc.)
 - In electronics (e.g. smartphones)
- The per-and polyfluoroalkyl substances (PFAS) are a group of **chemicals used to make fluoropolymer coatings and products** that resist heat, oil, stains, grease, and water.
 - PFAs can migrate to the soil, water and air during their production and use.
 - Since most PFAs do not break down, they remain in the environment for long periods of time.
 - Many PFAS, including perfluorooctane sulfonic acid (PFOS) and perfluorooctanoic acid (PFOA), are a concern because they:
 - ▶ **do not break down in the environment,**
 - ▶ **can move through soils** and contaminate drinking water sources,

- ▶ build up (**bioaccumulate**) in fish and wildlife.
- ▶ PFAS are found in rivers and lakes and in many types of animals on land and in the water.

Risks to human health:

Exposure to certain levels of PFAS may lead to:

- Reproductive effects such as decreased fertility or increased high blood pressure in pregnant women.
- Developmental effects or delays in children, including low birth weight, accelerated puberty, bone variations, or behavioral changes.
- Increased risk of some cancers, including prostate, kidney, and testicular cancers.
- Reduced ability of the body's immune system to fight infections, including reduced vaccine response.
- Interference with the body's natural hormones.
- Increased cholesterol levels and/or risk of obesity.

Regulation of PFAS (Globally)

- The **Stockholm Convention on Persistent Organic Pollutants** is an international treaty aiming to eliminate or restrict the production and use of the most toxic chemicals of global concern.
- Currently, two sub-group of PFAS are listed in the convention: PFOS and related substances since 2009 for global restriction and PFOA and related substances since 2019 for global elimination.

DELHI POLICE'S USE OF FACIAL RECOGNITION TECHNOLOGY

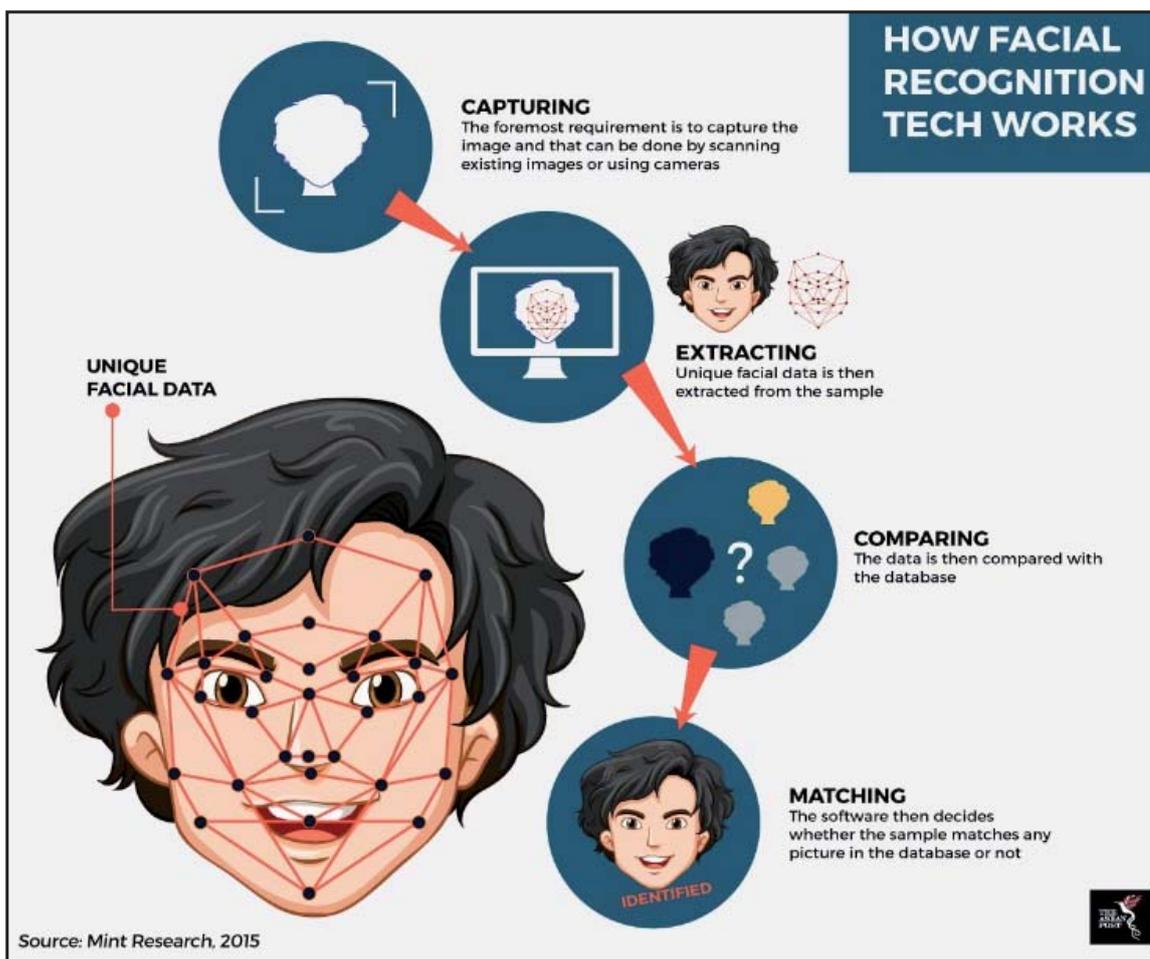
CONTEXT:

Right to Information (RTI) responses, reveals that the Delhi Police treats matches of above 80% similarity generated by its facial recognition technology (FRT) system as positive results.

Why is the Delhi Police using facial recognition technology?

- The Delhi Police first started using FRT to trace and identify missing children as per a 2018 direction of the Delhi High Court in *Sadhan Haldar vs NCT of Delhi*.
- Delhi police later made use of this technology to investigate the anti-CAA protests in 2019.
- It has also used FRT specifically during the 2020 northeast Delhi riots, the 2021 Red Fort violence, and the 2022 Jahangirpuri riots.

- Facial recognition is an **algorithm-based technology** that creates a digital map of the face by identifying and mapping an individual's facial features, which it then matches against the database to which it has access.
- It is a **biometric technology** that uses distinctive features of the face to identify and distinguish an individual.
- It has evolved in many ways- from looking at the 3D contours of a face to recognizing skin patterns.



Why is the use of FRT harmful?

- Misidentification Due to Inaccuracy of The Technology:
 - ▶ It can result in a false positive, where a person is misidentified as someone else, or a false negative where a person is not verified as themselves.

One example of such “**exclusion**” is the *failure of the biometric-based authentication under Aadhaar* which has led to many people being excluded from receiving essential government services which in turn has led to starvation deaths.

- Mass Surveillance Due to Misuse of The Technology
- Violation of Internationally recognized best practices

What does the right to Information Responses reveal?

- **Lack of reasoning behind the 80% similarity as the threshold:** The Delhi Police has revealed that **matches above 80%** similarity are treated as positive results while matches below 80% similarity are treated as false positive results which may require human intervention.
 - ▶ It is unclear why 80% has been chosen as the threshold between positive and false positive.
- **Categorization of below 80% results:** The categorization of below 80% results as false

positive instead of negative shows that the Delhi Police may still further investigate below 80% results.

- ▶ Thus, people who share familial facial features, such as in extended families or communities, could end up being targeted.
- **Overboard collection of Data:** Delhi Police is matching the photographs/videos against photographs collected under Sections 3 and 4 of the Identification of Prisoners Act, 1920, which has now been replaced by the Criminal Procedure (Identification) Act, 2022.
- It may result in a violation of internationally recognized best practices for the collection and processing of data.

Criminal Procedure (Identification) Act, 2022:

- This Act **allows for wider categories of data to be collected** from a wider section of people, i.e., “convicts and other persons for the purposes of identification and investigation of criminal matters”.

Need for regulatory frameworks:

The usefulness of facial recognition tech in countering terrorism can only increase in parallel with the sophistication levels of the tech itself, but this would also highlight the risks of data privacy in managing large-scale data collection.

Section: B
(SPECIALS)

CURRENT AFFAIRS

LANDMARK JUDGMENTS THAT CHANGED INDIA'S POLITY

◎ INTRODUCTION:

- To differentiate between “great” and “landmark”, it is necessary, to begin with, some very fine distinctions. A great judgment is one that restores the constitutional values of a polity from the waywardness into which it may have fallen, while a **landmark judgment is one which opens up new directions in our constitutional thinking** and, in the process, **adds new dimensions to what is regarded as established constitutional principles. If “great” restore the centrality of constitutional values, “landmark” revitalises them.**
- The Supreme Court is the ultimate interpreter of the Constitution and, by its creative and innovative interpretation, has been the protector of our constitutional rights and fundamental freedom.
- These judgements are to be appreciated not only as precedents but also as having laid down the law on issues of paramount importance—a law that is binding on all courts and authorities in the country.

◎ PERSONAL LIBERTY

- **K. Gopalan v. State of Madras (1950):** Procedure Established by Law

Relevance: In the case, the Supreme Court interpreted the Fundamental Rights under Part III of the Indian Constitution **A.K. Gopalan v. State of Madras (1950).**

- ▶ In this case, it held that the protection under **Article 21** is **available only against arbitrary executive action** and not from arbitrary legislative action.
- ▶ This means that the State can deprive the right to life and personal liberty of a person based on a law.
- **Maneka Gandhi v. Union of India (1978):** Procedure Established by Law: Fair, Just and Reasonable

Relevance: Expanding the **meaning of the ‘right to life** under the Constitution of India

- ▶ In a subsequent decision, the Supreme Court stated that Article 21 would read as: **‘No**

person shall be deprived of his life or personal liberty except according to fair, just and reasonable procedure established by valid law.

- **Shreya Singhal v. Union of India (2015): Section 66A of the IT Act**

Relevance: In a landmark ruling, India’s Supreme court had nullified Section 66A, terming it vague and unconstitutional. This judgement is significant as it safeguards the fundamental right of freedom of speech.

◎ AMENDABILITY OF FUNDAMENTAL RIGHTS

- **Shankari Prasad v. Union of India (1951)**

Relevance: This case dealt with the amenability of Fundamental Rights (the First Amendment’s validity was challenged).

- **Golaknath v. State of Punjab (1967):**

Relevance: In that case, the Supreme Court ruled that the Parliament cannot take away or abridge any of the Fundamental Rights.

◎ THE DOCTRINE OF BASIC STRUCTURE

- **Kesavananda Bharati v. State of Kerala (1973):**

Relevance: Propagating the **‘basic structure** doctrine as a safeguard against the usurpation of the Constitution.

- ▶ It was unique for the reason that it brought a shift in the balance of democratic power. Earlier judgements had taken a stand that Parliament could amend even the fundamental rights through a proper legislative process.
- ▶ But the present case held that Parliament cannot amend or alter the fundamental structure a **‘Basic Structure’** of the constitution.

- ▶ Besides, Kesavananda Case was significant in that the Supreme Court ascribed to itself the function of preserving the integrity of the Indian Constitution.
- ▶ The 'basic structure doctrine formulated by the court represented the pinnacle of judicial creativity and set a benchmark for other constitutional courts around the world.
- ▶ The doctrine ruled that even a constitutional amendment could be invalidated if it impaired the essential features—the basic structure—of the Constitution.

Evolution of the Basic structure doctrine

- Since the adoption of the Indian Constitution, debates have started regarding the power of the Parliament to amend key provisions of the Constitution.
- In the early years of Independence, the Supreme Court conceded absolute power to Parliament in amending the Constitution, as was seen in the verdicts in the **Shankari Prasad case (1951)** and **Sajjan Singh case (1965)**.
- This means Parliament had the power to amend any part of the constitution including Fundamental rights.
- However, in the **Golaknath case (1967)**, the Supreme Court held that Parliament could not amend Fundamental Rights, and this power would be only with a Constituent Assembly.
- The Court held that an amendment under Article 368 is "law" within the meaning of Article 13 of the Constitution and therefore if an amendment "takes away or abridges" a Fundamental Right conferred by Part III, it is void.
- To get over the judgments of the Supreme Court in the **Golaknath case (1967)**, **RC Cooper case (1970)**, and **Madhavrao Scindia case (1970)**, the then government headed by Prime Minister Indira Gandhi had enacted major amendments to the Constitution (the 24th, 25th, 26th and 29th).
- All four amendments brought by the government were challenged in the Kesavananda Bharati case.

- **Indira Nehru Gandhi v. Raj Narain case (1975)**

Relevance: The **doctrine of the basic structure** of the constitution was reaffirmed and applied by the Supreme Court in the Indira Nehru Gandhi case (1975).

- **Minerva Mills v. Union of India (1980)**

Relevance: The Supreme Court reiterated that Parliament can amend any part of the Constitution but it cannot change the "Basic Structure" of the Constitution.

- **I.R Coelho and State of Tamil Nadu 2007**

Relevance: Also known as the **Ninth Schedule Case**, this unanimous judgement delivered by a 9-judge bench led by Chief Justice Sabharwal upheld the validity of the Doctrine of Basic Structure propounded in the Kesavananda Bharti case.

- ▶ This judgement held that if a law is included in the 9th Schedule of the Indian Constitution, it can still be examined and confronted in court.

- **Berubari Union Case (1960):**

Relevance: In this case, the issue was resolved about whether the **Preamble is part of the Constitution or not**.

◎ PUBLIC INTEREST LITIGATION

- **Mumbai Kamgar Sabha, Bombay, 1976**

Relevance: This case is considered to be the foundation of public interest litigation in India.

- ▶ **Public interest Litigation (PIL)** means litigation filed in a court of law, for the protection of "**Public Interest**", such as Pollution, Terrorism, Road safety, Constructional hazards etc. Any matter where the interest of the public at large is affected can be redressed by filing a Public Interest Litigation in a court of law.

- ▶ **Some other landmark cases in the evolution of PIL are:**

- Sunil Batra v. Delhi Administration & Others, 1978
- Hussainara Khatoon vs. State of Bihar (1979)
- Bandhua Mukti Morcha v. Union of India (1984)

◎ HUMAN RIGHTS

- **Aruna Ramachandra Shanbaug v. Union of India (2011)** Right to Die With Dignity

Relevance: In this case, the victim of rape continued to be in a **persistent vegetative state (PVS)** for a period of 36 years. This case triggered the debate on the need to change euthanasia laws.

- ▶ Supreme court in 2011 **recognised passive euthanasia** in this case by which it had permitted withdrawal of life-sustaining treatment from patients not in a position to make an informed decision.
- ▶ Subsequent to this, in a landmark judgment (2018), the Supreme Court recognised passive euthanasia and **"living will"**.
- National Legal Services Authority and Union of India (2014):

Relevance: This case resulted in the recognition of transgender persons as a third gender. The SC also instructed the government to treat them as minorities and expand the reservations in education, jobs, education, etc.

- Justice K.S. Puttaswamy vs. Union of India (2017)
- Right to Privacy A Fundamental Right Under Article 21

Relevance: SC ruled that Fundamental Right to Privacy is intrinsic to life and liberty and thus, comes under Article 21 of the Indian constitution.

- **Navtej Singh Johar vs. Union of India (2018):** Decriminalising Homosexuality

Relevance: A five-judge SC bench gave a historic, unanimous decision on Section 377 of the Indian Penal Code, decriminalising homosexuality.

◎ GENDER JUSTICE

- **Mohammed Ahmed Khan v. Shah Bano Begum (1985):** A Milestone in the Journey of Gender Justice

Relevance: Questioning the sanctity of personal religious laws and bringing the debate on a Uniform Civil Code to the forefront of the national discourse.

- **Vishakha vs. the State of Rajasthan, (1997):** Preventing Sexual Harassment at Workplace

Relevance: The decision of the Supreme Court in Vishakha v State of Rajasthan was a landmark one as it laid down elaborate guidelines to deal with the menace of sexual harassment against women at workplaces.

- **Shayara Bano vs Union Of India And Ors. Vs. Union of India (2017):** Triple Talaq Unconstitutional

Relevance: The SC outlawed the backward practice of instant 'triple talaq', which permitted Muslim men to unilaterally end their marriages by uttering the word "talaq" three times without making any provision for maintenance or alimony.

- **Indian Young Lawyers Association vs. The State of Kerala (2018):** Entry of Females into Sabrimala Temple

Relevance: A 4:1 majority held that the custom is unconstitutional of prohibiting the entry of women in their 'menstruating years' (between the ages of 10 to 50), on the grounds that it is a place of worship.

- **Joseph Shine vs. Union of India (2019):** 497 IPC Unconstitutional

Relevance: The apex Court struck down Section 497 of IPC which criminalised **adultery** holding that it is violative of Articles 14, 15 and 21 of the Constitution.

- **Nirbhaya Case (2014)**

Relevance: Introduction of the Criminal Law (Amendment) Act, 2013 and definition of rape under the Protection of Children from Sexual Offences Act, 2012, the Indian Evidence Act, 1872, Indian Penal Code, 1860 and Code of Criminal Procedures, 1973.

Nirbhaya case changed Indian rape laws:

- SC also gave a new definition of rape under the Protection of Children from Sexual Offences Act, 2012, the Indian Evidence Act, 1872, Indian Penal Code, 1860 and Code of Criminal Procedures, 1973.

- The government set up the **“Nirbhaya fund”** with 1000 crores, to support women’s safety projects such as CCTV @public places, GPS-Emergency buttons in public vehicles, toll-free numbers and defence classes.
- It amended as well as inserted new sections in the IPC with regard to various sexual offences. New offences like acid attacks, sexual harassment, voyeurism, and stalking have been incorporated into the IPC.
- It expands the definition of rape to include oral sex as well as the insertion of an object or any other body part into a woman’s vagina, urethra or anus.
- The new amendment defines **‘consent’**, to mean an unequivocal agreement to engage in a particular sexual act; clarifying further, that the absence of resistance will not imply consent.
- Earlier the offence of rape (sexual assault) was gender-neutral, while now this offence is women-centric. Only a man is assumed to be capable of committing such offence and that too against a woman only. The aspect of gender neutrality was required in the following aspects:
- When a man or transgender person is raped.
- In a few instances, even women have carried out sexual assaults against other women.

CONSTITUTIONAL DEMOCRACY

- **R. Bommai v. Union of India (1994):** Power Under Art.356-Imposition of President’s Rule in States.

Relevance: In this case, the Supreme Court laid down that the Constitution is federal and characterised **federalism as its ‘basic feature’**.

- **NOTA “None of the Above” judgement (2013):** Reforms Right Not to Vote- NOTA Case

Relevance: This judgement introduced the NOTA (None-Of-The-Above) option for Indian voters.

- **Lily Thomas v. Union of India (2013): Election Reforms**

Relevance: Struck down as unconstitutional Section 8(4) of the Representation of the People Act (RPA)-1951 that allowed convicted lawmakers three months for filing appeals to the higher court and to get a stay on the conviction and sentence.

◎ INDEPENDENCE OF JUDICIARY

- **First Judges Case - ‘in consultation’ – Interpretation**

S P Gupta Vs. Union of India and Ors. AIR 1982 SC 149 (First Judges Case 1981):

- ▶ In this case, the Supreme Court was called upon to examine as to what does the word **“consultation”** in Article 124(2) and in Article 217(1) of the Constitution actually imply?
- ▶ The apex court held by a majority of 4-3 that in the appointment of a judge of the Supreme Court or the High Court, the word **“consultation”** in Article 124(2) and in Article 217(1) of the Constitution **does not mean “concurrence”** however the “consultation” with the CJI must be full and effective.
- ▶ The apex court rejected the idea that the CJI’s opinion should have primacy. and held that In the event of a disagreement, the “ultimate power” would rest with the Union Government and not the CJI.

Second Judges Case Birth of Collegium System

- **Supreme Court Advocates on Record Association Vs. Union of India (1993) 4 SCC 441**

Relevance: This verdict gave birth to the concept of the Collegium System.

Third Judges Case Strengthening of Collegium

- **In Re Special Reference Case AIR 1999 SC 1**

Relevance: This case arose out of a reference made by the President of India under Article 143 of the Constitution for the advisory opinion of the Supreme Court.

Fourth Judges Case

- **Supreme Court Advocates-on-Record Association v. Union of India, [(2016) [‘NJAC Case’]**

- ▶ The Constitution (Ninety-Ninth Amendment) Act, 2014 and the NJAC Act, 2014 sought to replace the Collegium system with the **National Judicial Appointments Commission**

(NJAC), a body comprising of the CJI, two senior judges, the Law Minister and “two eminent personalities” appointed by the Prime Minister, Leader of Opposition and CJI.

- ▶ The constitutional validity of the Ninety-Ninth Constitutional amendment and NJAC Act, 2014, was challenged before the apex Court.
- ▶ A constitution bench of five Judges with a majority of 4:1 struck down the Ninety-Ninth Constitutional Amendment Act and the NJAC Act as unconstitutional holding that the constitution of the Commission will amount to an infringement of judicial independence and a violation of the separation of powers.

◎ ENVIRONMENTAL PROTECTION

- **MC Mehta v. Union of India (1986) (Taj Mahal Case)**

Relevance: Taj Mahal is considered one of India's most epic Mughal structures. The Taj Trapezium zone, which is of 10,400 sq. km., is built to protect it from pollution. Mehta visited Taj in 1984 and noticed the white marble of the Taj turning yellow. To bring this matter into the limelight, he filed a petition in the Supreme Court.

- **MC Mehta v. Union of India (1986) (The Oleum Gas Leak Case)**

Relevance: The judgement is considered as one of the major rulings in the field of environmental law in our country. The judgement took up various new situations and ways of interpreting of the laws and Fundamental Rights.

- **MC Mehta v. Union of India (1986) (Ganga Pollution Case)**

Relevance: The writ appeal highlighted the abuse of the Ganga River by the dangerous industries located on its banks. Justice ES Venkataramiah gave a famous judgement in M.C. Mehta vs. Union of India commanding the closure of a number of poisoning tanneries near Kanpur.

◎ SOCIAL JUSTICE

- **Indra Sawhney v. Union of India (1992):** 50% Threshold in Reservations and Exclusion of 'Creamy Layer'.

Relevance: Delivering the decision relating to the constitutionality of reservations under the Constitution of India.

Summing Up

The judiciary has always been interpreting the Constitution in line with its revolutionary and transformative potential. When histories of nations are written and critiqued, there are **judicial decisions at the forefront of liberty**. The **inevitable truth is that law is not static** and immutable but ever-increasingly **dynamic and grows with the ongoing passage of time**. Yet others have to be consigned to the archives, reflective of what was, but should never have been.

As the custodian of the Constitution, the **court has to fight tyranny**. The judgment has struck a powerful blow for limiting government. **This is what makes it a landmark judgment**. Occasionally these landmark judgements also **diminish the arrogance of government, resurrect the principle of limited government, and reinstate the 'genuine' rule of law**.

Section: C

(Prelims)

CURRENT AFFAIRS

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PANDURANG KHANKHOJE

◎ CONTEXT:

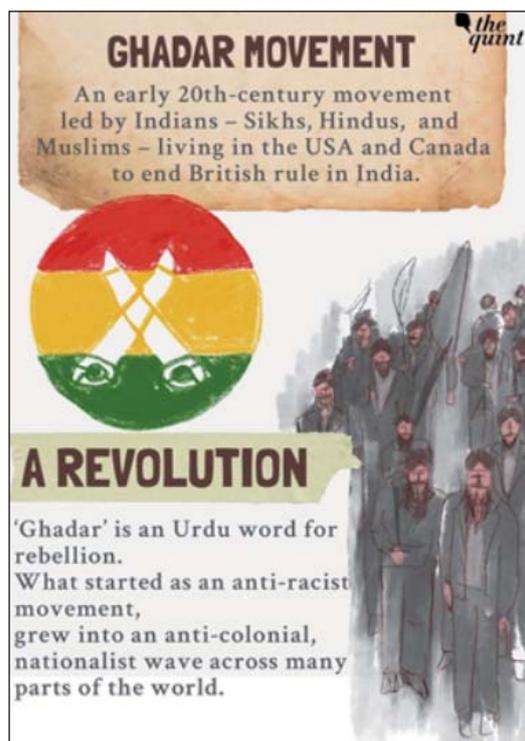
Recently the Lok Sabha Speaker Mr. Om Birla had visited Canada for 5th Commonwealth Parliamentary Conference and further planned to travel Mexico to unveil the statue of Swami Vivekananda and Maharashtra-born freedom fighter and agriculturalist Pandurang Khankhoje.

- The brief aims to remember the contributions of Pandurang Khankhoje.

Who was Pandurang Khankhoje?

- Pandurang Sadashiv Khankhoje (1884 –1967) had a close connection with Mexico where he sought refuge due to his association with the radical pro-Indian independence 'Ghadar Party'.
- He was born in Wardha, Maharashtra, in the late 19th century.
- According to his biography by his daughter **Savitri Sawhney**, as a student, Khankhoje was an **ardent admirer of the French Revolution** and of the **American War of Independence**.
- The Hindu reformer **Swami Dayanand** and his **Arya Samaj movement**, which called for a spirit of reform and social change, became the hero to a young student group led by Khankhoje.
- Khankhoje decided to go abroad for further training in revolutionary methods and militaristic strategy.
- After spending time with nationalists from Japan and China, Khankhoje eventually moved to the US, where he enrolled in college as a **student of agriculture**.
- In Mexico during the 1920s, he established the **Escuelas Libres de Agricultura Mexico (1924-1928)** - free agricultural colleges where he successfully experimented with **varieties of corn**.

Contributions in National Freedom Struggle



- **Association with Ghadar Party:** He was one of the founding members of the Ghadar Party, established by Indians living abroad in 1914, mostly belonging to Punjab.
- **Influencing Mexicans:** Inspired by the Mexican revolution of 1910, he also reached out to Indians working on farms in the US with the aim of discussing the idea of Indian independence with them. There, he met with Mexican workers as well.
- **Spread Nationalist ideologies:** He reached out to **Bhikaji Cama** in Paris, and met with **Vladimir Lenin** in Russia among other leaders, seeking support for the Indian cause.
 - However, as he was facing possible deportation from Europe and could not go to India, he sought shelter in Mexico.
- **Green Revolution:** He also researched **corn, wheat, pulses and rubber, developing frost and drought-resistant varieties**, and was part of efforts to bring in the **Green Revolution in Mexico**.

Later on, the American agronomist **Dr. Norman Borlaug** called as the '**Father of the Green Revolution**' in India, brought the Mexican wheat variety to Punjab.

UN REPORT ON CONTEMPORARY FORMS OF SLAVERY

◎ **CONTEXT:** A recent U.N. report which highlighted contemporary forms of slavery, pointed out that **Child labour, caste-based discrimination and poverty are closely inter-linked in India.**

◎ **ABOUT**

- Article 4 of the UDHR states that 'No one shall be held in slavery or servitude: slavery and the slave trade shall be prohibited in all their forms'.
- Slavery was the first human rights issue to arouse wide international concern yet it still continues today and slavery-like practices also remain a grave and persistent problem.

Contemporary forms of slavery	
<ul style="list-style-type: none">● traditional slavery● forced labour● debt bondage● serfdom	<ul style="list-style-type: none">● children working in slavery or slavery-like conditions● domestic servitude● sexual slavery● servile forms of marriage

◎ **KEY FINDINGS:** Contemporary forms of slavery are widely practiced around the world, including:

- forced labour for China's Uyghur minority
- bonded labour for the lowest caste Dalits in South Asia
- domestic servitude in Gulf countries, Brazil and Colombia
- **Main causes of contemporary forms of slavery**
 - Deep-rooted intersecting forms of discrimination,
 - Result of historical legacies, such as
 - ▶ slavery and colonisation
 - ▶ systems of inherited status
 - ▶ formalised and State-sponsored discrimination

- Child Labour:
- Child labour (among children 5 to 17 years of age), including its worst forms, **exists in all regions of the world.**
- In Asia and the Pacific, the Middle East, the Americas and Europe, between 4% and 6% of children are said to be in child labour, and the percentage is much higher in **Africa (21.6%),** with the highest rate in **sub-Saharan Africa (23.9%).**
- In India, **child labour, caste-based discrimination and poverty are closely interlinked.**
- **Dalits in South Asia:**
 - Dalit women in South Asia face severe discrimination, and as a result they are systematically denied choices and freedoms in all spheres of life.
 - **Manual scavenging,** predominantly carried out by Dalit women, is widely regarded as forced labour and a contemporary form of slavery, entailing harsh working conditions that have a negative impact on mental and physical health.
 - Dalits in Bangladesh are forced to undertake certain types of labour as a consequence of their assigned caste status and are almost exclusively working in “unclean” jobs in urban areas, like street sweeping and burying the dead.
- **Forced marriage:**
 - **Forced marriage** of women and girls is a concern in Asia, including **Cambodia, India, Kazakhstan, Sri Lanka, and Vietnam.**
 - In parts of the **Balkans,** half of all **Roma women** ages 20 to 24 are married before age 18, compared to around 10% nationally.

GOA BECOMES FIRST HAR GHAR JAL CERTIFIED STATE

- © **CONTEXT:** The Centre recently released the list of Har Ghar Jal certified states to declare that the state of Goa had topped the list with every household there having access to clean water through taps.

What is Jal Jeevan Mission (JJM) – Har Ghar Jal?

- **Jal Jeevan Mission is the** Government of India’s flagship programme.
- By 2024, the goal hopes to provide every **rural family in the nation with a reliable in Jal Jeevan Mission,** long-term supply of potable tap water in an appropriate amount and of the required quality.
- The initiative is carried out by the Indian government in collaboration with the States and UTs.
- It has achieved over 50% coverage across the country.



Goa gets Har Ghar Jal Certificate:

- The government of Goa, has invested over 200 Cr in the past three years to achieve 100 per cent coverage of tap water connections in the state.
- Despite numerous setbacks and difficulties encountered during the COVID-19 pandemic, Goa has achieved the success.
- The tap connection currently **provides access to potable water for all schools, anganwadi centres, and public institutions, including Gram Panchayat buildings, healthcare facilities, community centres, ashramshalas, and other government structures.**

After Goa, several Union Territories (UTs), including Daman and Diu and Dadra & Nagar Haveli, have also completed the 100 per cent coverage by providing tap water connections to over 85 thousand households in rural areas.

- ◎ **CERTIFICATION** • **Haryana, Telangana, Andaman and Nicobar Islands and Puducherry have reported 100% coverage, but are yet to be certified.**
- While other states such as Punjab (99.9%), Gujarat (97%), Bihar (95.49%), Himachal Pradesh (94.85%) are also inching closer to the target.
- However, the work is yet to gain momentum in 13 big states, including Uttar Pradesh, which accounts for 95% of the residual work.

LADAKH LAUNCHES E-VEHICLE PLAN

- ◎ **CONTEXT:** **The Union Territory of Ladakh has come up with an electric vehicle policy, “Ladakh’s Electric Vehicle and Allied Infrastructure Policy 2022”.**

Key-points

- The policy aims to transform Ladakh into a torchbearer in terms of the adoption of electric vehicles in the country and envisions encouraging and cultivating an EV ecosystem in the Union Territory.
- With this, the administration will encourage the citizens to procure and use e-vehicles to create a carbon-neutral future for the UT.
- The policy entails a capital subsidy of 10 per cent on two-wheelers, three-wheelers and four-wheelers.



- Public buses will be given a capital subsidy of 25 per cent under the policy.

Electric Vehicles

- An EV is a vehicle that operates on an electric motor, instead of an internal-combustion engine that generates power by burning a mix of fuel and gases.
- **Benefits**
 - ▶ Seen as a possible replacement for current-generation automobiles, in order to address the issues of rising pollution, global warming, depleting natural resources, etc.
 - ▶ Even though the concept of EVs has been around for a long time, it gained momentum amid the concern of rising carbon footprint and other environmental impacts of fuel-based vehicles.

Indian Policies on EVs

- In 2010, the Ministry of New and Renewable Energy (MNRE), announced a financial incentive for manufacturers for EVs sold in India.
- In 2013, India unveiled the National Electric Mobility Mission Plan (NEMMP) 2020.
 - It aimed to make a major shift to EVs and to address the issues of national energy security, vehicular pollution, and the growth of domestic manufacturing capabilities.
 - It offered subsidies and created a supporting infrastructure for e-vehicles but the plan has not been implemented.
- In the Union Budget 2015-16, the 'Faster Adoption and Manufacturing of EVs' (FAME) scheme was announced, with an initial outlay of Rs. 75 crore.
- In 2017, the Transport Ministry highlighted its intent to move to 100 percent electric cars by 2030.
- In February 2019, the Union Cabinet cleared an Rs. 10,000-crore programme under the FAME-II scheme.

EXERCISE PITCH BLACK IN AUSTRALIA

◎ CONTEXT:

An Indian Air Force contingent has reached Australia to participate in Exercise Pitch Black 2022.

Exercise Pitch Black

- Exercise Pitch Black is a biennial three-week multilateral air combat training exercise hosted by the Royal Australian Air Force (RAAF).

- Its last edition was held in **2018**.
- It was conducted for the **first time in 1981** between different RAAF units.
- It **ensures that the training and integration of forces** that occur during this exercise directly supports the Air Force's ability to conduct operations.
- This year's participants include Australia, Canada, India, France, Germany, Indonesia, Japan, Malaysia, the Netherlands, New Zealand, the Philippines, the Republic of Korea, Singapore, Thailand, the UAE, the UK and the US.
- Exercise Pitch Black 2022 is the Royal Australian Air Force's most significant International Engagement activity with forces participating from a wide range of partner and allied nations developing and enhancing military relationships at all levels.
- Exercise Pitch Black **features a range of realistic, simulated threats** which can be found in a modern battle-space environment and is an opportunity to test and improve our force integration, utilising one of the largest training airspace areas in the world.
- The Australian Navy was part of the Malabar naval exercise hosted by India in November 2020 as well as last year.

UN TO SIGN TREATY ON OCEAN BIOLOGICAL DIVERSITY

◎ **CONTEXT:** The U.N. kicked off a conference recently aimed at creating a new, legally-binding global treaty to govern use of the high seas.

◎ **BACKGROUND:**

- The UN general assembly had decided to convene an **Intergovernmental Conference (IGC)** in December 2017 to elaborate on the text of the legal instrument for **protecting biodiversity in areas beyond national jurisdiction (BBNJ) under UNCLOS**.
- The IGC held four formal sessions in September 2018, March 2019, August 2019 and March 2022.
- This is the **fifth round of negotiations** on the international instrument under the **UN Convention on the Law of the Sea (UNCLOS)**.

What can be expected?

- The ambition of the treaty is to;
 - reverse the current downward trend in biodiversity
 - protect marine life
 - guaranteeing safe access to international waters
- The treaty aims to help conserve biodiversity in **areas beyond national jurisdiction (BBNJ)** that lie **outside countries' 322-kilometre exclusive economic zones**.
- The high seas treaty, if agreed, would create a **new global body to enforce rules** laid out to protect about 30% of the world's oceans by 2030.

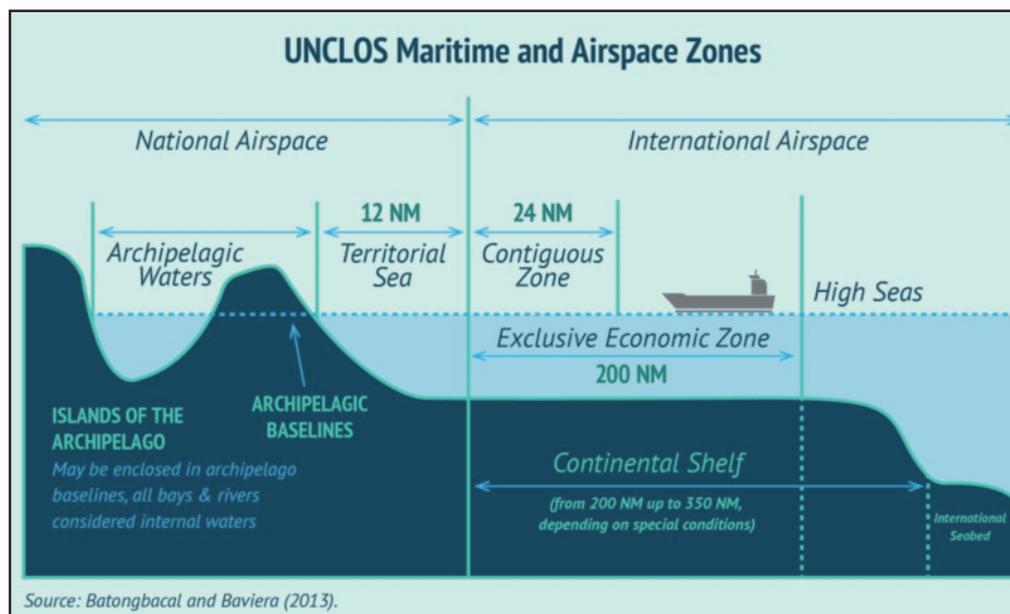
High Seas

- The **"high seas"** refers to international waters — sea space that doesn't fall within any nation's sovereign or extended maritime zone.
- It would extend international law beyond **countries' territorial waters and exclusive economic zones (EEZs)**, which extend 200 miles from any nation's coastline, to cover a major portion of the currently unprotected waters from threats such as overfishing and unchecked seafloor mining.

- This treaty will provide a **first-ever legal framework** for the protection of biodiversity in international waters, including the creation of ocean sanctuaries, environmental rules, and the application of Environmental Impact Assessments preceding any human activities on the waters that make up nearly half of the planet

UN Convention on the Law of the Sea (UNCLOS):

- UNCLOS was **adopted in 1982** and laid the foundation of ocean governance, with the first single set of rules for oceans and seas.
- There are two more instruments under the Convention:
 - The **1994 agreement on the implementation of Part XI of UNCLOS**
 - the **1995 UN Fish Stocks Agreement**
- The treaty on BBNJ will be the third legal instrument under the convention.



RANGANATHITTU BIRD SANCTUARY REOPENS

◎ **CONTEXT:** The sanctuary reopened for visitors after the place was flooded following heavy discharge from the Krishna Raja Sagara dam (KRS) in Karnataka.

- ◎ **ABOUT**
- The Ranganathittu Bird Sanctuary is also known as the 'Pakshi Kashi' of Karnataka.
 - It is a bird sanctuary in the Mandya District of the state of Karnataka in India.
 - It is the largest bird sanctuary in the state with 40 acres in area, and comprises six islets on the banks of the Kaveri River.
 - The sanctuary has been designated as a protected Ramsar site since 2022.

The sanctuary's islets were formed when an embankment across the Kaveri River was built between 1645 and 1648 by the then **king of Mysore, 'Kanteerava Narasimharaja Wadiyar'**.

- The ornithologist **Salim Ali** observed that the islets formed an important nesting ground for a large variety of birds, and persuaded the king of Mysore to declare the area a protected area in 1940.

- The sanctuary is currently maintained by the **Forest Department of Karnataka** and efforts are on-going to improve the sanctuary, including purchasing nearby private land to expand the **protected area**.
- In **2014**, around 28 sq. km around the sanctuary was declared as an **eco-sensitive zone**.

What are River Islets?

- An **islet** is a very small, often unnamed island.
- Generally, an islet has little or no vegetation and cannot support human habitation. It may be made of rock, sand and/or hard coral; may be permanent or tidal (i.e. surfaced reef or seamount); and may exist in the sea, lakes, rivers or any other sizeable bodies of water.



Biodiversity in the region

- Most of the park is within a **riparian area**.

Riparian: It relates to or living or located on the bank of a natural watercourse (such as a river) or sometimes of a lake or a tidewater riparian trees.

- **Flora:**
 - Riverine reed beds cover the banks of the islands, while the islands themselves are covered in broadleaf forests, with dominant species being **Terminalia arjuna (Arjun tree), bamboo groves, and Pandanus trees**.
 - Eucalyptus and acacia trees have also been planted, which might lead to long-term eradication of native species.
 - The endemic and threatened lily *Iphigenia mysorensis* of the family Colchicaceae also grows in the sanctuary.
- **Fauna:**
 - Roughly 170 bird species have been recorded.
 - Of these, the painted stork, Asian openbill stork, common spoonbill, woolly-necked stork, black-headed ibis, lesser whistling duck.

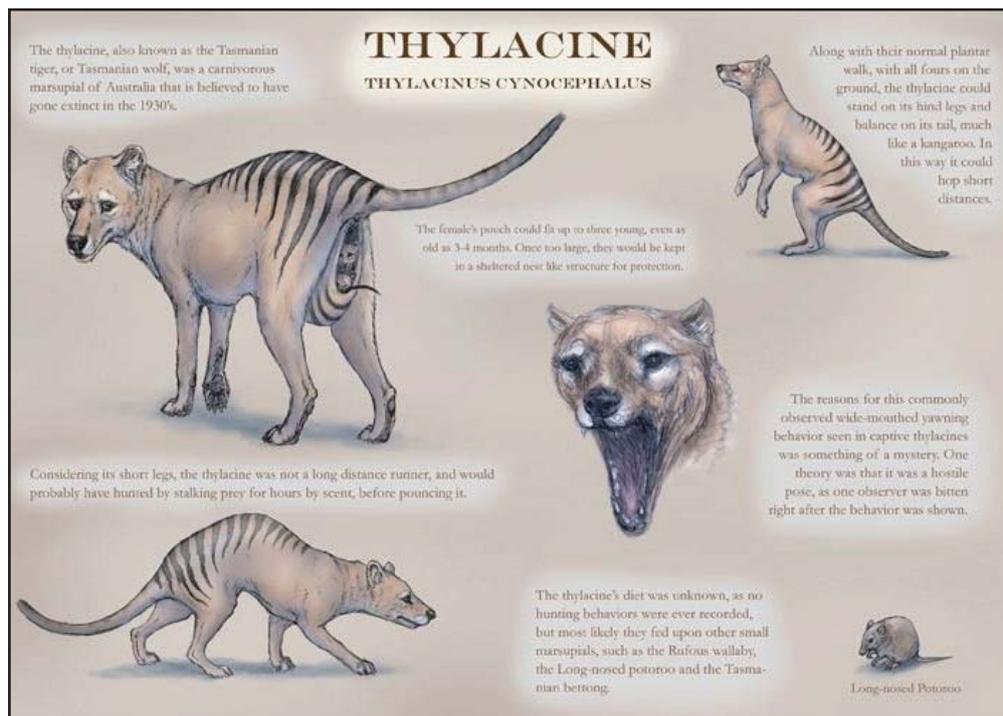
SCIENTISTS PLANNING TO 'RESURRECT' THE EXTINCT TASMANIAN TIGER

◎ CONTEXT:

Scientists in the US and Australia have embarked on a \$15-million project to resurrect the thylacine or Tasmanian Tiger, a marsupial that went extinct in the 1930s, using gene-editing technology.

Thylacine or Tasmanian Tiger:

- Tasmanian Tiger (*Thylacinus cynocephalus*), the only animal in the Thylacinidae family to survive in modern times, was a marsupial mammal that raises young ones in a pouch.
- Even though the species earned its nickname Tasmanian Tiger because of the stripes along its back, it was a slow-paced carnivorous that usually hunted alone or in pairs at night.
- The sharply clawed animal had a dog-like head and ate kangaroos, other marsupials, small rodents, and birds.
- At one time the Thylacine was widespread over continental Australia, extending north to New Guinea and south to Tasmania.



The resurrection process

- Even though the last living thylacine died over 86 years ago, many embryos and young specimens of the species have been preserved.
- For the de-extinction project, the scientists will be using a genome sequenced from a DNA extracted from a 108-year-old specimen held at Australia's Victoria Museum.
- De-extinction will not be complete until the success of the **rewilding process** – reintroducing the animal to its native habitat — which will 'stabilise the fragile ecosystem of Tasmania.'

Why is it the right choice?

- The thylacine is a great candidate for de-extinction because it only went extinct in 1936 due to human hunting and the ecosystem we are looking to return it to is still intact.

De-Extinction:

- De-extinction, or resurrection biology, reverses plant and animal extinctions by creating new versions of previously lost species.
- Back-breeding, cloning, and genome editing are species restoration methods.
- The goal is to re-establish dynamic processes that produce healthy ecosystems and restore biodiversity.

How De-extinction Works through Genome Editing?

- Genome editing technology creates hybrids between living and extinct organisms.
- Scientists insert edited DNA from an extinct species into the nucleus of a reproducing cell.
- They use this technique to resurrect more species, including those whose remains are not well-preserved.
- Genome editing blends the desired traits that made the species unique with genes from the donor species.
- That is why the resulting organism is not completely identical to the extinct species but is a hybrid.

GREAT INDIAN BUSTARDS (GIB) ADAPT TO PRODUCE A 2-EGG CLUTCH

◎ CONTEXT:

The Great Indian Bustards (GIB) has adopted a new habit of laying a clutch of two eggs at a time after having a diet with additional proteins during the monsoon season. Scientists have discovered the new proclivity in Jaisalmer district's Desert National Park (DNP).

What do we mean by a clutch?

- A clutch of eggs is a group of eggs produced by birds, amphibians, or reptiles, often at a single time, particularly those laid in a nest.
- **Size:** Clutch size differs greatly between species, sometimes even within the same genus.
 - It may also differ within the same species due to many factors including habitat, health, **nutrition**, predation pressures, and time of year.

Has a 2-egg clutch been observed for the first time?

- **The answer is 'No'.** The scientist **Wildlife Institute of India (WII)** who is leading the project said that about 5% to 10% of the female GIBs had been detected in the past laying two eggs each.
- But **this is for the first time that such a high incidence**, with the signs of an evolving habit, had been observed.

About Great Indian Bustard:

- The Great Indian Bustard (*Ardeotis nigriceps*), is a bustard native to the Indian subcontinent. Bustards are large terrestrial birds found in dry grasslands and steppe regions. It is also known as the Indian Bustard; it is **among the heaviest of flying birds in existence**.
- It is the **State bird of Rajasthan** and is considered India's most critically endangered bird.
- It is considered the **flagship grassland species, representing the health of the grassland ecology**.
- The **GIB is now found in a small number only in western Rajasthan**, while Gujarat claims to have a few females left in its **Banni Grassland Reserve**.
- **Population:** Less than 150 individuals of these birds persist in a few fragmented pockets of Rajasthan and Gujarat.
 - ▶ As per the last count of the GIB in 2018, there were around **127 birds in the Desert National Park or the DNP in Rajasthan**.
 - ▶ **Excessive hunting, the decline of natural habitation, and construction activities** like electric posts are some of the main reasons for the decline of GIB.

Protection Status:

- International Union for Conservation of Nature Red List: **Critically Endangered**
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES): **Appendix I**
- Convention on Migratory Species (CMS): **Appendix I**
- Wildlife (Protection) Act, 1972: **Schedule 1**

GIB- Breeding Project:

- The WII's team has been working on **ex-situ breeding of GIB** for the last three years. They are aiming at preserving the GIBs, whose **population has reduced to less than 150 in the wild**.
- The breeding project focuses on spatial prioritization, risk characterization, and conservation management with endangered species.
- The laying of clutches of two eggs in 2020 aroused immense curiosity, after which **the WII's experts became vigilant in monitoring the nests** to assess if such an instance would get repeated.
- The state government's Forest Department started the breeding project in collaboration with the WII to raise the new stock of GIB chicks in 2019 after a long wait by environmentalists for nearly four decades.

A NEW SPECIES OF BENT-TOED GECKO FOUND AT AGASTHYAMALAI

◎ CONTEXT:

A group of researchers has discovered a new species of bent-toed gecko from Agasthyamalai hills in the Western Ghats.

About the Species:

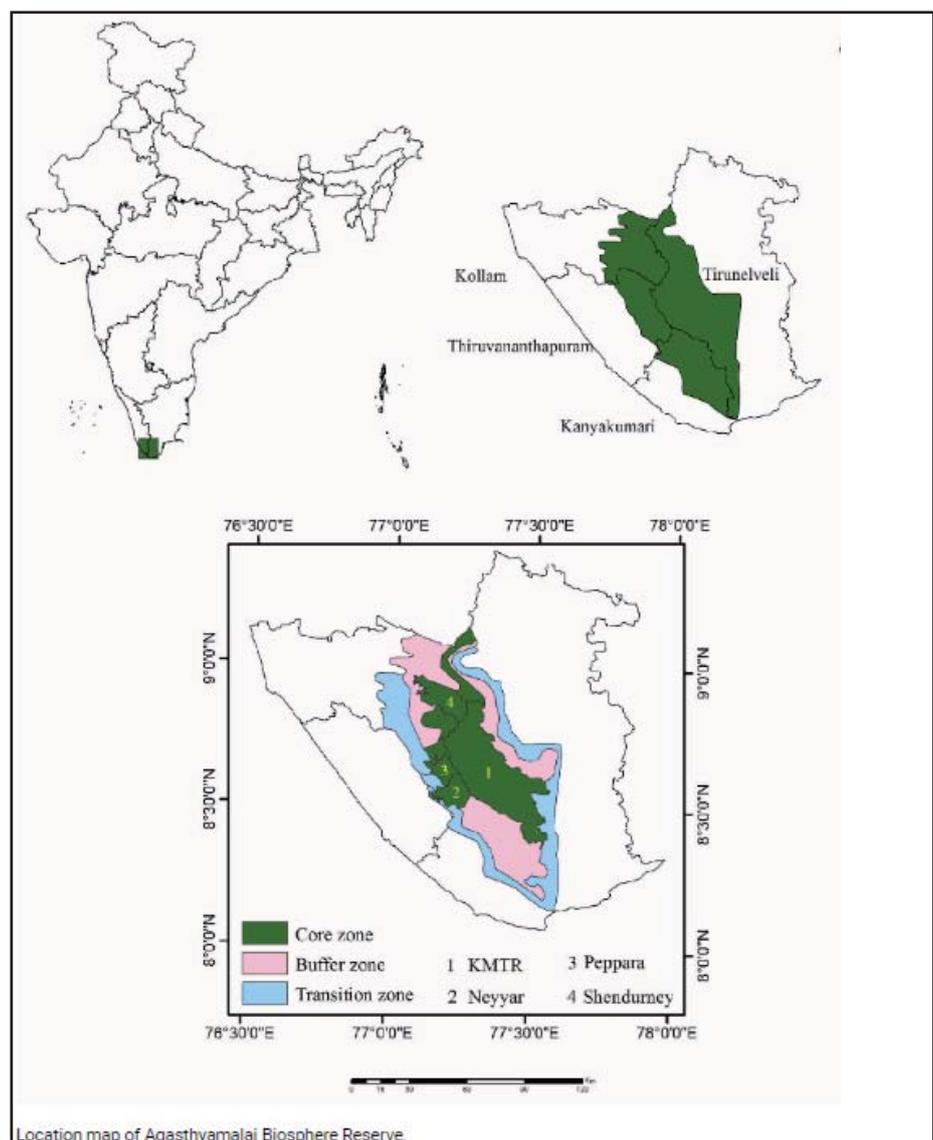
- **Scientific name:** *Cyrtodactylus aravindi*.
- The species has been given the common name Aravind's ground gecko after noted malacologist **N.A. Aravind**.

- It has been described based on its distinctness in the **morphological and molecular DNA data**.
- It has so far been found **only at two locations**, Muppandal and Thuckalay, in Kanyakumari district falling within the Agasthyamalai biosphere reserve in Tamil Nadu.



Agasthyamalai Biosphere Reserve (ABR)

- Located in the Western Ghats



- The Agasthyamalai Biosphere Reserve (ABR) was established in 2001 and straddles the border of Kollam and Thiruvananthapuram Districts in Kerala and Tirunelveli and Kanyakumari Districts in Tamil Nadu, South India at the southern end of the Western Ghats.
- It consisting mostly of tropical forests.
- It is also a unique genetic reservoir of cultivated plants especially cardamom, jamune, nutmeg, pepper and plantain.
- Agasthyamalai is also home to the Kanikaran, one of the oldest surviving ancient tribes in the world.
- **Wildlife Sanctuary:**
 - Kalakkad Mundanthurai Tiger Reserve (TN),
 - Neyyar Wildlife Sanctuary
 - Peppara Wildlife Sanctuary,
 - Shenduruny Wildlife Sanctuary

KARNATAKA'S MUDHOL HOUNDS

© CONTEXT:

Mudhol hounds, a breed of hunting dogs native to north Karnataka, could be inducted into the Special Protection Group (SPG), the elite force protecting the Prime Minister of India.

About Mudhol Hound Dog Breed:

- Mudhol hounds are Indian sight hound dogs, also known as **Caravan, Mahratta, Pashmi hounds and Kathewar Dog**. They are mostly available in Karnataka, and some parts of Andhra Pradesh and Maharashtra.
- Mudhol hounds are well known for their **speed and chasing skills**. They are the first Indian dogs, introduced in the **Indian Army's inventory in 2017**.
- The Mudhol hounds are **very energetic and athletic dog** that need regular exercise and are not suitable for apartment life.
- Mudhol Hound are dogs are considered as **royal dogs of India**, The Government of India had issued a **postal ticket in his honor**.
- Mudhol Hound is the first ever Indian dog breed to **join the Indian Army**.
- Mudhol hound is **breed of sighthound from Indian**, which were one of the **fastest running dog breed of India**.



The Origin and Breed History

- The Mudhol Hound dog is **native from the small town Mudhol, in the Bagalkot district of Karnataka state**, from where it got its name Mudhol.
- It is believed that the former ruler of **Mudhol presented two puppies to King George V**.
- There is no reliable information on the origin of the Mudhol Hound dog breed, but most people believe that they are the **descendants of the Arabian Saluki**, or freshly bred dogs from Central Asia.
- These dogs were brought to India during the Mughal period, and the Mudhol Hound is a mixture of the native dogs of India and these imported dogs.

'TOMATO FLU' IN INDIA

© **CONTEXT:** **A new virus known as tomato flu, or tomato fever, has emerged in India in the state of Kerala in children younger than 5 years.**

About the disease

- The rare viral infection is in an endemic to the state and is considered non-life-threatening.
- Although the tomato flu virus shows symptoms similar to those of COVID-19 the virus is not related to SARS-CoV-2.
- Its symptoms ranges to;
- Fever, fatigue, and body aches initially, and some patients also report rashes on the skin.
- Tomato flu is a self-limiting illness and no specific drug exists to treat it.

Cause of spread among Children

- Tomato flu could be an after-effect of **chikungunya or dengue fever** in children rather than a viral infection.
- The virus can also be a new variant of the **viral hand, foot, and mouth disease**, a common infectious disease targeting mostly children aged **1–5 years**.

Tomato flu gained its name on the basis of the **eruption of red and painful blisters** throughout the body that gradually enlarge to the size of a tomato. These blisters resemble those seen with the **monkey pox virus** in young individuals.

- Children are at increased risk of exposure to tomato flu as viral infections are common in this age group and spread is likely to be through close contact.
- Young children are also prone to this infection through use of nappies, touching unclean surfaces, as well as putting things directly into the mouth.

Implications and Prevention

- Similar to other types of influenza, tomato flu is **very contagious**.
- Hence, it is mandatory to follow careful isolation of confirmed or suspected cases and other precautionary steps to prevent the outbreak of the tomato flu virus from Kerala to other parts of India.
- Isolation should be followed for **5–7 days** from symptom onset to prevent the spread of infection to other children or adults.
- The best solution for prevention is the maintenance of **proper hygiene and sanitisation** of the surrounding necessities and environment as well as preventing the infected child from sharing toys, clothes, food, or other items with other non-infected children.

Is Treatment available?

- As yet, **no antiviral drugs or vaccines** are available for the treatment or prevention of tomato flu.

ARTEMIS: NASA TO ANNOUNCE SITES ON MOON

◎ **CONTEXT:** NASA has recently announced the 13 potential landing sites for its upcoming Artemis III mission, under which the US space agency will send the first woman and person of colour to the Moon.

◎ **ABOUT:**

- NASA has identified the following 13 regions as candidates for the landing of its Artemis 3 lunar mission:

<ul style="list-style-type: none"> Faustini Rim A Peak Near Shackleton Connecting Ridge Connecting Ridge Extension de Gerlache Rim 1 de Gerlache Rim 2 de Gerlache-Kocher Massif 	<ul style="list-style-type: none"> Haworth Malapert Massif Leibnitz Beta Plateau Nobile Rim 1 Nobile Rim 2 Amundsen Rim
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- Each region is located within six degrees of the latitude of the lunar South Pole, and this proximity makes these sites scientifically significant.
- This is because the lunar South Pole has permanently shadowed regions rich in resources; it also has terrain unexplored by humans.

Why is sunlight critical for the mission?

- Sunlight is required for a long-term stay on the Moon as it provides a power source and minimises temperature variations.
- Within each candidate site, there are areas with continuous access to sunlight throughout a period of six-and-a-half days, which is the planned duration of Artemis III.

What is the Artemis mission?

- Next generation of lunar exploration**-NASA's Artemis mission is touted as the next generation of lunar exploration, and is named after the twin sister of Apollo from Greek mythology.
- Uncrewed space mission**-It is an uncrewed space mission where the spacecraft will launch on SLS — the most powerful rocket in the world — and travel 2,80,000 miles from the earth for over four to six weeks during the course of the mission.
- Land humans on the moon**- With the Artemis programme, NASA aims to land humans on the moon by 2024, and it also plans to land the first woman and first person of colour on the moon.

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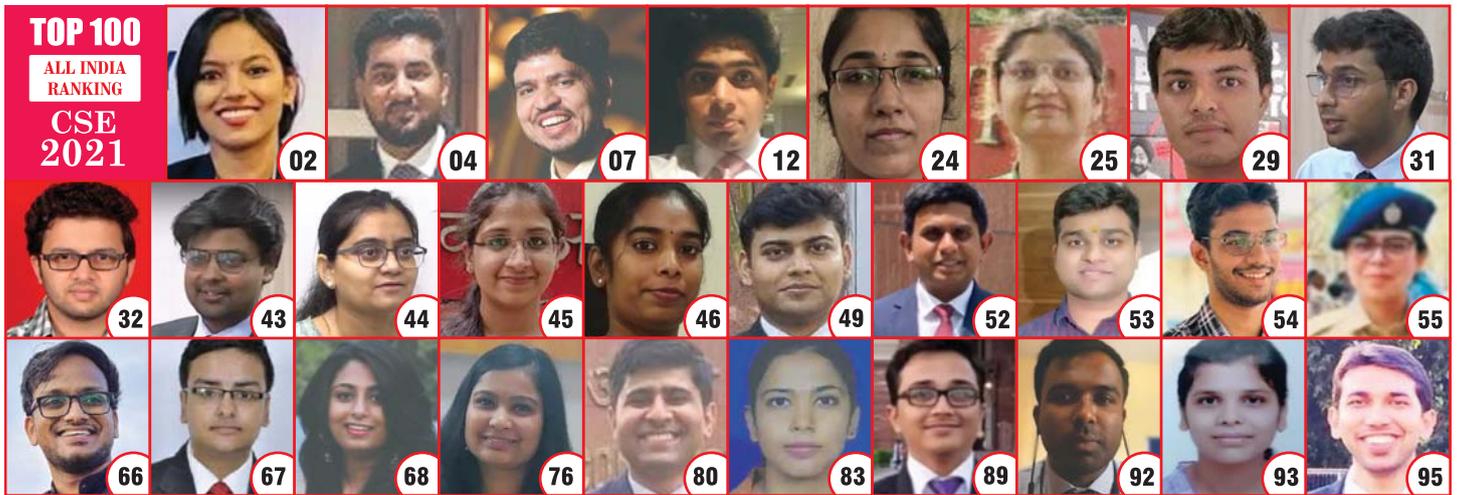
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