

*Monthly Magazine*

# CURRENT AFFAIRS



For Summary of  
Economic Survey 2022-23   
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Inside Magazine  
**UNION BUDGET 2023-24**  
(HIGHLIGHTS)

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# POLITY & GOVERNANCE

## BASIC STRUCTURE OF THE INDIAN CONSTITUTION

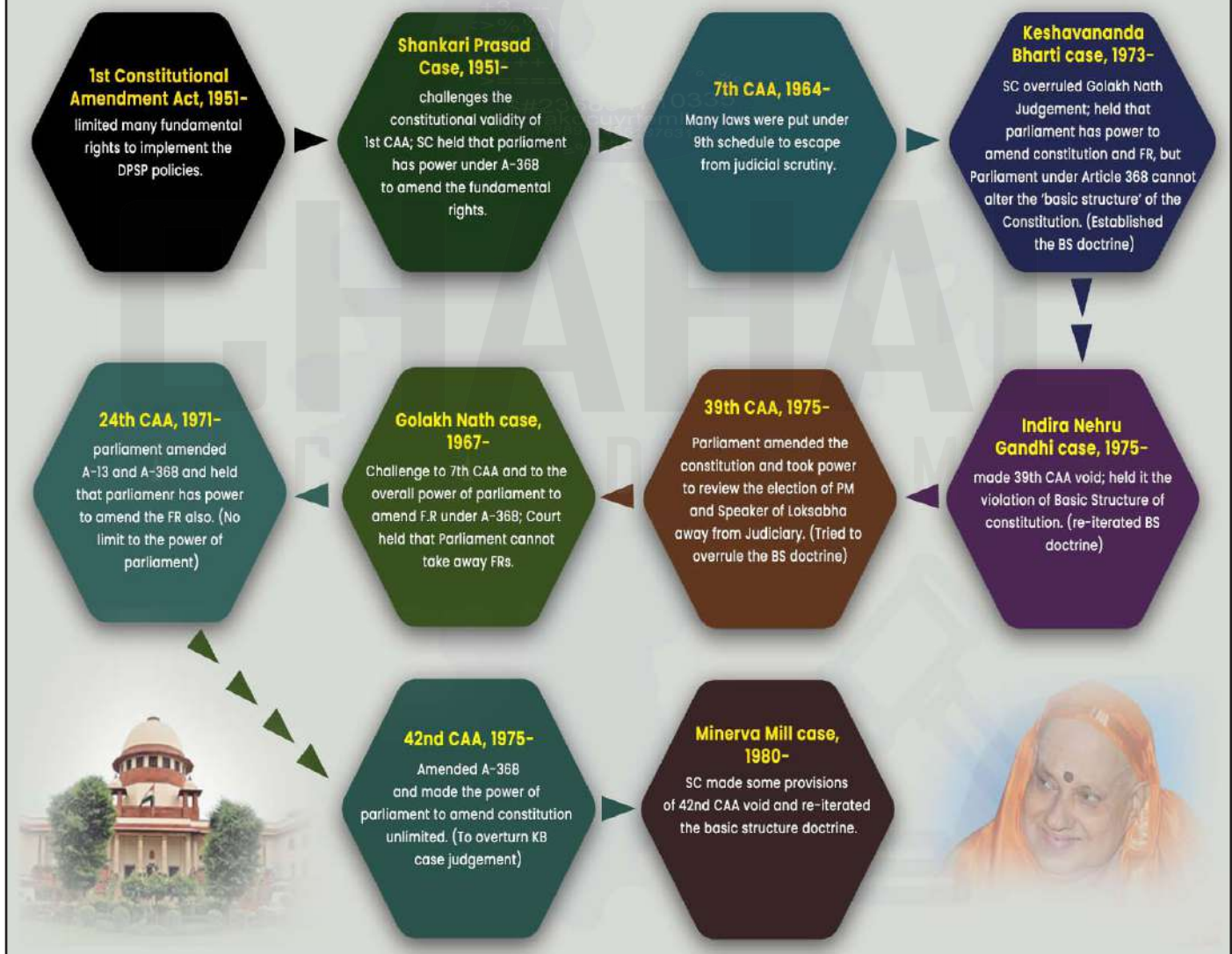
*Context:* Vice President of India criticised the Supreme Court for using the doctrine of basic structure to strike down the constitutional amendment that introduced the National Judicial Appointments Commission Act.

### What is the Basic Structure Doctrine?

- The Doctrine of Basic Structure is a form of **judicial review** that is used to **test the legality** of any legislation by the courts.

- The doctrine was evolved by the Supreme Court in the **1973 landmark** ruling in **Kesavananda Bharati v State of Kerala**.
- A 13-judge Constitution Bench ruled that the **'basic structure'** of the Constitution is **inviolable**, and **could not be amended by Parliament**.
- If a law is found to damage or destroy the basic features of the Constitution, the **Court declares it unconstitutional**.
- The test is **applied to constitutional amendments** to ensure the amendment does not dilute the fundamentals of the Constitution itself.

## The evolution of **BASIC STRUCTURE DOCTRINE** in India





## Basic structure type doctrine found in other nations' constitution

Just like 'Basic structure doctrine' of India, which places the limitation on parliament's amendment power, there are several examples in world with similar type of doctrines/judgements. Some of them are-

- The Constitutions of **Greece and Portugal** have provided a list of all unamendable provisions which is long and fairly exhaustive.
- The Constitutions of **France and Italy** on the other hand, have attempted to safeguard **only one or two core principles** such as the Republican form of Government.
- In the context of **Iran**, the unamendable provisions include those which relate to the Islamic and democratic character as well as the objectives of the republic such as social and economic goals.
- In **Pakistan**, a case of 2015, in the majority opinion, 8 judges held that there were implied limitations on the amending powers of the Parliament.
- In the country of **Thailand**, the 2007 Constitution prohibits amendments which change the democratic regime of the Government with the King as the head of the state or which has the effect of changing the form of the State.
- The doctrine of the basic structure has also been invoked in certain cases in **Belize** (Belize is a Caribbean and Central American country) in order to strike down amendments to the Constitution.
- The High Court of **Australia** has also held that the law-making powers of the Parliament are subject to limitations which can be inferred in and from the Constitution of Australia itself.
- In **Britain**, in certain cases, it was held that, "In exceptional circumstances involving an attempt to abolish judicial review or the ordinary role of the courts, the House of Lords may have to consider whether this is a constitutional fundamental which even a sovereign Parliament cannot abolish."
- In **South Africa**, a debate has been started regarding the applicability of the basic structure doctrine.

## What was the NJAC?

- The NJAC **proposes** to make the **appointment of high court and Supreme Court judges** and chief justices more transparent.
- They will be selected by the commission, whose **members** will be **drawn from the judiciary, legislature and civil society**.
- It was supposed to **replace the collegium system**.
- With the NJAC amendment, **Articles 124 A, B and C** were added to the Constitution to make the NJAC valid.

## Who were supposed to be the members of NJAC?

- The **CJI** will be **chairperson**
- The next **two seniormost Supreme Court judges**
- The **law and justice minister**; and
- **Two eminent persons**, to be selected by a committee comprising the CJI, Prime Minister and leader of the opposition

## Why the court struck down NJAC?

- The court has held that the **appointment of judges**, along with **primacy of judiciary** and the **CJI**, was part of the **basic structure** of the Constitution and that the parliament, through NJAC act, **violated this basic structure**.

## EUTHANASIA

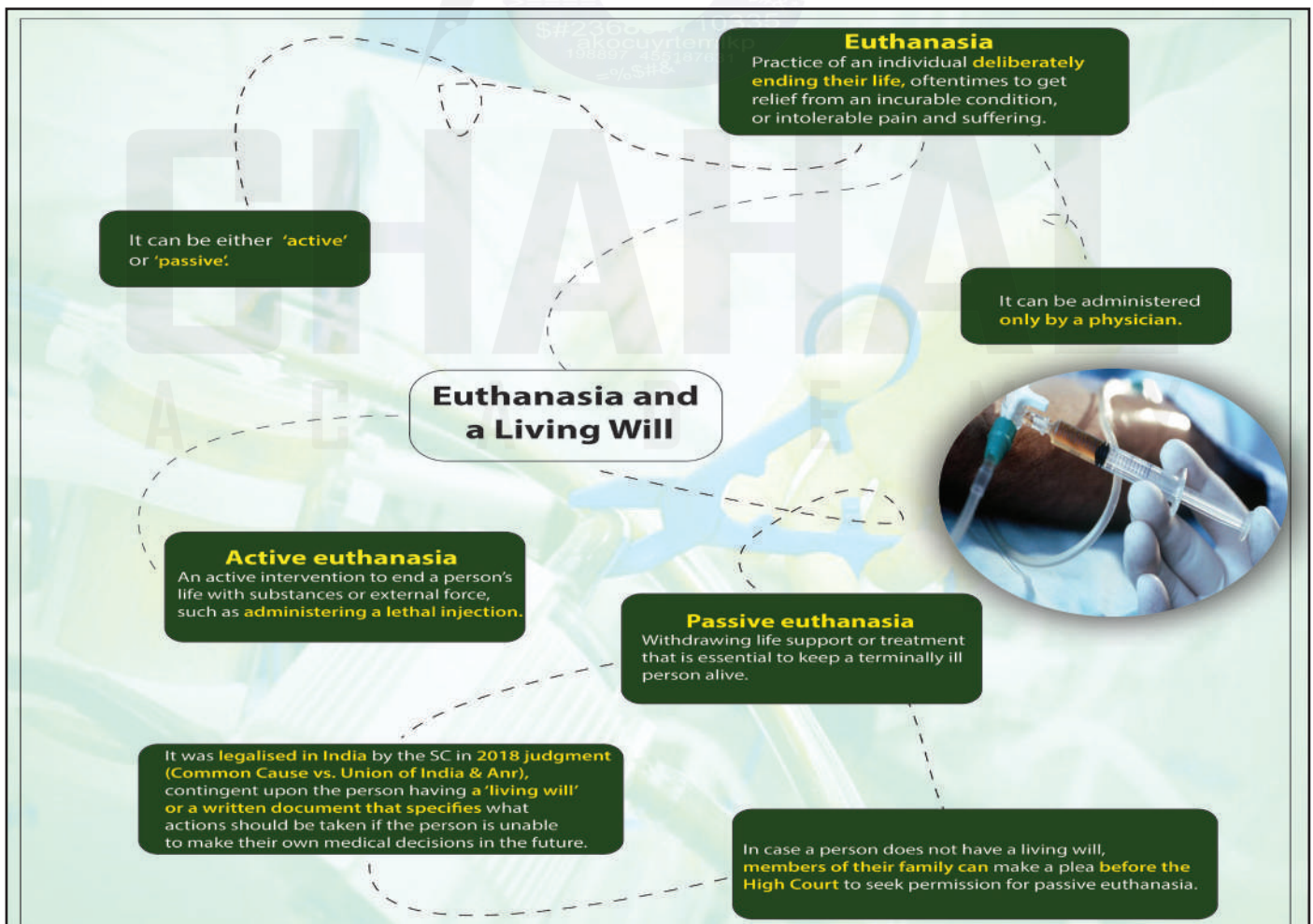
*Context:* Recently, the SC has relaxed the guidelines for 'advance medical directive' that it issued in its **2018 judgment (Common Cause vs. Union of India & Anr)** by which it had legalised passive euthanasia under certain circumstances.

## SUICIDE

While the **IPC Section 309** criminalises attempt to suicide, the **Mental Healthcare Act, 2017**, has created an **exception** within **IPC Section 309** which bars prosecution.

## Changes after the New SC's order @ Passive Euthanasia Procedure

|   | <b>NOW</b>   | <b>EARLIER</b>   |
|---|--|--|
| <b>Living will</b>                                  | An attestation by a notary or a Gazetted officer to be sufficient for a living will  | It was necessary that a judicial magistrate attest or countersign a living will  |
| <b>Access to the living will</b>                    | Living will a part of national health record which can be accessed by Indian hospitals   | Living will was kept in the custody of the district court concerned  |
| <b>Primary board to examine patient's condition</b> | Three doctors, including treating physician and two other doctors with five years of experience in the specialty, will comprise the primary board of doctors | Primary board of doctors needs at least four experts from general medicine, cardiology, neurology, nephrology, psychiatry or oncology with overall standing of at least 20 years |
| <b>Time taken to decide</b>                         | Primary/secondary board to decide within 48 hours on withdrawal of further treatment   | The 2018 judgment did not specify any outer limit on withdrawal of treatment   |
| <b>Secondary board</b>                              | Hospital must immediately constitute a secondary board of medical experts  | The district collector had to constitute the second board of medical experts   |





## SITUATION BEFORE 2018 @ EUTHANASIA



**P Rathinam vs Union of India Case (1994)**

The SC deemed the IPC Section 309 (attempt to suicide) to be a cruel and irrational provision and declared it as **unconstitutional and void**.



**Smt. Gian Kaur vs The State of Punjab (1996)**

The SC **overturned the decision in P Rathinam** saying that the **right to life** under Article 21 did **not include the right to die**, and only legislation could permit euthanasia.



**Aruna Ramchandra Shanbaug vs Union of India & Ors (2011)**

- The SC **allowed passive euthanasia** for Aruna Shanbaug, a nurse who had been sexually assaulted and had been in a vegetative state since then.
- The court made a **distinction between 'active' and 'passive'**, and allowed the latter in "certain situations".



**Law Commission of India (196th Report) (2006)**

It had **recognised the patient's decision** to not receive medical treatment and said it did not constitute an attempt to commit suicide under Section 309 IPC.



**Law Commission of India (241st Report) (2008)**

It **proposed legislation** on 'passive euthanasia', and also prepared a draft Bill.

## Different euthanasia related laws in different countries



**NETHERLANDS**  
**BELGIUM**  
Allow both euthanasia and assisted suicide for anyone who faces "unbearable suffering" that has no chance of improvement.

**SWITZERLAND**  
Bans euthanasia but allows assisted dying in the presence of a doctor or physician.



**CANADA**  
Had announced that euthanasia and assisted dying would be allowed for mentally ill patients by March 2023; however, the decision has been widely criticised, and the move may be delayed.

**UNITED STATES**  
Has different laws in different states. Euthanasia is allowed in some states like Washington, Oregon, and Montana.

## SUPREME COURT UPHOLDS DEMONETISATION

**Context:** Recently the Supreme Court upheld the government's decision to demonetise currency notes of Rs 500 and Rs 1,000 by a 4:1 majority.

### What is the Supreme Court's verdict on demonetisation?

- The Preamble of the **Reserve Bank of India Act, 1934**, said the right to regulate the issue of banknotes is **entirely with RBI**.
- It also generally **operates the currency and the credit system**.
- The Court adjudicated that the notification from the Government (November 8, 2016) is lawful and that it passes the **proportionality test**.
- One Judge (Justice V Nagarathna) has given a dissenting judgment noting that even though demonetization was well-intended and well-thought-out, it still needs to be declared unlawful on legal grounds and not on the basis of objects.

### What is the proportionality test?

The constitutionality and rationality of any decision/law/regulation/order can be judged on fulfilment of four criteria. The four ingredients of the test to be satisfied are:

- Legitimate purpose;**
- Rational connection with the purpose;**
- Necessity;**
- Whether the action taken is proportional or balanced.**

### What did the majority judgement say on proportionality test of demonetisation?

- The majority verdict states that **curbing fake currency, black money and terror funding** are legitimate interests of the State and have a rational connection with demonetisation.
- On the **question of necessity**, the Court said that it is "**exclusively within the domain of the experts**"- the RBI to answer this question.
- On the question of Proportionality, the Court said what **alternate measure** could have been undertaken with a lesser degree of limitation is **very difficult to define**.
- The minority view rejected the decision of demonetization outrightly, hence did not ponder on proportionality test.

## DEMONETIZATION

### DEFINITION

Demonetization is the process of **eliminating the lawful acceptance status** of a monetary unit.

### MORE ABOUT DEMONETISATION

- Demonetization is the process through which a nation's economic unit of exchange loses its legally enforceable validity.
- Currencies that are terminated are no more legally considered exchanges and have no financial value.
- Demonetization is a process by which countries opt to reintroduce defunct currencies as legal money.

### REASONS BEHIND DEMONETIZATION

- Hyperinflation
- Elimination of activities like counterfeit currency, terror, and tax fraud.
- To introduce a new monetary system in some circumstances.

### ADVANTAGES

- Control criminal activities
- Forbids tax avoidance and other financial crimes
- Contributes to a paperless financial system

### DISADVANTAGES

- Expenses issuing new currency and coinage minting can be high
- Illegal activity will not be stopped entirely
- May create disturbances among individuals

## Two events of demonetisation

### Demonetisation of 1978

- In January **1978**, the Indian government demonetised **Rs 1,000, Rs 5,000 and Rs 10,000** notes which was quite substantial at that point of time.
- The move was enacted under the **High Denomination Bank Note (Demonetisation) Act, 1978**.
- Under the law all "high denomination bank notes" **ceased to be legal tender** after January 16, 1978.

### 2016 demonetisation

- On **8 November 2016**, the Government of India announced the demonetisation of all **₹500 and ₹1,000 banknotes** of the Mahatma Gandhi Series.
- It also announced the **issuance of new ₹500 and ₹2,000 banknotes** in exchange for the demonetised banknotes.



- According to a 2018 report from the Reserve Bank of India ₹15.3 trillion of the ₹15.41 trillion in demonetised bank notes, or approximately 99.3%, were deposited in banks.

## DELEGATED LEGISLATION

*Context: In upholding the Centre's 2016 decision on demonetisation, one of the key questions to decide for the Supreme Court was whether Parliament gave excessive powers to the Centre under the law to demonetise currency. While the majority ruling upheld the validity of the delegated legislation, the dissenting verdict noted that excessive delegation of power is arbitrary.*

### What is delegated legislation?

- **Definition:**
  - A 1973 Supreme Court ruling explains the concept as: The practice of empowering the Executive to make subordinate legislation within a prescribed sphere.
- Parliament routinely delegates certain functions to authorities established by law since every aspect cannot be dealt with directly by the law makers themselves.
- This delegation of powers is noted in statutes, which are commonly referred to as delegated legislations.
- The delegated legislation would specify operational details, giving power to those executing the details.
- **Examples:**
  - Regulations and by-laws under legislations are classic examples of delegated legislation.

### What was the delegation of power in the demonetisation case?

- Section 26(2) of the Reserve Bank of India Act, 1934 essentially gives powers to the Centre to notify that a particular denomination of currency ceases to be legal tender.

- Here, Parliament, which enacted the RBI Act, is essentially delegating the power to alter the nature of legal tender to the central government.
- The Centre exercised that power by issuing a gazette notification, which is essentially the legislative basis for the demonetisation exercise.

### Why was this challenged?

- The Constitution gives law-making powers to the Parliament.
- While operational aspects can be delegated to statutory bodies, essential powers cannot be delegated.
- Also, the delegation must be with sufficient guidelines on how the power can be used.
- The petitioners in the demonetisation case argued that since Section 26(2) contains no policy guidelines on how the Centre can exercise its powers, it is arbitrary and therefore, unconstitutional.

### What did the Court decide?

- The majority verdict held that since the delegation of power is to the Centre which is anyway answerable to the Parliament, the delegation power cannot be struck down.
- The dissenting opinion held that Centre could not have exercised its delegated powers because Section 26(2) of the RBI only gives powers to the Centre when the recommendation is "initiated" by the RBI Central Board.
- The dissenting view also held that, even if the Centre has the power under Section 26(2) allowing for demonetisation of "any" notes is a vast power that is arbitrary and therefore unconstitutional.

# Delegated legislatives' scrutiny and way forward

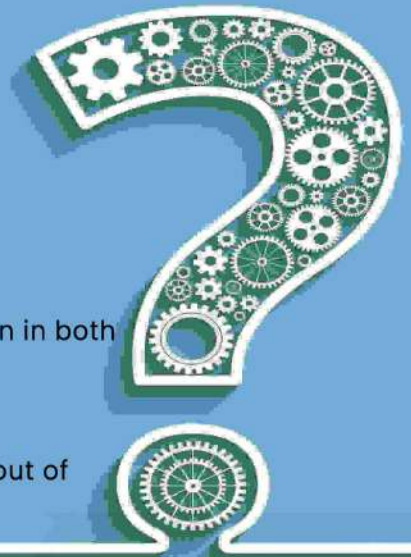
## How delegated legislatures are scrutinized?

There are majorly two forms of scrutiny-

- Scrutiny of legislative, if the law explicitly mentions that;
- Scrutiny through the Standing Committee on Subordinate Legislation in both houses of parliament.

## What is the actual case?

According to a study, from 2008–2012, **only 101 delegated legislations** out of 6985 were scrutinized.



## What does judiciary say about scrutiny of delegated legislation?

Judiciary puts **conflicting views** on the mandatoriness of putting delegated legislation before legislative.

- In **Narendra Kumar v. Union of India**, the Supreme Court held that putting any rule framed under any delegated legislative is mandatory before legislative or else it becomes void.
- While, in **Jan Mohammad v. State of Gujarat**, the SC held that laying down delegated legislation before legislative is not mandatory for the rules made under the legislative to become effective.

## Reasons for in-effectivity of legislatives' scrutiny:

- Administration is very complex business.
- Legislatives have neither time nor expertise to have better control over administration
- Legislatives are led by executives in India
- Lack of strong and effective opposition in legislatives
- Lack of technical support to legislatives like support of bureaucracy to executive
- Size of legislative is too big
- All these reasons make legislative's control sporadic, general and mostly political in nature.

## How to improve scrutiny of delegated legislatives?

The **Committee on Subordinate Legislation** has made the following recommendation in order to streamline the process of delegated legislation in India.

- Power of judicial review should not be taken away or curtailed by rules.
- A financial levy or tax should not be imposed by rules.
- Language of the rules should be simple and clear and not complicated or ambiguous.
- The delegation of power to the authority must be defined unambiguously in the parent law.
- Final authority to interpret the rules must not reside with the delegated authority.
- Rules must not travel beyond the provisions provided in parent laws.
- Sufficient publicity must be provided on the delegated legislative.

## ANTI-CONVERSION LAW

**Context:** The Supreme Court agreed to hear the Madhya Pradesh government's challenge to a High Court order restraining it from prosecuting interfaith couples who get married without first informing the district magistrate.

## Ruling of the Madhya Pradesh High Court

- The Madhya Pradesh High Court last year **restrained the state government from prosecuting adult citizens** if they solemnise marriage on their own volition and **violate Section 10 of the Madhya Pradesh Freedom of Religion Act (MPFRA), 2021.**





## LEGISLATIVE HISTORY of

### ANTI-CONVERSION LAWS IN INDIA

The Legislative history of anti-conversion is more diverse and straight-forward. Pursuant to the Judicial pronouncements made, many States have passed their own version of the Anti-conversion law and they have either been repealed or a challenge to the same lies before the Hon'ble Courts.

- In 1978, the State of Arunachal Pradesh passed the **Arunachal Pradesh Freedom of Religion Act, 1978** to protect the identity of the indigenous tribes in the State.
- In 2002, the State of Tamil Nadu passed the **Tamil Nadu Prohibition of Forcible Conversion Act, 2002**. (Repealed in 2004)
- In 2003, the State of Gujarat passed the **Gujarat Freedom of Religion Act, 2003**.
- In 2017 and 2018, **Jharkhand and Uttarakhand** passed anti-conversion laws respectively.
- In 2021, the Karnataka State Legislative Assembly, the lower house, passed the **Karnataka Protection of Right to Freedom of Religion Bill, 2021**. (Pending before legislative council)

#### INTERNATIONAL CONVENTIONS ON RELIGIOUS FREEDOM:

Art 18 of the **International Covenant on Civil and Political Rights ("ICCPR")** holds the freedom of religion, that is freedom of belief in worship, observance, practice and teaching of religious doctrines.

### Major judicial pronouncements on Freedom of Religion:

1. **Bijoe Emmanuel and Ors. v. State of Kerala**
2. **Acharya Jagdishwaranand v. Commissioner of Police, Calcutta**
3. **M. Ismail Faruqui v. Union of India**
4. **Ramji Lal Modi v. State of UP**
5. **Raja Birakishore v. State of Orissa**
6. **The Durgah Committee Ajmer v. Syed Hussain Ali and Others**

### SAME-SEX MARRIAGE

**Context:** The Supreme Court transferred to itself a batch of petitions seeking recognition of same-sex marriages. These petitions were pending before the Delhi and Kerala High Courts.

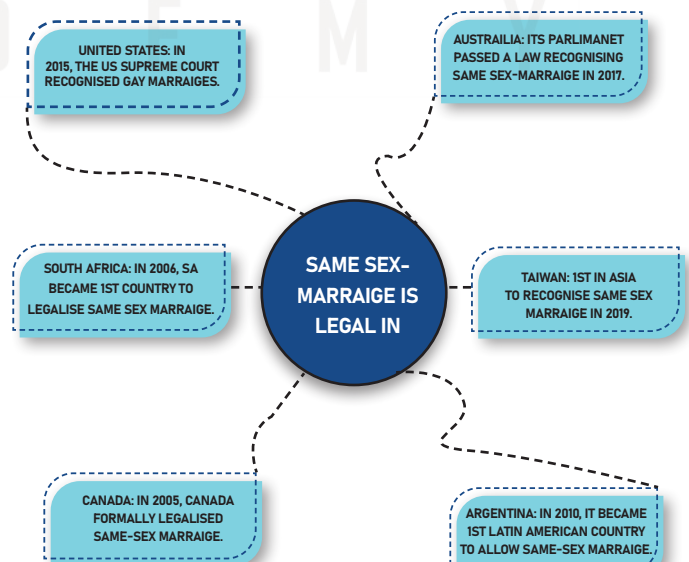
#### Key details:

- According to the **Human Rights Campaign**, a US-based LGBTQ advocacy group, **only 32 countries around the world recognise gay marriage**.
- In **most countries** that allow same-sex marriage, marriage equality was introduced by **legislation**.
- Gay marriage was recognised by a **court ruling** in **only 10 countries**.
- The **Netherlands** was the **first country in 2001** to legalise same-sex marriage.

### What do the petitions say?

- The Special marriage Act provides a **civil form of marriage for couples** who cannot marry under their personal law, and both the recent pleas seek to **recognise same-sex marriage in relation to this Act and not personal laws**.
- One petition argued that the **SMA was "ultra vires"** the Constitution to the extent it **discriminates** between same-sex couples and opposite-sex couples.
  - It stated that the Act **denied same-sex couples both legal rights as well as the social recognition and status** that came from marriage.
  - The petitioners emphasised that the SMA ought to apply to a marriage between any two persons, **regardless of their gender identity and sexual orientation**.
- The other petition argued that the **recognition of same-sex marriage** was only a **continuation** of the **Navtej Singh Johar judgment of 2018** (decriminalising homosexuality) and the **Puttaswamy judgment of 2017** (affirming the Right to Privacy as a fundamental right).
  - The petition **did not touch on personal laws** but only sought to make the **1954 Act "gender-neutral"**.
  - Their plea pointed out that while a section of the SMA **permitted the solemnisation of marriage between any two persons**, a subsequent section placed restrictions by using the words 'male' and 'female'.
  - The use of **gendered language** such as the terms '**husband/wife**' and '**bride/bridegroom**' in other sections of the Act, **limit the access** to marriage to a couple comprising one 'male' and one 'female'."

### Same sex marriage: A case-study around world



## SUPREME COURT EXPANDS ARTICLE 19 AMBIT

**Context:** By ruling that a citizen can seek enforcement of the fundamental rights to **freedom of speech** not just against the state, the Supreme Court has, effectively, extended the ground for seeking these rights against other citizens.

### Key details:

- The court took this view while ruling that the **right of free speech and expression** guaranteed under the **Article 19(1)(a)** cannot be curbed by any additional grounds other than those already laid down in Article 19(2).
- Article 19 which guarantees freedom of speech and expression is a right **invoked against the state**.
- Some fundamental rights such as those prohibiting **untouchability, trafficking and bonded labour** are explicitly against both the **state and other individuals**.
- **Implications:**
  - The court, **extending free speech against private citizens**, opens up a **range of possibilities in Constitutional law**.
  - This interpretation could also bring an **obligation on the state** to ensure private entities also abide by Constitutional norms.
- The Court relied on the **2017 verdict in Puttaswamy** where a nine-judge bench unanimously upheld **privacy as a fundamental right**.
  - One of the key arguments by the government was that **privacy is a right enforceable against other citizens** and, therefore, **cannot be elevated** to the status of a fundamental right against the state.
- **Vertical vs horizontal approach:**
  - The Court said that **no jurisdiction in the world appears to be adopting**, at least as on date, a purely **vertical approach** or a **wholly horizontal approach**.
  - A **vertical approach** provides **weightage to individual autonomy, choice and privacy**, while the **horizontal approach** seeks to **imbibe Constitutional values** in all individuals.
  - These approaches which appear to be bipolar opposites, raise the age-old question of '**individual vs. society**'.
  - A **vertical** application of rights would mean it can be **enforced only against the state** while a **horizontal** approach would mean it is **enforceable against other citizens**.

- For example, a **horizontal application** of the right to life would enable a citizen to bring a case **against a private entity for causing pollution**, which would be a **violation of the right to a clean environment**.
- Under Indian Constitution, all the Fundamental Rights are **available against the State** but **only 4 fundamental Rights are available against both State and individuals**.
  - **Article 15(2)** - no citizen shall be subjected to any form of discrimination based on caste, religion, place of birth, or caste.
  - **Article 17** - abolition of Untouchability.
  - **Article 23** - Prohibits trafficking of humans and forced labour.
  - **Article 24** - Prohibits employment of children in factories and hazardous place.

### Article 19 (1)

- Article 19(1) of the Constitution of India guarantees **six fundamental freedoms** to every citizen of India, namely-
  - Freedom of **speech and expression**;
  - Freedom to **assemble peacefully and without arms**;
  - Freedom to **form associations, unions or co-operative societies**;
  - Freedom to **move freely throughout the territory of India**;
  - Freedom to **reside and settle in any part of the territory of India**, and
  - Freedom to **practice any profession, or to carry on any occupation, trade or business**.
- **Reasonable restrictions on the right to free speech and expression**
  - The right to free speech and expression is **not an absolute right** and is subject to **reasonable restrictions**.
  - As per **Article 19(2)**, restrictions can be imposed upon the freedom of speech and expression in the interests of:
    - **sovereignty and integrity** of India,
    - the **security of the state**,
    - **friendly relations** with foreign states,
    - **public order, decency or morality**, or
    - in relation to **contempt of court**,
    - **defamation**, or
    - **incitement to an offence**.



## PASSPORT AS A FUNDAMENTAL RIGHT

**Context:** The Jammu & Kashmir and Ladakh High Court slammed the Passport Office, Srinagar, for not considering the application of some person.

### Is passport a fundamental right?

- **Maneka Gandhi v. Union of India:** In this case, the SC significantly **broadened** the interpretation of **Article 21** of the Indian Constitution.
  - It **overruled A. K. Gopalan v. State of Madras**, which had implied the **exclusiveness of fundamental rights**, and established a **relationship between Articles 14, 19, and 21** (known as the 'golden triangle' or 'trinity').
  - It held that a law depriving a person of 'personal liberty' must not violate any of them.
  - The decision also held that a procedure under Article 21 cannot be arbitrary, unfair, oppressive, or unreasonable.
- In **Poulami Basu vs The Government of India:** A Single Bench of Karnataka HC has held that, **right to travel abroad is a fundamental right guaranteed under Article 21** of the Constitution of India.
- Delhi High Court also observed that every citizen has a **fundamental right to go abroad and have a passport issued in his name.**

## OBSCENITY LAWS IN INDIA

**Context:** A political leader appealed to the authorities to take action against actor Urfi Javed for roaming the streets of Mumbai and exhibiting her body.

### What are the obscenity laws in India?

Under the **Indian Penal Code (IPC)**, Sections **292, 293** and **294** deal with the offence of **obscenity**.

- A **vague definition** of obscenity in Section 292:
  - it says that any content shall be deemed to be obscene if it is **lascivious or appeals to the prurient interest**, or if its effect tends to **deprave and corrupt persons** likely to read, see or hear the content.
  - This section **prohibits the sale or publication** of any obscene pamphlet, book, paper, painting, and other such materials.
- **Section 293:**
  - **criminalises the sale or distribution** of obscene objects to anyone who is **under the age of 20**, or an attempt to do so.
  - It is a **bailable offence**.

### Section 294:

- **Prohibits** obscene acts and songs in **public spaces**.

- **Section 67 of the Information Technology Act** says that anyone who publishes or transmits obscene material in electronic form can be punished.

### Judiciary's view on what constitutes as obscene

- **Until 2014**, the judiciary used the **Hicklin test** to determine if something is obscene or not.
  - According to it, a work can be considered obscene if **any portion of it** is found to **deprave and corrupt those** whose minds are open to such influences.
- However, in **2014**, the apex court **did away with the Hicklin Test**.

## ADMINISTRATIVE TRIBUNAL

**Context:** Soon the Maharashtra's state government-appointed panel will come up with physical test criteria for transpersons who have applied for recruitment. A few months ago, a transperson petitioned the **Maharashtra Administrative Tribunal (MAT)** after she was **not allowed to apply** for the posts advertised by the Maharashtra police.

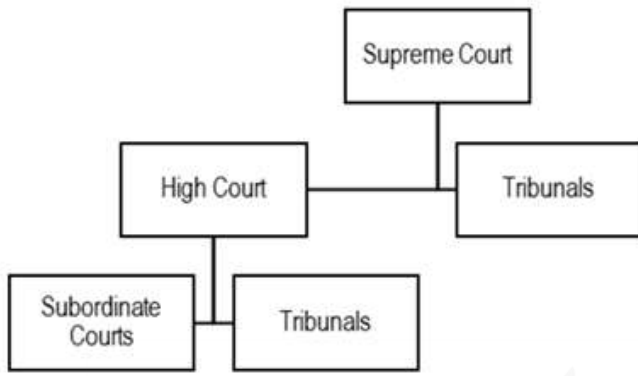
### What is an administrative tribunal?

- Tribunals are institutions established for discharging **judicial or quasi-judicial duties**.
- The **objective** is to **reduce case load** of the judiciary or to bring in subject expertise for technical matters.
- Tribunals have been defined as - **Bodies outside the hierarchy of the courts with administrative or judicial functions**.
- **Administrative tribunals** have been established to resolve:
  - disputes between a **private citizen** and a **central government department**, such as claims to social security benefits;
  - disputes which require the **application of specialised knowledge or expertise**, such as the assessment of compensation following the compulsory purchase of land; and
  - **other disputes** which by their nature or quantity are considered **unsuitable for the ordinary courts**, such as fixing a fair rent for premises or immigration appeals.

- **Constitutional status:**

- Tribunals were **not part of the original constitution**.
- It was incorporated by **42<sup>nd</sup> Amendment Act, 1976**.
- **Article 323-A - Administrative Tribunals**.
- **Article 323-B - tribunals for other matters**.

Figure 1: Structure of Indian tribunal system



- SC in the **NALSA v. Union of India case (2014)** declared **transgender people as a 'third gender'**.
- **Transgender Persons (Protection of Rights) Act, 2019** defines transgender person as one whose gender does **not match the gender assigned at birth**.
- **2011 Census** was the first census in its history to incorporate the number of **'trans' population** of the country. It estimated that **4.8 million Indians** identified as transgender

## A HIGH-POWER LADAKH COMMITTEE

*Context: The Ministry of Home Affairs (MHA) constituted a high-powered committee for the Union Territory of Ladakh.*

### The committee

- **The committee will discuss:**
  - **measures to protect the region's unique culture and language** taking into consideration its geographical location and strategic importance;
  - **ensure protection of land and employment** for the people of Ladakh;
  - **strategise inclusive development** and discuss issues related to the empowerment of the **Ladakh Autonomous Hill District Councils** of Leh and Kargil.

### What is the sixth schedule?

- The sixth schedule under **Article 244** of the Constitution **protects the autonomy of tribal populations** through **creation of autonomous development councils** which can frame laws on land, public health and agriculture.
- As of now **ten autonomous councils** exist in **Assam, Meghalaya, Tripura and Mizoram**.
- As per the 2011 Census, the total population of Ladakh was 2,74,289, and **nearly 80% of them are tribals**.

## THE RESISTANCE FRONT

*Context: The Centre declared **The Resistance Front (TRF)** a "terrorist organisation" under the Unlawful Activities (Prevention) Act.*

### What is the TRF?

- The Resistance Front is a **militant outfit** active in **Jammu and Kashmir** born as an off-shoot of the **Lashkar-e-Taiba (LrT)**.
- TRF began as an **online entity** in the aftermath of the **abrogation of Article 370** and revocation of special status to Jammu and Kashmir.

## Unlawful Activities (Prevention) Amendment Act

- The UAPA – an enhancement on the TADA (Terrorist and Disruptive Activities (Prevention) Act), which was allowed to lapse in 1995 and the Prevention of Terrorism Act (POTA) was repealed in 2004 – was originally passed in 1967 under the then Congress government led by former Prime Minister Indira Gandhi.
- Eventually, amendments were brought in under the successive United Progressive Alliance (UPA) governments in 2004, 2008 and 2013.

## Salient Features of the UAPA Act

- The Act gives special procedures to handle terrorist activities, among other things. It aims at the effective prevention of unlawful activities associations in India. Unlawful activity refers to any action taken by an individual or association intended to disrupt the territorial integrity and sovereignty of India.



- **Who may commit terrorism:** According to the Act, the union government may proclaim or designate an organisation as a terrorist organisation if it: (i) commits or participates in acts of terrorism, (ii) prepares for terrorism, (iii) promotes terrorism, or (iv) is otherwise involved in terrorism. The Bill also empowers the government to designate individuals as terrorists on the same grounds.
- UAPA has the death penalty and life imprisonment as the highest punishments. The Act assigns absolute power to the central government, by way of which if the Centre deems an activity as unlawful then it may, by way of an Official Gazette, declare it so.
- Under UAPA, both Indian and foreign nationals can be charged. The offenders will be charged in the same manner whether the act is performed in a foreign land, outside India.
- **Approval for property seizure by National Investigation Agency (NIA):** As per the Act, an investigating officer is required to obtain the prior approval of the Director-General of Police to seize properties that may be connected with terrorism. The Bill adds that if the investigation is conducted by an officer of the National Investigation Agency (NIA), the approval of the Director-General of NIA would be required for seizure of such property.
- **The investigation by the National Investigation Agency (NIA):** Under the provisions of the Act, investigation of cases can be conducted by officers of the rank of Deputy Superintendent or Assistant Commissioner of Police or above. The Bill additionally empowers the officers of the NIA, of the rank of Inspector or above, to investigate cases.
- **Insertion to the schedule of treaties:** The Act defines terrorist acts to include acts committed within the scope of any of the treaties listed in a schedule to the Act. The Schedule lists nine treaties, comprising of the Convention for the Suppression of Terrorist Bombings (1977), and the Convention against Taking of Hostages (1979). The Bill adds another treaty to this list namely, the International Convention for Suppression of Acts of Nuclear Terrorism (2005).

## GRIEVANCES APPELLATE COMMITTEES FOR SOCIAL MEDIA

*Context:* The Centre has notified the formation of three grievance appellate committees that will address users' complaints against social media and other internet-based platforms, including being empowered to oversee and revoke content moderation-related decisions taken by these platforms.

### Key details:

- **Composition:**
  - Each of the three grievances appellate committees (GACs) will have a **chairperson**, **two whole-time members** from different government entities, and **retired senior executives** from the industry.
- **Term:**
  - The term will be of **three years** from the date of assumption of office.
- **First Panel:**
  - The first panel will be chaired by the **chief executive officer** of the **Indian Cyber Crime Coordination Centre** under the Ministry of Home Affairs.
- **Second Panel:**
  - The second panel will be chaired by the **joint secretary in charge** of the **Policy and Administration Division** in the Ministry of Information and Broadcasting.
- **Third Panel:**
  - The third panel will be chaired by a **senior scientist** at the Ministry of Electronics and IT.
- **Role of the panels:**
  - **Appellate authority against the decision of social media grievance officer's decision:**
  - In case a user is not satisfied with the content moderation decision taken by a social company's grievance officer, they can **appeal that decision** before the proposed government-appointed appeals committee.
- **Assistance from experts:**
  - GACs can also seek assistance from people who may have adequate expertise and experience in a subject matter while **dealing with users' appeals.**

- **An online mechanism:**
  - The GACs will adopt an **online dispute resolution mechanism** where the entire appeal process, from its filing to the final decision, will be done online.
- **Responsibility of social media companies:**
  - Social media companies will also have to **compile every order** passed by the GACs and **report them on their respective websites**.
- **Time period for the appeal:**
  - Any person aggrieved by a decision of the grievance officer of a social media intermediary will be allowed to file an appeal to the GAC **within a period of 30 days**.
  - The GAC will have to deal with the appeal and **resolve it within a month** of the receipt of the appeal.
- **Unfair terms and conditions on Indian users:**
  - WhatsApp in 2021 updated its privacy policy according to which **users would no longer be able to stop** the app from sharing data with its **parent Facebook** unless they delete their accounts.
- **Ethical concerns:**
  - The unethical use of social media has resulted in the **breach of individual privacy** and impacts both **physical and information security**.
- **Privacy concerns:**
  - Teenagers and children are the **most vulnerable to cyber-crimes** related to breaches of information privacy
- **Fake news and misinformation:**
  - **Competition** among websites and social media platforms has sometimes resulted in the **generation of fake news**
- **Online frauds**
  - People are becoming victim of **online financial scam** through social media
- **National security concern:**
  - Unregulated social media has **empowered state and non-state actors** in pursuance of illegal and terrorist activities, such as **radicalization, child pornography, human trafficking, drug trafficking** etc.
- **Online abuse and defamation**
  - Social media is often used as a **platform to trample the dignity** of individual for political and personal purposes.

### WHAT IS SOCIAL MEDIA?

- It is all those different **Media platforms** that are **user-oriented** are considered to be places for communal activity.
- Social media can be regarded as an **online facilitator** that helps individuals enhance their **social connectivity**.
- It mainly consists of various tools that allow users to **interact with each other and share information**.

### Need for social media regulation:

- **Statistics:**
  - Globally, there are more than three billion **active social media users** and it is growing by **9% annually**
  - The projected annual growth is **34%** over the next 5 years
  - India has **692 million active Internet users as of 2022** and India is the **second-largest online market, after China**.
- **Social costs of social media:**
  - Social media platforms should be regulated to **minimize their social costs** such as adverse impact on **mental health, anti-social behaviours** etc.

### Regulations in India:

- **The Information Technology Act, 2000**
  - Under the Act social media platforms are considered as intermediaries and hence are required to **follow 'due diligence'** as prescribed under the IT Rules.
- **Guidelines for Social Media/Intermediaries under IT Rules 2021:**
  - The government, under the ambit of the **Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021**, has brought in detailed guidelines for **digital content on both digital media and Over the Top (OTT) platforms**, while giving **overriding powers to the government to step in**.



- **By Judiciary:**
  - The Supreme Court has struck down **Section 66A** of the Information Technology Act, 2000 that made **posting "offensive" comments online a crime punishable by jail**, as being **unconstitutional and against free speech**
- **By Election commission:**
  - The Election Commission of India has issued **instructions on social media use during election campaigns** that require candidates to:
    - provide **information about their social media accounts**
    - Obtain **approval** of their political advertisements
    - **Report expenditure** on campaigning through social media websites.

- However, it needs to be understood that in an equal society **no one is above the law** and the **platforms need to comply with the rules** issued by the government.
- It is important to **address the concerns** of the platform through proper channels within the confines of the law of the land.

## SECTION 197 OF CRPC AND AFSPA

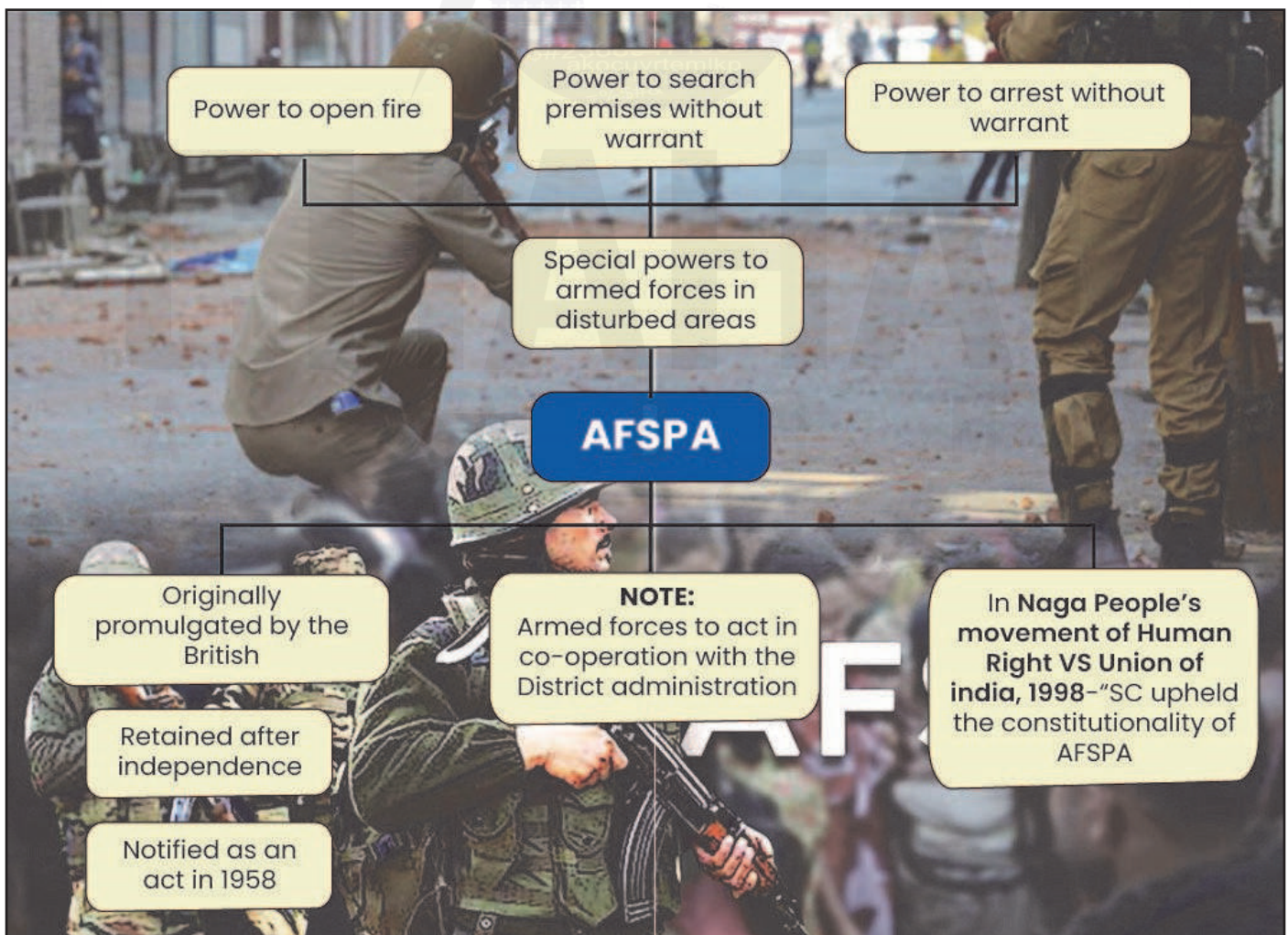
**Context:** A women's group demanded the repeal of Section 197 of the Code of Criminal Procedure (CrPC) along with the draconian Armed Forces (Special Powers) Act of 1958.

### What is Section 197 of CrPC?

- Section 197 of the CrPC seeks to **provide protection to an officer from unnecessary harassment**, who is **accused of an offence** committed while acting or purporting to act in the discharge of his official duties.
- Section 197 of the CrPC **prohibits the court from taking cognisance** of such offence **except with the previous sanction of the competent authority**.
- Public servants have been treated as a **special category** in order to protect them from malicious or vexatious prosecution.

### Conclusion

- Till now, the government has assumed an **accommodating stance** towards the intermediaries by allowing them **immunity** under the 'safe harbour' provision.



## Various expert panels report on AFSPA

- **Jeevan Reddy Committee 2004:** It recommended **repealing the AFSPA act** and inserting the essential provisions of AFSPA into already existing UAPA act.
- **Justice Verma report:** It mentioned the Act as a part of a section on offences **against women in conflict areas.**
  - It also said that “there is an imminent need to review the continuance of AFSPA and AFSPA-like legal protocols in internal conflict areas as soon as possible.”
- **The 2<sup>nd</sup> ARC** headed by then Union law minister **M Veerappa Moily** also recommended **same conclusion** as done by **Jeevan Reddy committee.**
- However, none of these have made any real difference to the status of the AFSPA.

- To **study the various entries** in the Central List of OBCs and **recommend correction** of any repetitions, ambiguities, inconsistencies and errors of spelling or transcription.
- As part of its work, the commission had **identified dominant caste groups** among all OBC communities in the Central list, finding that a **small group of dominant OBC communities** were crowding out a large number of communities from the 27% quota.

## SUB-CATEGORISATION COMMITTEE FOR OBCs

*Context: The Justice G. Rohini-led commission for the sub-categorisation of other backward classes (OBCs) has been given yet another extension in its tenure by the President.*

### Key details:

- This is the **14th extension** in tenure that the commission has been given.
- The commission, **formed in 2017**, was initially given 12 weeks to finish the task of sub-categorising the nearly 3,000 castes within the OBC umbrella and **recommend division of the 27% OBC quota** among them equitably.
- Initially, the government cited more time required by the panel to gather information and data and then it cited the pandemic.
- **Terms of reference of Rohini Commission:**
  - It was originally set up with **three terms of reference:**
    - To **examine the extent of inequitable distribution** of benefits of reservation among the castes or communities included in the broad category of OBCs with reference to such classes included in the Central List.
    - To **work out the mechanism, criteria, norms and parameters** in a scientific approach for sub-categorisation within such OBCs.
    - To **take up the exercise of identifying the respective castes or communities or sub-castes** or synonyms in the Central List of OBCs and classifying them into their respective sub-categories. A fourth term of reference was added on January 22, 2020.

### Parity check

The panel will report on the extent of inequitable distribution of benefits, including quotas, among the OBCs and work out scientific norms of sub-categorisation

Nine States already have OBC sub-categorisation, but the Cabinet move would take the concept to the Central level too



#### POLITICAL MEANING

Politically, this means an outreach to more backward castes among the OBCs but it may mean that the quotas available for better-off OBC groups shrink. The Centre cannot breach the cap of 50% imposed on quotas by the SC

OBCs as a whole are estimated to number anywhere between 41%-52% of the country's total population

### Challenges

- It is likely to **hurt the dominant OBC groups.**
- For instance, an **earlier attempt** to provide sub-quotas for OBCs in **Andhra Pradesh** was **stalled by courts** on the ground that a **religion-based quota is not permitted.**
- **Vote-bank politics:**
  - It has a lot to do with the **prioritising of caste-based categorisation** over **income-based differentiation** to identify reservation beneficiaries.

### What is sub-categorisation of OBCs?

- The idea is to **create sub-categories** within the larger group of OBCs for the **purpose of reservation.**
- OBCs are granted **27% reservation** in **jobs and education** under the central government.
- The argument for creating sub-categories within OBCs is that it would **ensure equitable distribution** of representation among all OBC communities.

### The extent of inequity

- According to 2018 data, just **ten OBC communities** have **taken the 25 per cent** of reserved central jobs and institutional seats.
- **97 per cent** of the reserved jobs and seats have **gone to 25 per cent of OBC sub-castes.**



- As many as **37 per cent**, of the 2,600 communities under the OBC category have **zero representation in jobs** and institutes.
- Only **2.68 per cent** reservation has been used by 994 castes.

#### Advantages and Disadvantages of sub-categorization:

| Advantages  | Disadvantages   |
|---|---|
| Equal representation from the different sections of society.  | It encourages casteism.   |
| Equal opportunities are given to deserving candidates.  | Chances of creating more castes in the society instead of eliminating it.         |
| Encourages implementation of justice and human rights.  | The dominant class or the creamy layer gets the entire benefit.                   |
| Maintains an economic balance in the society.   | It opposes meritocracy.   |
| Acts as compensation for the injustice and mistreatment done to the backward classes for centuries. | It provides short-term relief but, in reality, harms the society in the long run. |
| Levelling of the society for the candidates from every section of the society to compete.           | The privileged gets more privileged.  |
| Equality is essential to implement meritocracy.   | It acts as a barrier between ethnicities.   |

#### Reservation rules in India

- Currently, **27 per cent jobs and seats in educational institutes** provided by the Centre have been reserved for OBCs.
- Only **20 per cent of central government jobs** have gone to OBCs.
- Apart from OBCs, **scheduled castes (SC)** and **scheduled tribes (ST)** also get reservation in jobs and educational institutes.
  - **Fifteen per cent** of seats and jobs have been reserved for **SCs** and **7.5 per cent** for **STs**.
- Several seats that fall under the **OBC category** are taken by candidates from the **General category** as OBC candidates are declared '**None found suitable**' (NFS).

| Reservation Category | Reservation Quota (%) |
|----------------------|-----------------------|
| ST                   | 7.5                   |
| SC                   | 15                    |
| OBC                  | 27                    |
| EWS                  | 10                    |
| Total                | 59.50%                |

Reservation quota in India for Government Jobs and Higher Educational Institutions

#### Conclusion:

- If the **categorisation of the creamy layer had been done consistently and uniformly**, there would not have been any felt need to differentiate among the caste groups.
- The **reservation pie is limited**, and no group, whether rich or poor, dominant or subservient, can hope to gain except **at the expense of another socio-economic category**.

## MANDATORY MINIMUM SENTENCES

**Context:** A Supreme Court bench decided to examine a petition challenging the constitutional validity of **Section 376 DB of the Indian Penal Code**.

- This section describes the punishment for gangrape of a minor under 12 years of age, to the extent that it prescribes a 'minimum mandatory sentence' of life imprisonment for the remainder of the convict's life and even death.

#### What is mandatory minimum sentencing?

- The concept of mandatory minimum sentencing refers to a sentence which **must be imposed without leaving any discretion** to the court.
- It means a quantum of punishment which **cannot be reduced below the period fixed**.
- Essentially, this **predetermines the minimum punishment** or sentence for **certain offenses** which are considered to be **more serious than others**, with a view to ensure justice and not let the perpetrator of such an offense go unpunished.
- No matter what the unique, individual circumstances of the offender or the offense might be, the **court must mandatorily award this minimum period** of sentencing for the offenses which prescribe it.

#### What provisions award a mandatory sentence?

- This concept comes primarily from the **Canadian and American legal systems**.
- In India, such sentences are prescribed for all **sexual offenses** under the **Prevention of Children from Sexual Offences (POCSO) Act** except the offense of **sexual harassment**.
- Under the POCSO Act, a **punishment of 3-5 years** has been prescribed for offenses which deals with offenses of **sexual assault against children**.
  - However, **imposing the minimum punishment** in such cases is **mandatory**.
- The **Criminal Law (Amendment) Act, of 2013** updated the definition of 'life imprisonment' to mean the entire remainder of the convict's life and **introduced a minimum sentence of 20 years for gang rape**.
- Following this, even the **death penalty could be meted out** to those repeatedly indulging in such offenses.

## NAME CHANGE OF MADRAS STATE

**Context:** Tamil Nadu Governor remarks suggesting changing the name of the state to 'Tamizhagam' triggered a controversy.

### A short history of Tamil Nadu

- It was on January 14, 1969 that the **Madras State** was officially renamed **Tamil Nadu**, under the then Chief Minister **C N Annadurai**.
- Social activist **E V Ramasamy**, fondly known as '**Periyar**' (1879-1973), had started the **Self Respect Movement** in 1925 to "redeem the identity and self-respect" of Tamils.
- He envisaged an **independent Dravida homeland** of Dravida Nadu (In Tamil, Nadu means country), comprising **Tamil, Malayalam, Telugu** and **Kannada** speakers, and launched a political party called the **Dravidar Kazhagam (DK)**.
- Periyar was **anti-caste** and **anti-religion**, advocated for **equality for women** in society, and supporting **birth control** for women for their health and well-being.
- He also opposed the **imposition of Hindi** and emphasised the need for a **cultural identity** of the Tamil nation.
- In 1938, the Justice Party and Self-Respect Movement came together and in 1944, the new outfit was named **Dravidar Kazhagam**.
  - DK was **anti-Brahmin, anti-Congress**, and **anti-Aryan** (read North Indian), and launched a movement for an independent Dravida nation.
  - Post-independence in 1947, the party continued to demand a '**Dravida Nadu**'.
- In 1967, Annadurai became the **first Chief Minister of Madras State**.
- He then chose to move away from the demand of an independent Dravida Nadu and instead decided to work for **greater autonomy for Tamil Nadu** and better cooperation among the southern states.

### How Madras State became Tamil Nadu

- Formerly called Madras Province, it had been renamed **Madras State** on January 26, 1950.
- On May 7, 1957, the DMK brought in a **name change resolution** in the Assembly.
- A month later, the **resolution failed** after it was tabled, without the support of the Congress party.
- The then State Finance Minister offered a compromise and said that the state government will use the term **Tamil Nadu** in its communication in Tamil.

- He also said that the '**Madras state**' term can be used in **communications in English**.
- Since the renaming needed a **Constitutional amendment**, both **Houses of the Parliament** approved a Bill in 1968 respectively.
- The state government later issued a **gazette notification** to bring the name change into effect on January 14, 1969.

## DOCTRINE OF PROPORTIONALITY

**Context-** On the demonetization row, P Chidambaram said that the issue needs to be examined on the doctrine of proportionality too as 86% currency notes were rendered invalid by the decision.

### What is doctrine of proportionality?

- Doctrine of Proportionality is a **ground for judicial review**.
- In India, the doctrine of proportionality was adopted by the **Supreme Court of India** in the case of **Om Kumar v. Union of India**.
- It is a principle where courts would examine **priorities** and **processes** of the administration for **reaching or recalling a decision**.
- Proportionality means that the **administrative action should not be more drastic** than it ought to be for obtaining the desired result.
- Thus, this doctrine tries to **balance means with ends**.
- **K.S. Puttaswamy vs Union of India (2017) case:**
- The court held that **any restriction** placed on the right **must conform to a doctrine of proportionality**:
  - State action must have a **legislative mandate**
  - The state action must show that the **objective** of its law is founded on a **legitimate governmental aim**
  - The action must be proportionate, i.e., such state action must be **necessary for a democratic society**.
  - Such action must have **no alternative and less intrusive measures** available to achieve the same objective
- The principle of proportionality calls for **striking down of laws that are excessively harsh or disproportionate**.
- This doctrine is applied in **following situations**:
  - Where an administrative action **invades fundamental rights**, courts make strict scrutiny of the administrative action and go into the question of the correctness of the choices made by the authority.



- The court would also **balance adverse effects** on the rights and objects sought to be achieved.
  - Where a question of **quantum of punishment** imposed by the administrative authority is involved, the court would **not make strict scrutiny**.
  - Courts follow the principle that though the quantum of punishment is within the jurisdiction of the administrative authority, **arbitrariness must be avoided**.

## SECTION 6A OF CITIZENSHIP ACT

**Context:** A Constitution Bench led by Chief Justice of India D.Y. Chandrachud said it will first take up for preliminary determination whether Section 6A of the Citizenship Act, 1955 suffers from any "constitutional infirmity".

### What is Section 6A?

- Section 6A was a **special provision** inserted into the 1955 Act in furtherance of a **Memorandum of Settlement** called the '**Assam Accord**' signed on August 15, **1985**.
- It was done by the then **Rajiv Gandhi government** with the leaders of the **Assam Movement** to **preserve and protect** the Assamese culture, heritage and linguistic and social identity.
- The Accord came at the end of a **six-year agitation** by the **All-Assam Students Union (AASU)** to **identify and deport undocumented immigrants**, mostly from neighbouring Bangladesh, from the State.
- Under Section 6A, **foreigners** who had entered Assam **before January 1, 1966**, and been "**ordinarily resident**" in the State, would have **all the rights and obligations** of Indian citizens.
- Those who had entered the State **between January 1, 1966 and March 25, 1971** would have the **same rights and obligations** except that they would **not be able to vote for 10 years**.
- Therefore, this act **fixes March 25, 1971** as the **cut-off date for granting citizenship** to Bangladeshi migrants in Assam.

### The Assam Accord

- The Assam Accord was a **Memorandum of Settlement (MoS)** signed between **representatives of the Government of India** and the **leaders of the Assam Movement**.
- The Assam movement ended with the **signing of the Assam Accord**.
- The **leaders of the Assam Movement** agreed to **accept all migrants** who had entered into Assam **prior to 1 January 1966**.

- The government agreed to **identify and deport** any and all refugees and migrants **after March 25 1971**.
- According to the Assam Accord, the Government of India agreed to **secure the international border against future infiltration** by the **erection of physical barriers** like walls, barbed wire fencing and other obstacles at appropriate places and **deploying a patrol** by security forces on land and river routes all along the international Bangladesh-India border.
- **All open police charges** against the **participants and the leaders of the Assam Movement**, prior to and on the date of signing the Accord, were also **withdrawn and closed**.
- **Hence, summing up, as per this accord:**
  - all foreigners who had entered Assam **between 1951 and 1961** were to be given **full citizenship including the right to vote**.
  - Migrants those who had come **after 1971** were to be **deported**.
  - Those who entered **between 1961 and 1971** were to be **denied voting rights for ten years** but would **enjoy all other rights of citizenship**.

### The citizenship Act:

- **As per the Citizenship Act, 1955**, every person **born in India:**
  - on or after the **26th day of January 1950**, but **before the 1st day of July 1987**;
  - on or after the **1st day of July 1987**, but before the commencement of the **Citizenship (Amendment) Act, 2003** and either of whose parents is a **citizen of India** at the time of his birth;
  - on or after the commencement of the **Citizenship (Amendment) Act, 2003**, where-
    - **both of his parents** are citizens of India; or
    - **one of whose parents is a citizen of India** and the **other is not an illegal migrant** at the time of his birth, **shall be a citizen of India by birth**.

## LAW ON PROTECTION OF JOURNALISTIC SOURCES IN INDIA

**Context:** While rejecting a closure report filed by the Central Bureau of Investigation, a Delhi court said there is "no statutory exemption in India to journalists from disclosing their sources to investigating agencies".

### What is the legal protection for disclosure of journalistic sources?

- In India, there is **no specific legislation** that protects journalists from being asked to disclose their sources.
- **Article 19** of the Constitution guarantees the **right to freedom of speech and expression** to all citizens.
- **Investigative agencies can issue notice** to anyone, **including journalists**, to provide information.
- Like any citizen, a **journalist can be compelled to give evidence** in Court.
- If she does not comply, the **journalist can face charges of Contempt of Court.**

### What have courts said on this issue?

- While the **Supreme Court broadly recognises the freedom of the press**, including the right of journalists to ensure protection of their sources, various courts have ruled differently on this issue.
- The Supreme Court in **October 2021** said that one of the fundamental conditions for the media to exercise its right to freedom of speech and expression under Article 19 is the **protection of 'journalistic sources.'**
- Protection of journalistic sources is one of the **basic conditions for the freedom of the press.**

- Without such protection, **sources may be deterred** from assisting the press in informing the public on matters of public interest.
- In 2019, the Supreme Court in a review petition in the Rafale case **overruled the Centre's objections on the petitioner's claims** since they relied on purportedly "stolen" confidential documents.
- However, in the **absence of a specific law**, it is often the **discretion of a Court.**
- Under the **Press Council of India (PCI) Act, of 1978**, the **Press Council has powers of a civil court** to deal with complaints when a newspaper has **offended against the standards of journalistic ethics** or public taste or that an editor or working journalist has committed any professional misconduct.
- However, the Council **cannot force** a newspaper, news agency, journalist, or editor to **reveal their sources during the proceedings.**

### Recommendations for a change in law

- The **Law Commission of India in its 93rd Report in 1983 recommended recognising journalistic privilege by amending the Indian Evidence Act.**
- The report suggested **insertion of a new provision** which would read:
  - **No court shall require a person to disclose the sources of information** contained in a publication for which he is responsible, where such information has been obtained by him on the express agreement or implied understanding that the source will be kept confidential.
- In its **185th report** on the amendments to the Evidence Act, the **Law Commission again suggested this amendment.**



### NOTES



# ECONOMY

## HINDENBURG RESEARCH

# H HINDENBURG RESEARCH



**Context:** Recently, a U.S.-based short seller **Hindenburg Research** has hit back at Gujarat-based Adani Group and accused the conglomerate of “holding back India’s future”.

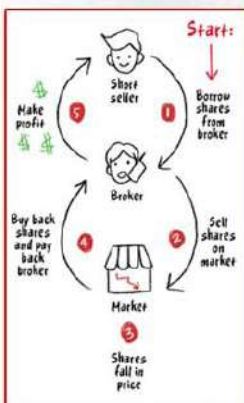
### About Hindenburg Research

- **Founded:** 2017
- **Founder:** Nate Anderson
- It is a **forensic financial research** company and activist short seller.
- It focuses on, among other issues:
  - ▶ Analysing accounting irregularities
  - ▶ Undisclosed transactions
  - ▶ Illegal/unethical business or financial reporting practices

### About ‘short seller’ and ‘short selling’

A **short seller** *speculates on the decline* in the prices of a company’s stocks.

- **Short selling** occurs when an **investor borrows a security**, sells it on the open market, and expects to buy it back later for less money.
- A **short seller** essentially **does not own the stocks** they are selling, and bets on a decline in their price in the future, hence taking on a huge risk.
  - Investors intending to short sell a stock usually **have to borrow it from a dealer or a brokerage company.**
    - ▶ This is the reason why **trader must buy the stocks back** from the market, even if they are not making a profit, because the stocks need to be returned to the broker
  - The short seller’s profit lies in the money that is left after buying back the stock at a reduced value.
  - However, if the bet doesn’t pay off and stock prices rise, the short seller will incur a loss.



### Do You Know?

Historically, Hindenburg was a series of **commercial German passenger aircraft**.

This aircraft is known for a **tragic aviation disaster in 1937** when a Hindenburg airship **caught fire** and was destroyed during a docking attempt at an airfield in New Jersey, U.S.





## THE T+1 SETTLEMENT CYCLE

# THE T+1 SETTLEMENT CYCLE



**Context:** After China, India will become the second country in the world to start the 'trade-plus-one' (T+1) settlement cycle in top listed securities, bringing operational efficiency, faster fund remittances, share delivery, and ease for stock market participants.

## What's the T+1 settlement plan?

- The T+1 settlement cycle means that **trade-related settlements** must be **done within a day**, or 24 hours, of the completion of a transaction.
- **Until 2001**, stock markets had a **weekly settlement system**.
- The markets then moved to a **rolling settlement system** of T+3, and then to T+2 in 2003.
- The **United States, United Kingdom and Eurozone markets** are yet to move to the T+1 system.
- **Benefits of T+1**
  - ▶ In the T+1 format, if **an investor sells a share**, she will **get the money within a day**, and the buyer will get the shares in her demat account also within a day.
  - ▶ This will also help investors in **reducing the overall capital requirements** with the margins getting released on T+1 day, and in **getting the funds in the bank account within 24 hours** of the sale of shares.
  - ▶ The shift will **boost operational efficiency** as the rolling of funds and stocks will be faster.



## OLD PENSION SCHEME

**Context:** The government in Himachal Pradesh cleared the decision for its employees to revert to the Old Pension Scheme (OPS).

# OLD PENSION SCHEME



**Context:** The government in Himachal Pradesh cleared the decision for its employees to revert to the Old Pension Scheme (OPS).

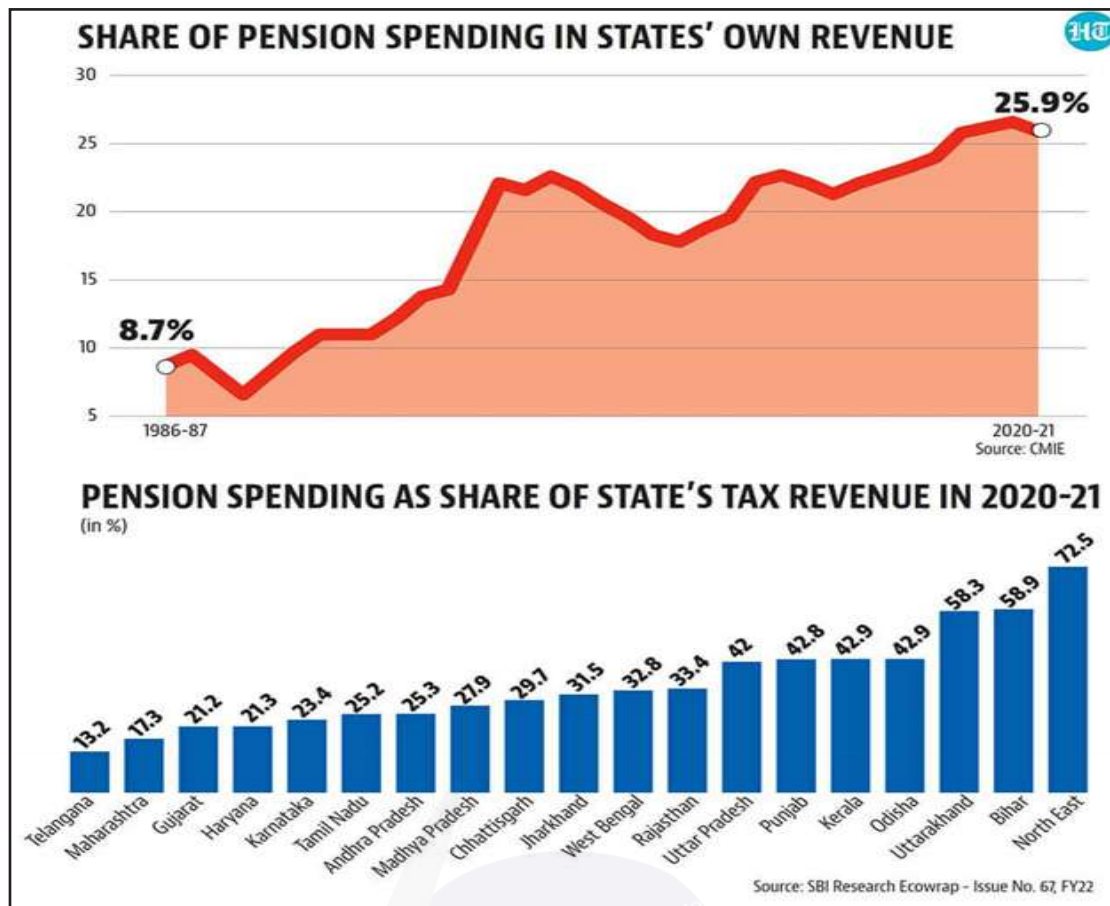
### The Old Pension Scheme

- The attraction of the Old Pension Scheme lay in its promise of an **assured or 'defined' benefit to the retiree i.e. 'Defined Benefit Scheme'**.
- Under this scheme, the pension was **fixed at 50 per cent of one's last drawn basic pay in addition to the dearness allowance**.
  - ▶ DA is calculated as a **percentage of the basic salary**.
  - ▶ It is a kind of **adjustment** the government offers its employees and pensioners to **make up for the steady increase in the cost of living**.
  - ▶ DA hikes are announced **twice a year**, generally in January and July.



### Concerns with the OPS

- There is **no fixed corpus of fund** from where the pensions are to be funded and which grows in proportional to the **increasing pension liability** every year.
- The **increasing life expectancy and dependency ratio** increase the pension bill every year.
- Pension liability eats out significant portion of revenue expenditure.
- The increasing pension liability cuts out the share of more productive capital expenditure of economy.
- The OPS **raises the inter-generational equity question** i.e., the present taxpayers are paying the pensions of retirees.



(In 30 years, the cumulative pension bill of states has jumped to Rs 3,86,001 crore in 2020-21 from Rs 3,131 crore in 1990-91.)

### The New Pension Scheme:

- originally conceived for unorganised sector workers, was adopted by the government for its own employees starting from January 1, 2004.
- Under this scheme, the defined contribution comprised 10 per cent of the basic salary (a reduction from the erstwhile 50 per cent) and dearness allowance by the employee with a matching contribution from the government.
- In 2019, the government increased its contribution to 14 per cent of the basic salary and dearness allowance.
- Individuals can choose from a range of schemes and pension fund managers ranging from public sector banks and financial institutions to private companies.
- The risk profiles of various schemes offered by these players vary from 'low' to 'very high'.

### Difference between OPS and NPS

| Criteria        | New pension scheme   | Old pension scheme                               |
|-----------------|--|--|
| Public coverage | Anyone from the age of 18 till 55                                | Only central government employees                |
| Contribution    | All the contributions are included along with dearness allowance | 10% of ( special pay+basic pay+other allowances) |
| Fund management | Six fund managers  | Managed by Provident fund trust                  |
| Regulation      | PFRDA  | No such body                                     |
| Charges         | Fixed as well as variable charges applicable                     | No extra charges applicable                      |
| Bank account    | Same account is only required                                    | Separate account needed                          |



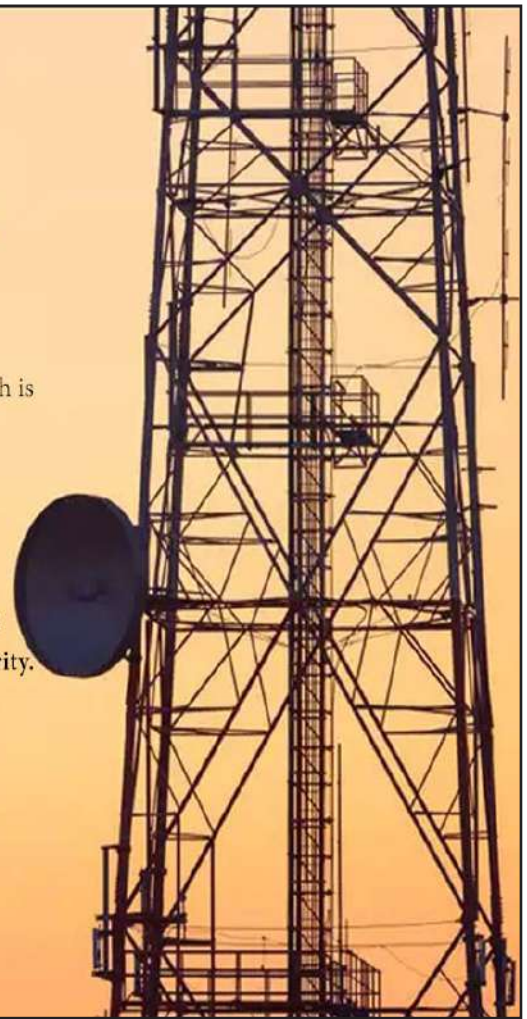
## THE INDIAN TELEGRAPH (INFRASTRUCTURE SAFETY) RULES 2022

# The Indian Telegraph

**Context:** The Department of Telecommunications under the Ministry of Communications has formulated the Indian Telegraph (Infrastructure Safety) Rules 2022.

### Salient features:

- Any person wishes to exercise a **legal right to dig or excavate** any property which is likely to cause **damage to a telegraph infrastructure** shall give notice to the licensee.
- In case **no licensee provides details** within the prescribed time, the person having legal right to dig or excavate shall be **free to dig or excavate the property thereafter**.
- Any person, who has dug/excavated any property causing damage to a telegraph infrastructure, shall be **liable to pay the damage charges to the telegraph authority**.
- The asset owner agencies map their underlying assets with GIS coordinates on **PM GatiShakti NMP platform**.
- **Advantages:**
  - ▶ Many utilities can be saved from **unwanted cuts and wasteful cost** towards restoration, thus saving thousands of crores for businesses and associated tax loss to Govt.
  - ▶ Inconvenience caused to citizens because of frequent breakdown may be reduced due to better synergy between the agencies.



## GREEN BONDS

**Context:** The RBI said that the maiden Sovereign Green Bonds (SGrBs) would be issued in two tranches of ₹8,000 crore.

### Key details:

- The proceeds will be deployed in projects which **help in reducing the carbon intensity** of the economy.
- The Centre will be issuing the SGrBs for **mobilising resources for green infrastructure**.

### What are Green Bonds?

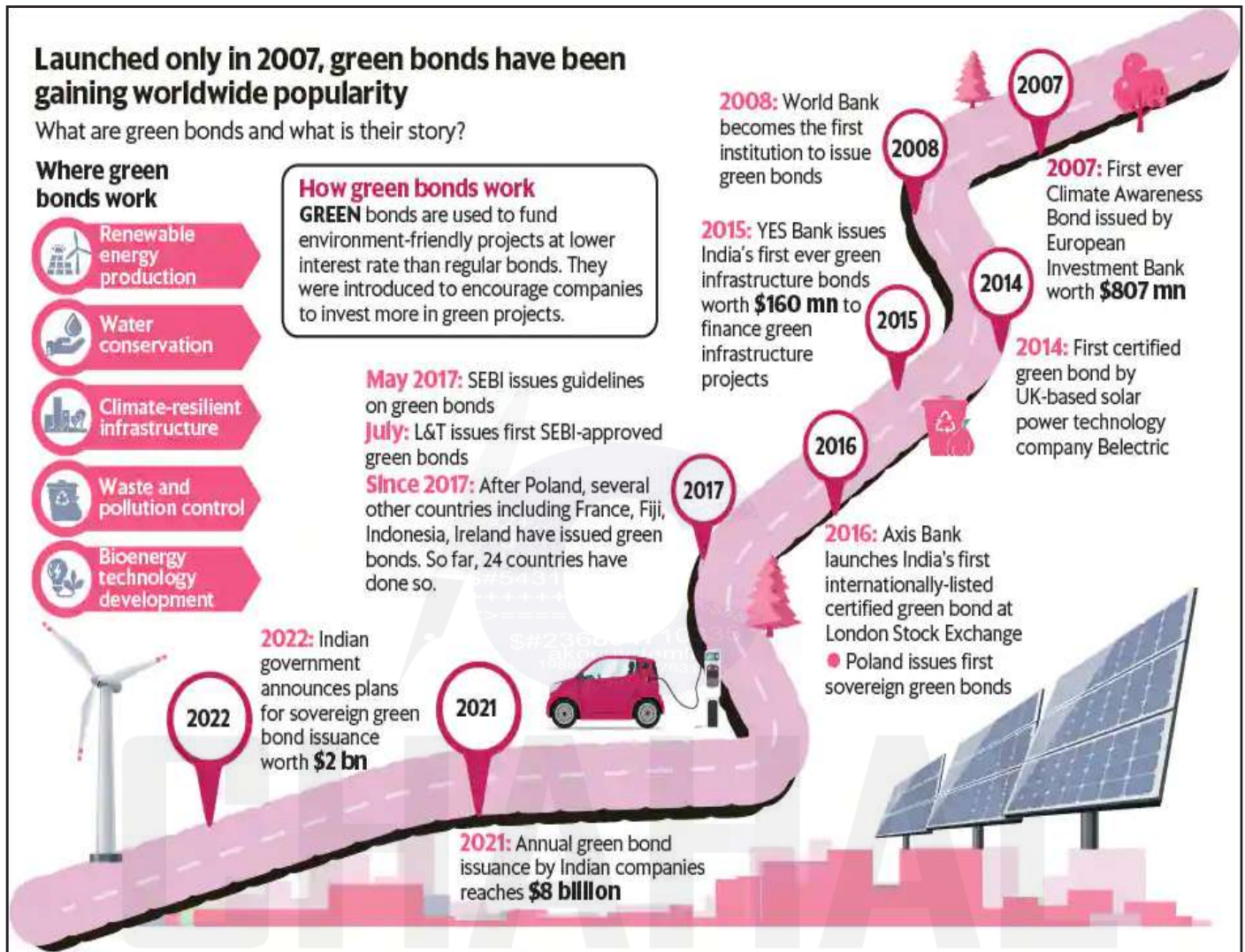
- A green bond is a **debt instrument** through which **capital is raised to fund green projects** relating to renewable energy, clean transportation, sustainable water management etc.

### What is a Bond?

- Bond is a **fixed-income instrument** that represents a **loan from an investor to a borrower**.

- It is a **contract between the investor and the borrower**, where the borrower uses the money to fund its operation and the investors receive interest on the investment.
- Bonds are high-security debt instruments that fall under the **fixed income asset class**.
- It enables an entity to **raise funds to fulfill the capital requirement** for funding various projects.
- Green bonds **raise funds for new and existing projects** which deliver environmental benefits, and a more sustainable economy.
- **'Green' can include:**
  - renewable energy,
  - sustainable resource use,
  - conservation,
  - clean transportation and
  - adaptation to climate change.

- The **Union Budget 2022-23** emphasised **sovereign green bonds** and **thematic funds** for blended finance in areas including climate action.
- Green bonds, issued through the **Reserve Bank of India**, will be part of the government's overall **borrowing programme** and used for projects leading to a less carbon economy.
- **Blended financing** will be done through several agencies, such as **NABARD**, with part contribution from the government and private sector.
- **Who regulates it?**
  - The **Securities and Exchange Board of India (SEBI)** regulates issuance and listing of green bonds.



## FALL IN INDIA'S FOREIGN EXCHANGE RESERVES

**Context:** After three consecutive years of rise, India's foreign exchange reserves declined by around \$ 70 billion in 2022 amid rising inflation and interest rates.

### Key details:

- **Two reasons** for this decrease in the forex reserves:
- **Valuation loss:**
  - One of the primary reasons was **valuation loss** after the **US dollar** appreciated against major currencies in 2022.
  - The rise in the US currency was due to **risk aversion** among investors amid the **aggressive monetary tightening** of the US Federal Reserve and uncertainty surrounding the Russia-Ukraine war last year.
  - Foreign exchange reserves are maintained as a **multi-currency portfolio** comprising **major currencies** such as the US dollar, Euro, Pound sterling, and Japanese yen, among others, but are **valued in terms of US dollars**.



- When the **dollar strengthens**, the **valuation of other currencies vis-à-vis** the US currency **declines**, leading to **notional fall** in the overall reserves position, analysts said.
- The RBI also keeps the forex reserves in the **dollar-denominated assets** like the **10-year benchmark securities** of the US and UK.
- Since the **yields** of these assets **rose in 2022**, it **impacted India's foreign exchange reserves**.
- **FPI withdrawal**
  - Besides valuation loss, the forex reserves also declined as the **Reserve Bank sold dollars** in the **spot market** to smoothen the sudden fluctuations in the rupee's movement caused by outflows from foreign investors.
  - In 2022, Foreign Portfolio Investments **started pulling out** after inflation spiked and central started hiking interest rates.
  - The **Russian invasion of Ukraine** accentuated the FPI withdrawals with the global economic slowdown making inflows tougher, analysts said.
- **High FII outflows:**
  - Higher **Foreign Institutional Investment** outflows led to an **over 10 per cent fall in the rupee** – making it the **worst-performing Asian currency** in 2022.
  - As per the latest data, the **RBI remained net seller of the US dollar** in 2022.

### Impact on import cover

- With the depletion of reserves, the **number of months of imports** that can be covered through the country's reserves have **also declined**.
- As of January 7, 2022, the foreign exchange reserves provided a **cover equivalent to 13 months** of import estimated for 2021-22.
- When the reserves reached an all-time high of **\$642.5 billion** in September 2021, it was **equivalent to 15 months of import cover**.

### Why hold foreign exchange reserves?

- **Reduce the likelihood of balance-of-payments crises,**
- **Help preserve economic and financial stability** against pressures on exchange rates and disorderly market conditions, and

- **Create space for policy autonomy.**

### Advantages of High Forex Reserves

- Helps in meeting international finance obligations
- helps in boosting market confidence about nations' economy
- Acts as cushion for unforeseen external shocks
- Boost foreign direct investment (FDI)
- Helps in maintaining high volatility of domestic currency
- Central bank can invest these foreign currency in less risky investment destination to earn profits

### Disadvantages of High Foreign Reserves

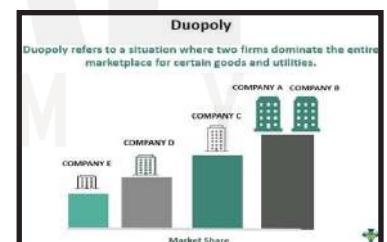
- Maintaining a high foreign exchange leads to infusion of liquidity in domestic market and hence fear of high inflation
- Maintaining high forex is like putting money in idle condition
- Additional cost for maintaining high forex
- High forex reserves are suitable for export surplus economies.

## DUOPOLY

*Context: Duopoly concerns loom large in the telecom sector as the fate of India's third-largest telecom, Vodafone-Idea, is hanging in the balance.*

### What is a Duopoly?

- A duopoly is a situation where **two companies** together own all, or nearly all, of the market for a **given product or service**.
- A duopoly is the most **basic form of oligopoly**, a market dominated by a small number of companies.
- A duopoly can have the **same impact on the market as a monopoly** if the two players **collude on prices or output**.
- While a duopoly qualifies as an oligopoly, **not all oligopolies are duopolies**.



| Market Structure  |   |
|---|---|
| <b>Perfect Competition</b><br>100's of firms                        | <ul style="list-style-type: none"> <li>Freedom of entry/exit</li> <li>Homogenous goods - Perfect information</li> <li>Normal profit</li> </ul>            |
| <b>Monopoly</b><br>1 firm with at least 25% market share            | <ul style="list-style-type: none"> <li>Barriers to entry</li> <li>Higher prices than competitive markets</li> <li>Economies of scale</li> </ul>           |
| <b>Oligopoly</b><br>5 firm concentration ratio > 50%                | <ul style="list-style-type: none"> <li>A few large firms dominate market</li> <li>Interdependence of firms</li> <li>Some barriers to entry</li> </ul>     |
| <b>Monopolistic competition</b><br>Several firms with brand loyalty | <ul style="list-style-type: none"> <li>Low barriers to entry</li> <li>Firms produce differentiated products</li> <li>Less profit than monopoly</li> </ul> |
| <b>Contestable markets</b><br>Number of firms not important         | <ul style="list-style-type: none"> <li>Freedom of entry and exit. Low sunk costs.</li> </ul>  |
| <b>Collusive oligopoly</b><br>A few firms fix prices                | <ul style="list-style-type: none"> <li>A few firms fix prices and deter entry</li> <li>High profits like monopoly</li> </ul>                              |

### Advantages

- The two companies can **cooperate with each other** and **maximize their profits** as there are no other competitors.
- In other words, there is a **collusive cooperative equilibrium**.
- The companies in a duopoly can concentrate on **improving their existing products** rather than feeling pressure to create new products for the market.
- Because the two companies compete with each other, the **consumer benefits** because prices are controlled to some extent and do not become monopoly prices.

### Disadvantages

- They **limit free trade**.
- With a duopoly, the supply of goods and services **lacks diversity**, and there are **limited options for consumers**.
- It is **difficult for other competitors** to enter the industry and gain market share.
- The absence of competitors in a duopoly **stifles innovation**.
- With a duopoly, **prices may be higher** for consumers when the competition is not driving prices down.
- Price fixing and collusion** can occur in duopolies, which means consumers pay more and have fewer alternatives.

### PROBLEM OF BAD LOANS IN INDIA

**Context:** Recently, the finance minister told Parliament that banks had **written off bad loans** worth ₹10,09,511 crore during the last five financial years.

### What is a loan write-off?

- Writing off a loan essentially means it will no longer be counted as an asset.
- By writing off loans, a bank can reduce the level of non-performing assets (NPAs) on its books.
- An additional benefit is that the amount so written off reduces the bank's tax liability.

### Why do banks resort to write-offs?

- The bank writes off a loan after the borrower has defaulted on the loan repayment and there is a very low chance of recovery.
- The lender then moves the defaulted loan, or NPA, out of the assets side and reports the amount as a loss.
- After the write-off, banks are supposed to continue their efforts to recover the loan using various options.
- They have to make provisioning as well. The tax liability will also come down as the written-off amount is reduced from the profit.
- However, the chances of recovery from written-off loans are very low, which raises questions about the assets or collateral against which the banks lent funds to these defaulters.

### In the last five years, how much have banks had to mark as bad loans?

- Loans written off by **scheduled commercial banks (SCBs)** during the last five financial years **totalled ₹10.1 lakh crore**.
- Only ₹1.32 lakh crore has been recovered**.
- As a **percentage** of write-offs, this comes to **only about 13%**.
- One explanation is that if an NPA is fully recognised in a particular year, **even the fastest of legal processes may not resolve for full repayment**.

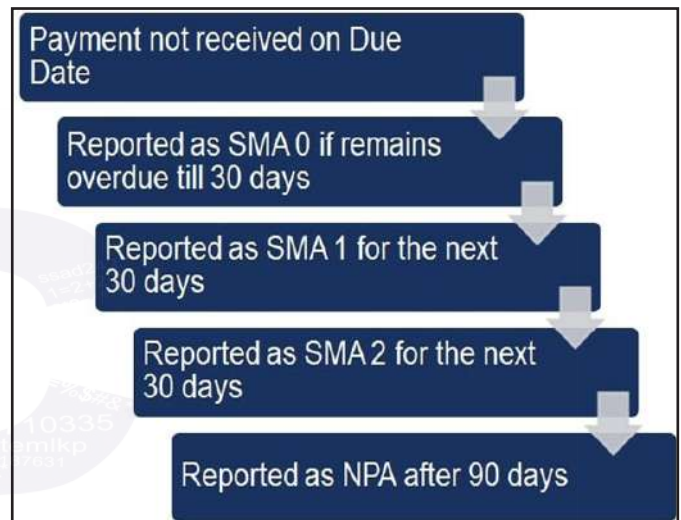
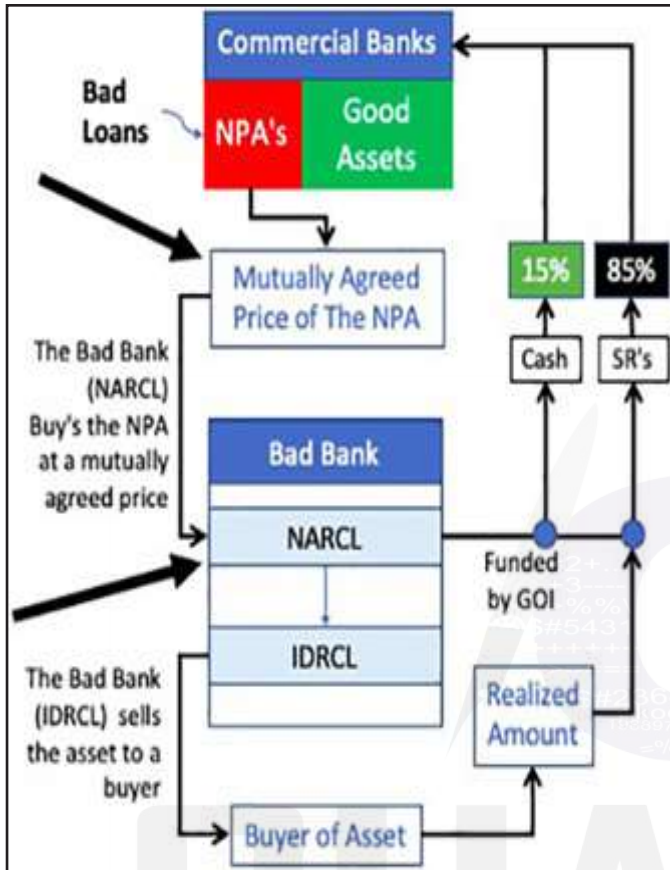
### National Asset Reconstruction Company Ltd:

- Announced in Union Budget 2021-2022.
- Constituted under Company Act 2010.
- Licensed as an Asset reconstruction Company from RBI
- set up by banks to aggregate and consolidate stressed assets** for their subsequent resolution.
- PSBs will maintain 51% ownership in NARCL.
- will be assisted by the India Debt Resolution Company Ltd (IDRCL) in the form of a Principal-Agent basis.
- Objective of setting up NARCL

- to resolve stressed loans amounting to about ₹2 lakh crore in phases.
- To incentivize quicker action on resolving stressed assets thereby helping in better value realization.
- To help banks in freeing up of personnel in banks to focus on increasing business and credit growth.
- How NARCL will resolve the bad loans

**What is a bad loan?**

- A bad loan is that which has not been 'serviced' for a certain period.
  - Servicing a loan is paying back the interest and a small part of the principal depending on the agreement between bank and borrower to begin with so that over time, you pay back the principal as well as the interest accrued in the duration.
  - A non-performing asset (NPA) is a loan given by a bank that has stopped adding interest to the bank for a period more than 90 days.
  - When a bank stops receiving payment of principal and interest towards a particular loan for more than three months, that loan is treated as an NPA.



- How do NPAs impact the banking sector?
  - The banks earn their income through interest they receive on the loans given to the borrowers.
  - With that income, the bank pays interest to depositors.
  - The balance between the interest income and income paid is the profit earned by the bank.
  - This is the reason the interest charged by the bank is always more than the interest given to depositors.
  - Bad loans are a problem, for, with time, there is less and less certainty that the loan would be paid back in full.

| NARCL vs ARCs                     |   |  |
|-----------------------------------|---|--|
| Parameters                        | NARCL   | ARCs   |
| Ownership                         | Government/ PSBs  | Private sector   |
| Registered under                  | RBI   | RBI  |
| Valuation                         | No conflict, since government backs the NARCL                                 | Conflict between public banks and private ARCs regarding valuation |
| Ability to deal with big accounts | Comparatively more  | Comparatively less   |
| Relaxation of rules               | Being backed by government, RBI may relax rules regarding bad loans for NARCL | Less chance of relaxation of rules.                                |

**CO-LOCATION**

*Context: The Securities and Exchange Board of India (SEBI) will challenge the order of the Securities Appellate Tribunal (SAT), which set aside Rs 624 crore disgorgement order against the National Stock Exchange (NSE) by the market regulator in the co-location scam.*



### What does 'co-location' mean?

- Co-location is a **data centre facility** where **third parties can lease space** for servers and other computer hardware.
- They **provide infrastructure** like power supply, bandwidth and cooling for setting up servers and storage of data.
- Customers usually **rent out space** by rack, cabinet, cage or room.
- The **NSE introduced co-location facilities in 2009** and offered traders/brokers the ability to place their servers within NSE's data centre for a fee.
- By being in close proximity to the stock exchange servers, **traders/brokers would have faster access to the price feed** and the execution of trades, due to the **low latency connectivity**.

### What is the NSE co-location case?

- In January 2015, a whistleblower wrote a complaint to SEBI, alleging that **some brokers who leased space at the NSE co-location facility**, were able to log into the NSE systems with better hardware specifications while engaging in **algorithmic trading**.
- This allowed them **unfair access** from the period 2012-2014, as the hardware specifications gave them a **split-second advantage** in accessing the price feed.
- A minuscule difference in time can **lead to huge gains for a trader**.
- At that time NSE used to **disseminate information through unicast**, which is a single, direct request sent from one host to another, with only those hosts interacting over the route.
- At least 15 brokers were **identified by SEBI** for having **preferential access**.

## WORLD ECONOMIC OUTLOOK

*Context: Recently, the World Economic Outlook (WEO) report was updated by the IMF.*

### Key details:

- **Global growth rate:**
  - The IMF effectively **rules out a global recession**.
  - It expects global growth to **bottom out in 2023** before starting to **gather speed in 2024**.

- As such, the **global growth**, which was estimated at 3.4 percent in 2022, is now **projected to fall to 2.9 percent** in 2023 before rising to 3.1 percent in 2024.

- **Global inflation**

- Inflation is expected to have **peaked in 2022** but the **disinflation** (the fall in inflation rate) will be **slow** and take all of 2023 and 2024.
- About **84 percent** of countries are expected to have **lower headline** (consumer price index) **inflation** in 2023 than in 2022.
- **Global inflation** is set to **fall** from 8.8 percent in 2022 (annual average) to **6.6 percent in 2023** and **4.3 percent in 2024** above pre-pandemic (2017-19) levels of about 3.5 percent.

- **Price rise is slowing for two main reasons.**

- One, **monetary tightening** all across the world — higher interest rates drag down overall demand for goods and services and that, in turn, slows down inflation.
- Two, in the wake of a faltering demand, **prices of different commodities** (both fuel and non-fuel) **have come down** from their recent highs.
- In 2023, **advanced economies** are expected to have an inflation of 4.6% while emerging economies will continue to face an inflation of 8.1%.

- **Forecast for India**

- **There's been no change in India's growth outlook since October 2022.**
- **Growth in India** is set to **decline** from 6.8 percent in 2022 to 6.1 percent in 2023 before picking up to 6.8 percent in 2024, with resilient domestic demand despite external headwinds.
- **This means India will remain the world's fastest growing major economy both in 2023 as well as 2024.**
- **India's GDP growth rate** is expected to be **significantly higher** than all its comparable economies, especially China (which is set to grow at 5.4% in 2023 and 4.5% in 2024).

## About World Economic Outlook

The World Economic Outlook (WEO) is a comprehensive report published twice a year by the International Monetary Fund (IMF).

- It includes the IMF's estimates and forecasts for:
  - **global output growth and inflation**
  - **real gross domestic product (GDP) growth,**
  - **consumer prices,**
  - **current account balances**
  - **unemployment**
- It has 190 member countries, grouped by region and development status.
- The WEO also includes several chapters on selected pressing economic issues.
- The WEO is usually published in April and October, followed by the less comprehensive WEO updates in July and January.

### About the IMF

- The International Monetary Fund (IMF) works to achieve **sustainable growth and prosperity** for all of its 190 member countries.
- It does so by **supporting economic policies** that promote financial stability and monetary cooperation, which are essential to increase productivity, job creation, and economic well-being.
- The IMF is **governed by and accountable to its member countries.**
- **The IMF has three critical missions:**
  - **furthering international monetary cooperation,**
  - **encouraging the expansion of trade and economic growth, and**
  - **discouraging policies that would harm prosperity.**
- **IMF funds come from two major sources: quotas and loans.**
  - **Quotas, which are pooled funds of member nations, generate most IMF funds.**
  - **The size of a member's quota depends on its economic and financial importance in the world.**
  - **Nations with greater economic significance have larger quotas.**
  - **The quotas are increased periodically as a means of boosting the IMF's resources in the form of special drawing rights.**
  - **Special drawing rights are supplementary foreign exchange reserve assets maintained by the International Monetary Fund.**
  - **SDRs are units of account for the IMF, and not a currency per se.**
  - **They represent a claim to currency held by IMF member countries for which they may be exchanged.**

## ELECTRONIC NATIONAL AGRICULTURE MARKET (E-NAM)

*Context: e-NAM, a flagship initiative of the Ministry of Agriculture and Farmers Welfare, has won the **Platinum Award** in the **Digital Empowerment of Citizens Category** in **Digital India Awards 2022.***

**About e-Nam** (Combine all the information about e-Nam in a single infographic if possible)


- **National Agriculture Market (NAM)** is a **pan-India electronic trading portal** launched in 2016.
- It is **completely funded by Central Government** and implemented by **Small Farmers Agribusiness Consortium (SFAC).**



- NAM portal **networks the existing APMC (Agriculture Produce Marketing Committee) / Regulated Marketing Committee (RMC) market yards, sub-market yards, private markets and other unregulated markets to unify all the nationwide agricultural markets** by creating a **central online platform for agricultural commodity price discovery**.
- The **common electronic trading portal is called as e-NAM**.

**Objective of NAM**

- National Agriculture Market (NAM) is a pan-India web based trading portal which will network existing APMC and other market yards to create a Unified National market for agricultural (and allied) commodities
- The objectives include:
  - Better price and bargaining power to farmers
  - Access to more markets for buyer
  - Increase competitiveness
  - Establish quality assaying systems
  - Real time information of prices/trade
  - Transparent and quick financial transactions



**e-NAM**  
National Agriculture Market  
*Making Lives Easier For Annadata*

**Benefits To Farmers:**

- No middleman between farmers and buyers
- No dependency on anyone for the sale of crops
- Better prices for their produce
- Real-time progress of bids in mandis
- Time-saving, as farmers don't have to go to market for selling produce



### Agricultural Produce Market Committee (APMC)

- APMC is a **marketing board established by the state governments**.
- **Aim:**
  - To **eliminate the exploitation incidences of the farmers** by the intermediaries.
- **Process:**
  - The produce **must be brought to the market** and sales are made **through auction**.
  - The market place is known as **Mandi**.
  - **Licenses** are issued to the traders to operate within a market.
- **Who are not allowed to trade?**

- The **mall owners, wholesale traders, retail traders** are not given permission to purchase the produce from the farmers **directly**.

### HUNDIS

*Context: The 'hundi' at the temple of Lord Venkateswara in Tirumala registered a whopping income of ₹1,450.41 crore by way of offerings received from the devotees during 2022.*

### What are Hundis?

- Hundis refer to **financial instruments** evolved on the Indian sub-continent used in trade and credit transactions.
- They were used:
  - as **remittance instruments** (to transfer funds from one place to another),
  - as **credit instruments** (to borrow money [IOUs]),
  - for **trade transactions** (as bills of exchange).
- Technically, a Hundi is an **unconditional order in writing made by a person directing another to pay a certain sum of money to a person named in the order**.
- Hundis, being a part of the informal system have **no legal status and are not covered under the Negotiable Instruments Act, 1881**.
- Though normally regarded as bills of exchange, they were more often used as **equivalents of cheques issued by indigenous bankers**.
- Hundi means an aspect of the **causal framework with no lawful status and is not secured under the Negotiable Instruments Act, 1881**.
- Although all types of hundi are typically viewed as bills of trade, they are **frequently utilized as reciprocals of indigenous brokers' checks**.

### Negotiable Instrument Act:

- Under the Negotiable instrument act, it recognises only **three types of instruments** as negotiable instruments viz.:
  - a Promissory Note,
  - a Bill of Exchange and
  - a Cheque.
- However, it **does not mean that other instruments are not negotiable instruments** provided that they **satisfy the following conditions:**

- The instrument should be **freely transferable** by the custom of trade. Transferability may be by:
  - delivery or
  - endorsement and delivery.
- The person who **obtains it in good faith** and for consideration gets it free from all defects and can sue upon it in his own name.
  - The holder has the **right to transfer**.
  - The negotiability **continues till the maturity**.

## SEBI BAN ON AGRI COMMODITIES TRADE

**Context:** Recently, a farmer's union launched an indefinite agitation outside the office of the SEBI in Mumbai against the continued suspension of derivatives trading in seven agri commodities.

### Background of the SEBI ban

- The capital markets regulator **suspended futures trading in seven commodities**, viz:
  - **wheat, paddy** (non-basmati), **moong, chana, soyabean** and its derivatives,
  - **mustard seed** and its derivatives, and
  - **palm oil** and its derivatives on the exchanges.
- The SEBI order allowed the squaring of contracts but said **no new contract would be allowed in these commodities**.
- The trading was initially suspended for a year, but in December 2022, the **ban was extended for another year**, i.e., until December 20, 2023.
- The ban on the launch of futures contracts was intended to **stop speculative trade in these commodities**.
- The central government was worried about **food inflation**, and the ban was part of the efforts made to control it.

### How does the derivatives trade in commodities work?

- Agricultural commodities are traded on the **National Commodities and Derivatives Exchange (NCDEX)** and the **Multi Commodity Exchange (MCX)**.
- **What are derivatives?**
  - Derivatives are **short-term financial contracts** that are bought and sold in the market.
  - Profits are made in the derivatives trade by **predicting price movements** of the asset that underlies the contract.
  - The derivatives trade can be in **futures and options**.
- **What are futures?**
  - In a futures contract, a supplier **pledges to sell a certain quantity at a fixed price at a future date**.
  - Also, farmers can put **fixed amounts of their produce**, which fits the quality standards of the exchange, to be sold at a fixed price — almost like **price insurance**.
  - **Both contracts can be exited** by either the producer or the trader by paying a margin price to the exchange.

### Why are farmers protesting against the ban?

- The futures trends provided by the exchange are an important **indicator for farmers**.
- More than individual farmers, the **Farmers Producer Companies (FPCs)** trade on the exchanges.
- The union has said that the ban on the futures trade has **taken away the only price indicator** they had.
- Ever since the ban kicked in, **price discovery and realization in the markets has been low**.



## SECURITIES AND EXCHANGE BOARD OF INDIA (SEBI)

- SEBI is a **statutory body** and a **market regulator**, which controls the **securities market** in India.
- The basic functions of Sebi is to **protect the interests of investors** in securities and to promote and regulate the securities market.
- Sebi is run by its **board of members**.
  - ▶ The board consists of a **Chairman** and several other **whole time and part time members**.
  - ▶ The **chairman is nominated** by the union government.



### • The others include:

two members  
from the finance  
ministry

one member  
from Reserve  
Bank of India

five other members  
are also nominated  
by the Centre

### Securities Appellate Tribunal (SAT)

- Sebi also **appoints various committees**, whenever required to look into the pressing issues of that time.
- A **Securities Appellate Tribunal (SAT)** has been constituted to protect the interest of entities that feel aggrieved by Sebi's decision.
- SAT consists of a **presiding officer and two other members**.

### Functions and powers of Sebi

- It **controls activities** of stock exchanges
- It **safeguards** the rights of shareholders
- It **guarantees the security** of their investment
- It aims to **check fraudulence** by harmonising its statutory regulations and self-regulating business
- It also **enables a competitive professional market** for intermediaries
- It **provides a marketplace** in which the issuers can increase finance properly.
- It also **ensures safety and supply** of precise and accurate information from the investors.
- It **analyses the trading** of stocks and saves the security market from the malpractices.
- It **controls the stockbrokers and sub-stockbrokers**.
- It **provides education regarding** the market to the investors to enhance their knowledge

## VISCOSE STAPLE FIBRE

*Context: The Association of Man-made Fibre Industry of India (AMFII) has appealed to the Union Finance Ministry to accept the recommendations of the Directorate General of Trade Remedies (DGTR) on levy of anti-dumping duty (ADD) on imports of Viscose Staple Fibre from Indonesia.*

### VSF:

- Viscose Staple Fiber (VSF), is a **natural and biodegradable fiber** which has characteristics that are **similar to cotton**.
- Due to its versatility, VSF is widely used for manufacturing **apparels, home textiles, dress materials, knitted wear and non-woven applications**

### Anti-Dumping Duty

- It refers to the **action of exporting market products** to another country at a **market price that is far below** what is charged at the home country where such a product is manufactured.
- Generally, dumping such products in a nation can **harm the GDP of the country**.
- An **anti-dumping policy** helps to prevent a **potential dumping scheme**.

- It generally entails a **protectionist tariff** that a government **imposes on foreign imports** which they deem to be far below market price in the country of production.
- The appropriate body for carrying out **trade issues** is the **World Trade Organization**, and this body **doesn't prevent dumping schemes**, rather it **focuses on the measures** which domestic governments take to thwart dumping schemes

## ADDITIONAL TIER-1 BONDS

*Context: The Bombay High Court quashed the write-off of Additional Tier-1 (AT1) bonds worth Rs 8,400 crore issued by Yes Bank Ltd, bringing relief to investors.*

### What are AT1 bonds?

- AT1 bonds are **unsecured bonds** that have **perpetual tenors**.
- These bonds, **issued by banks**, have **no maturity date**.
- They have a **call option**, which can be **used by the banks to buy these bonds** back from investors.
- These bonds are typically used by banks to **bolster their core or tier-1 capital**.
- **Mutual funds (MFs)** were among the **largest investors** in perpetual debt instruments.

## How are these bonds different from other debt instruments?

- These bonds **do not carry any maturity date**.
- They offer **higher returns** to investors but compared with other debt products, these instruments carry a **higher risk** as well.
- If the capital ratios of the issuer fall below a certain percentage or in the event of an institutional failure, the **rules allow the issuer to stop paying interest** or even **write down these bonds**, as happened in the Yes Bank case.
- These **bonds are subordinate** to all other debt and **senior only to equity**.

## LOAN LOSS PROVISION BY BANKS

*Context: The Reserve Bank of India (RBI) published a discussion paper on “loan loss provision”, proposing a framework for adopting an expected loss (EL)-based approach for provisioning by banks in case of loan defaults.*

### What is loan-loss provision?

- The RBI defines a loan loss provision as an **expense that banks set aside for defaulted loans**.
- Banks set aside a **portion of the expected loan repayments** from all loans in their portfolio to **cover the losses either completely or partially**.
- In the event of a loss, instead of taking a loss in its cash flows, the **bank can use its loan loss reserves to cover the loss**.
- Since the **bank does not expect all loans to become impaired**, there is usually enough in the loan loss reserves to cover the full loss for any one or a small number of loans when needed.
- An **increase in the balance of reserves** is called **loan loss provision**.
- The **level of loan loss provision** is determined **based on the level expected to protect the safety and soundness of the bank**.

### What is the expected loss-based approach?

- Under this practice, a bank is **required to estimate expected credit losses** based on **forward-looking estimations**, rather than wait for credit losses to be actually incurred before making corresponding loss provisions.
- As per the **proposed framework**, banks will need to **classify financial assets** into one of three categories — **Stage 1, Stage 2, or Stage 3** — depending upon the **assessed credit losses** on them.

- **Stage 1** assets are financial assets that have **not had a significant increase in credit risk** since initial recognition or that have **low credit risk** at the reporting date.
- For these assets, **12-month expected credit losses** are recognised and interest revenue is calculated on the gross carrying amount of the asset.
- **Stage 2** assets are financial instruments that have had a **significant increase in credit risk** since initial recognition, but there is **no objective evidence of impairment**.
- For these assets, **lifetime expected credit losses are recognised**, but interest revenue is still calculated on the gross carrying amount of the asset.
- **Stage 3** assets include financial assets that have **objective evidence of impairment** at the reporting date.
- For these assets, **lifetime expected credit loss is recognised**, and interest revenue is calculated on the net carrying amount.

### Benefits of this approach

- It will further **enhance the resilience** of the banking system in line with globally accepted norms.
- It is likely to result in **excess provisions** as compared to shortfall in provisions as seen in the incurred loss approach.

### Concerns

- The incurred loss approach requires banks to provide for losses that have **already occurred or been incurred**.
- The **delay in recognising** expected losses under an “incurred loss” approach was found to exacerbate the downswing during the financial crisis of 2007-09.
- Faced with a systemic increase in defaults, the delay in recognising loan losses resulted in banks having to make **higher levels of provisions** which ate into the capital maintained precisely at a time when banks needed to shore up their capital.
- This **affected banks’ resilience** and **posed systemic risks**.
- Further, the delays in recognising loan losses **overstated the income generated by the banks** which, coupled with dividend payouts, **impacted their capital base** because of **reduced internal accruals**, which too, affected the resilience of banks.

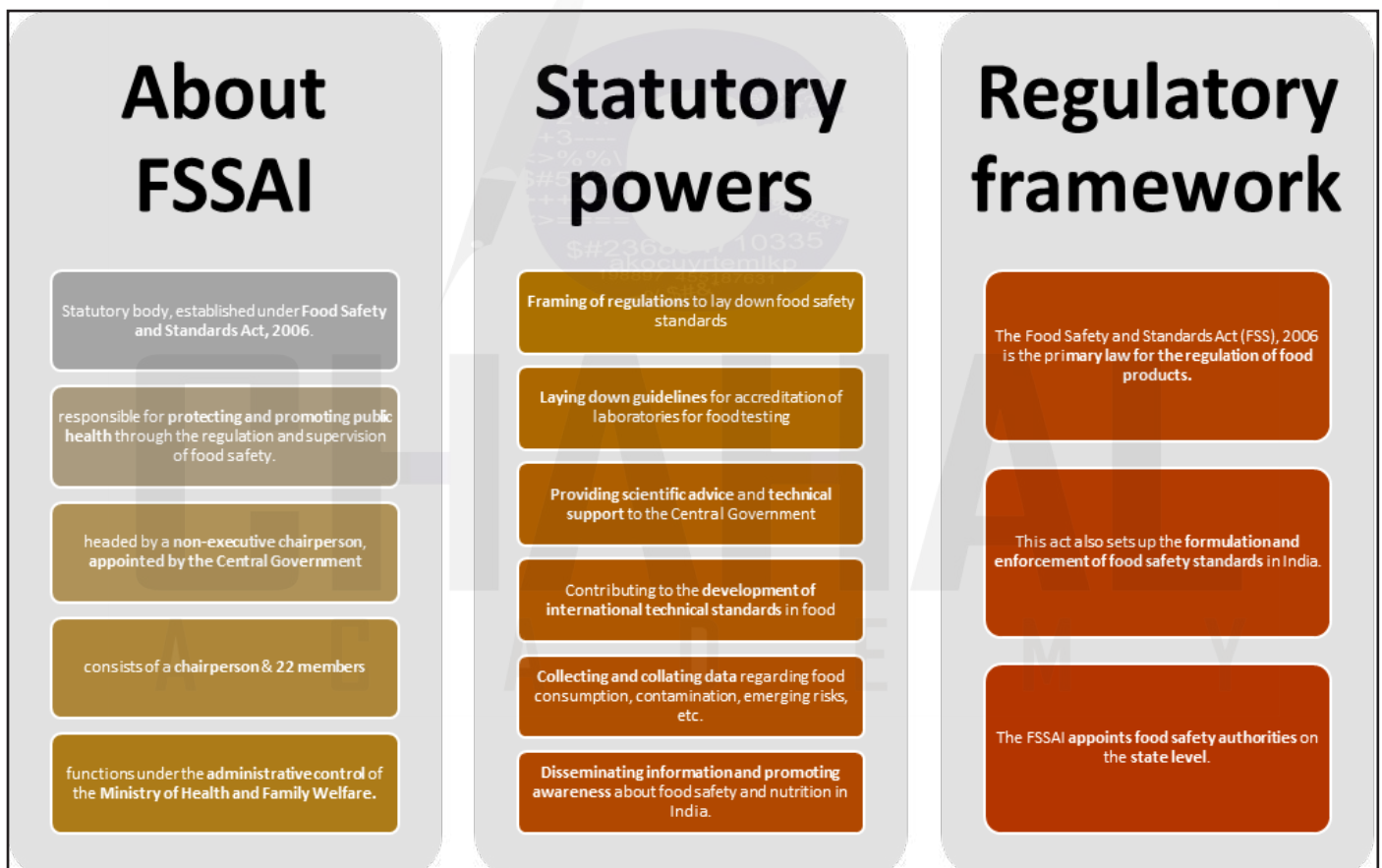


## FSSAI SETS STANDARDS FOR BASMATI RICE

**Context:** In a bid to promote the business around basmati rice, the Food Safety and Standards Authority of India (FSSAI) notified standards for basmati rice.

### Key details:

- FSSAI hopes that the standards would **protect consumer interest** and ensure the basmati rice sold in the market has the **characteristic fragrance** identified with this variety and is **free from artificial fragrances and colouring**.
- The authority has also set standards on parameters such as **average size** of grains and their **elongation ratio** after cooking.
- It has set the **maximum limits** for **moisture, amylose content, uric acid, damaged grains** and **presence of non-basmati rice**.
- The standards are applicable to **brown basmati rice, milled basmati rice, parboiled brown basmati rice** and **milled parboiled basmati rice**.
- **Cultivation of basmati in India:**
  - Basmati rice is cultivated in the **Himalayan foothills** of the Indian subcontinent.
  - In India, rice grown in specific parts of **Punjab, Haryana, Himachal Pradesh, Delhi, Uttarakhand, Uttar Pradesh** and **Jammu & Kashmir** can be labelled as basmati.
  - Basmati rice is **exported out of India** and India accounts for **two-thirds** of the global supply of basmati rice, according to FSSAI.



## EXPORT PROMOTION CAPITAL GOODS SCHEME

**Context:** The Indian government has announced a one-time relaxation from maintaining average export obligation and an option to extend the export obligation period for certain sectors under the Export Promotion Capital Goods (EPCG) Scheme.

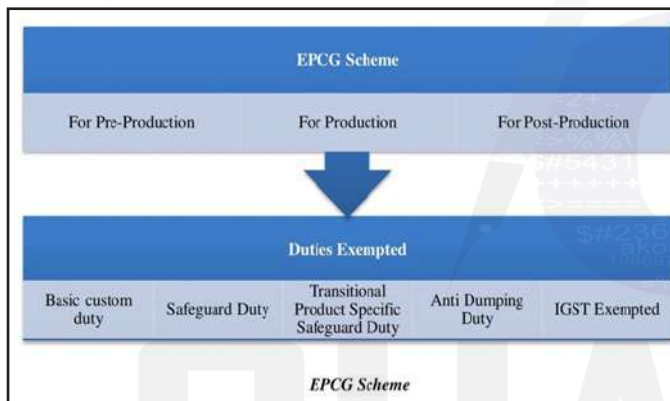
### Key details:

- The sectors that are **eligible** for this relief are the **Hotel, Healthcare, and educational sectors**.

- These sectors will also have the option to **extend the export obligation period** for a longer duration, **without having to pay any additional fees.**

#### About the scheme:

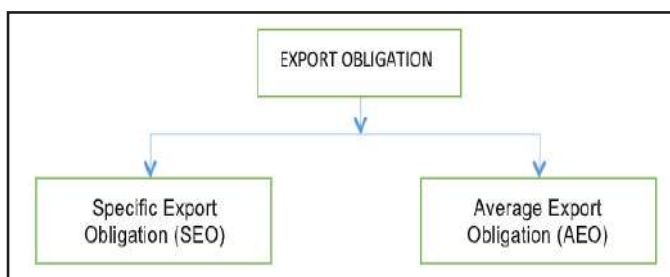
- The Export Promotion Capital Goods (EPCG) scheme is a **trade promotion scheme** that allows **duty-free import** of capital goods for the purpose of export production in India.
- **Aim:** The scheme aims to **encourage the production of goods for export** by providing **import duty concessions** on capital goods.
- The EPCG scheme is administered by the **Directorate General of Foreign Trade (DGFT)** and is governed by the **Foreign Trade Policy of India.**
- It can be explained as **"Duty-Free (Zero Customs Duty) Import of Capital Goods/ Machinery for the manufacture of products meant for Export."**
- The Capital Goods may be used for production, **pre-production & post-production stages**



#### Eligibility Criteria for applying under EPCG Scheme-

- Benefits under EPCG Scheme can be **applied by any Exporter irrespective of his turnover.**
- EPCG License can be issued to the **following category of Exporters:**
  - Manufacturer Exporter.
  - Merchant Exporter with a supporting manufacturer.
  - Service Provider (who is exporting services) For Example. Hotel Industry.

#### Export Obligation under EPCG scheme



#### • Average Export Obligation:

- It basically means that the **Average turnover** maintained in the **past 3 years** before obtaining the license should be **maintained for each FY until the specific export obligation is completed.**
- It is imposed with a view that after upgradation and induction of new machinery, the overall export **should not fall below the past average of turnover achieved** i.e., there should be a **rise in the export turnover** with the help of new machinery.
- It is to be maintained **over and above the specific export obligation.**

#### • Specific Export Obligation:

- Goods manufactured from the imported machinery to be exported **worth 6 times of the duties, taxes, and cess** saved on the capital goods **within 6 years** from the date of issue of EPCG Authorization.
- In the case of indigenous sourcing of Capital Goods, **specific EO shall be 25% less than the above Export Obligation.**

- If the required **Export Obligation is not fulfilled** in 6 years, **one extension of 2 years** can be obtained.
- If the EPCG Authorization holder **fails to achieve the Export Obligation** (even after extension), the Organisation **has to pay all the Custom Duties, Cess, taxes, saved plus 15% annual interest** to the Customs Authority.

#### KERALA OPPOSING THE NEW ELECTRICITY RULES

*Context:* Ever since the Union Power Ministry shared the Electricity (Amendment) Rules, 2022 with the States, the government in Kerala had fiercely objected to Rule 14 which permits distribution companies (Discoms) to automatically recover from consumers, on a monthly basis, the expenses arising out of variations in fuel price and power purchase costs.

#### What are the new rules?

- The Centre introduced the **Electricity (Amendment) Rules, 2022**, to amend the Electricity Rules, 2005.
- **Rule 14** of the Rules requires the **State electricity regulatory commission** to **specify a price adjustment formula** for automatically passing on the costs through the consumer tariff on a monthly basis.



- Fuel and power purchase adjustment surcharges shall be calculated and billed to consumers, automatically, **without going through the regulatory approval process**, on a monthly basis, according to the formula, prescribed by the respective State Commission.
- The government has suggested creating a **central pool of renewable energy sources** from which an **intermediary company will procure power** to be supplied to an entity that will undertake **distribution and retail supply to more than one state**.
- The ministry has also proposed that **standalone energy storage system (ESS)** will be a **delicensed activity**.

### What has been Kerala's stand?

- The State government has argued that **giving Discoms the freedom** to automatically pass on the aforementioned costs through the electricity bill **endangers consumer interests**.
- Consumers would be subjected, quite **unfairly**, to **frequent price fluctuations**.
- It further observed that the **crucial role** played by the **State Electricity Commission** in fixing the surcharge would **get diluted**.
- Since Kerala **produces only 30%** of its electricity demand within its borders, the **power purchase expenditure**, especially during the summer months when demand soars, is quite substantial.
- In the normal course of things, the **Kerala State Electricity Regulatory Commission** finalises a decision on the KSEB plea after holding a public hearing.
- According to the State government, **doing away with this prudence check** would put the general public at the receiving end.

### Way forward

- The government directed the Power department to **examine whether potential tariff fluctuations** arising out of the new arrangement can be **balanced through reduced tariffs** during the **State's extended monsoon months** when power purchases and consumption levels are on the lower side.
- During rainy seasons, **hydropower generation is high, meeting over 50% of the demand**.
- The government has also suggested that, in the **remaining months**, power purchase costs should be **kept to a minimum to avoid burdening the consumers**.

- Such **safeguards would only work** in a situation where a **State-run entity like the KSEB is at the helm of things**.
- The **real concern** lies in the future where **private players enter electricity distribution in Kerala**.

## MAHADAYI WATER SHARING ROW


**Context:** *Karnataka's decision to go ahead with a water diversion project on river Mahadayi has escalated its long-standing dispute on the issue with neighbouring Goa.*

### The Kalasa-Banduri Nala project

- **Aim of the project:**
  - The Kalasa Banduri Nala project aims to **divert water** from Mahadayi to satisfy the drinking water needs of Belagavi, Dharwad, Bagalkot and Gadag districts.
  - Though the project was **first proposed in the early 1980s**, it has remained on paper owing to a **dispute between Karnataka, Goa and Maharashtra**.
  - As per plans, barrages are to be built against **Kalasa and Banduri streams** — **tributaries of Mahadayi** — and **water diverted towards Karnataka's parched districts**.
- Mahadayi originates **inside the Bhimgad Wildlife Sanctuary** in the Belagavi district of Karnataka and **flows into the Arabian Sea in Goa**.

### The Mahadayi river

- Is known as the **lifeline of Goa**.
- **Panaji**, the state capital and **Old Goa**, the former capital of Goa, are both situated on the left bank of the.
- Water sharing **disputes between Karnataka and Goa**.
- The **Karnataka government** proposes to **divert** some water from the Mahadayi river to the **Malaprabha River** basin as part of the **Kalasa-Banduri Nala project**.
- **Mahadayi Water Disputes Tribunal** under inter state River Water Disputes Act has been constituted to decide the sharing of the river waters by the riparian states.
- In August **2018**, Mahadayi Water Tribunal verdict permitted:
  - **Goa** to use 24 tmcft,
  - **Karnataka** to use 13.42 tmcft of which 5.5 tmcft is meant for use within the river basin and for diversion to the Malaprabha reservoir, and around 8 tmcft for power generation and
  - **Maharashtra** to use 1.33 tmcft for consumptive purposes.



### Various Inter-state river disputes in India:

| Tribunal                            | States Concerned   | Date of Constitution | Current Status  |
|-------------------------------------|--|----------------------|---|
| Godavari Water Disputes Tribunal    | Maharashtra, Andhra Pradesh, Karnataka, Madhya Pradesh, Orissa | April 1969           | Report and decision given in July 1980.   |
| Krishna Water Disputes Tribunal – I | Maharashtra, Andhra Pradesh, Karnataka,                        | April 1969           | Report and decision given in May 1976.  |
| Narmada Water Disputes Tribunal     | Rajasthan, Madhya Pradesh, Gujarat, Maharashtra                | October 1969         | Report and decision given in December 1979. Narmada Control Authority (NCA) was constituted to implement the decision.  |
| Ravi & Beas Water Tribunal          | Punjab, Haryana, Rajasthan                                     | April 1986           | Report and decision given in April 1987. Further Report is pending.   |
| Cauvery Water Disputes Tribunal     | Kerala, Karnataka, Tamil Nadu, Puducherry                      | June 1990            | Report and Decision given on 5 February 2007. Supreme Court modified the decision on 16 February 2018. The Cauvery Water Management Authority (CWMA) and Cauvery Water Regulation Committee (CWRC) were constituted to implement the modified decision. |
| Krishna Water Disputes Tribunal -II | Karnataka, Andhra Pradesh, Maharashtra, Telangana              | April 2004           | Report and decision given on 30 December 2010. SLPs filed pending in the Court. The term of the Tribunal has been extended after the bifurcation of Andhra Pradesh. The matter is under adjudication in the Tribunal.                                   |
| Vansadhara Water Disputes Tribunal  | Andhra Pradesh, Odisha   | February 2010        | Report and decision submitted on 13 September 2017. Further Report is pending.  |
| Mahadayi Water Disputes Tribunal    | Goa, Karnataka, Maharashtra                                    | November 2010        | Report and decision submitted on 14 August 2018. Further Report is pending.   |
| Mahanadi Water Disputes Tribunal    | Chhattisgarh, Odisha   | March 2018           | Under adjudication by the Tribunal. Report and decision are awaited.  |

### CRITERIA FOR INCLUSION OF ST COMMUNITY

**Context:** The Office of the Registrar-General of India (RGI) is following the set of criteria set out by the Lokur Committee nearly 60 years ago to define any new community as a Scheduled Tribe.

#### Key details:

- Approval of the Office of the RGI is **mandatory** for the **inclusion of any community** on ST lists, as per the procedure for scheduling tribes.
- For criteria, report of the **Advisory Committee** on the revision of the lists of Scheduled Castes and Scheduled Tribes (Lokur Committee 1965) is **consulted**.
- The **criteria** set out by the **Lokur Committee** for defining a community as a tribe are:
  - indications of primitive traits,
  - distinctive culture,
  - geographical isolation,
  - shyness of contact with the community at large, and
  - backwardness.
- The **government task force on Scheduling of Tribes** in February 2014, had concluded that **these criteria may have become obsolete** considering the process of transition and acculturation.
  - Further, it noted that terms like **primitive** and the requirement of **primitivity** to be a characteristic of Scheduled Tribe indicates a **condescending attitude by outsiders**.



- It also pointed out problems with the **geographical isolation criterion**, arguing that as infrastructure development continued across the country, “how can any community remain in isolation?”
- Accordingly, the task force **recommended changes** to the criteria and based on this, the Tribal Affairs Ministry in June 2014 prepared a draft Cabinet note to overhaul the criteria and procedure for **scheduling of new communities** as STs.

#### • Proposed criteria

- The proposed criteria under the government’s consideration included:
  - **socio-economic**, including educational, backwardness, vis-a-vis, the rest of the population of the State;
  - **historical geographical isolation** which may or may not exist today;
  - distinct language/dialect;

- **presence of a core culture** relating to life-cycle, marriage, songs, dance, paintings, folklore;
- **endogamy**, or in case of **exogamy**, marital relationship primarily with other STs (This criterion is for scheduling of a community as ST and not for determining ST status of an individual)”.
  - The draft Cabinet note also proposed communities which have adopted a ‘Hindu’ way of life will not be ineligible merely on this ground.

#### About the Registrar General of India:

- **Registrar General and Census Commissioner of India** was founded in 1961 for **arranging, conducting and analysing** the results of the **demographic surveys** of India including **Census of India and Linguistic Survey of India**.
- The position of Registrar is usually held by a **civil servant** holding the rank of **Joint Secretary**.

NOTES

CHAHAL  
ACADEMY

# ENVIRONMENT & GEOGRAPHY

## GREATER SCAUP DUCK



# GREATER SCAUP DUCK

**Context:** Recently, a rare species of duck, Greater Scaup, locally known as Sadangman, was sighted in Loktak lake in Manipur after a gap of over 90 years.

### *About Greater Scaup (Sadangman)*

- A **medium-sized diving duck** species that belongs to the family of **Anatidae**.
- **Distribution:** Asia, Europe, the United States and Canada
  - ▶ It is a rare visitor to the Indian Subcontinent.
- **Habitat:** Shallow, freshwater lakes, pools and rivers with grassy shorelines
- **Threats:** Human development, preyed upon by owls, skunks, raccoons, foxes, coyotes, and humans.
- **IUCN Red List Status:** Least Concern
- **Highly migratory**
  - ▶ Breeding near arctic regions and migrating to the warmer south from August onwards.



### Loktak Lake (Manipur)

- It is a freshwater lake.
- It is famous for unique floating islands called 'Phumdis'
- **Keibul Lamjao National Park** located on the Loktak Lake.
  - It is the last natural habitat of the "Sangai".
- It designated as a **wetland of international importance under the Ramsar Convention.**

## RHINOS

# NO Rhinos POACHED IN Assam IN 2022



**Context:** Assam Chief Minister announced that no rhinos were poached in the state in 2022.

### Indian rhinoceros

- The Indian rhinoceros (*Rhinoceros unicornis*) is found **only in the Brahmaputra valley**, parts of North Bengal, and parts of southern Nepal.
- It has a single black horn that can grow up to 60 cm, and a tough, grey-brown hide with skin folds, which gives the animal its characteristic armour-plated look.
- **IUCN status:**
  - ▶ **Vulnerable**

### Rhino poaching

- Rhinos have been **poached for their horn**, which is prized in some cultures.
- Ground rhino horn is used in **traditional Chinese medicine** to cure a range of ailments, from cancer to hangovers, and also as an aphrodisiac.
- In **Vietnam**, a rhino horn is considered a **status symbol**.
- In 2019, the **Assam government** constituted a **Special Rhino Protection Force** to keep a check on rhino poaching and related activities at **Kaziranga National Park (KNP)**.

### Rhino Conservation Programmes in India

#### Indian Rhino Vision 2020:

- Launched in 2005, Indian Rhino Vision 2020 was an ambitious effort to attain a wild population of at least 3,000 greater one-horned rhinos spread over seven protected areas in the Indian state of Assam by the year 2020.
- Seven protected areas are Kaziranga, Pobitora, Orang National Park, Manas National Park, Laokhowa wildlife sanctuary, Burachapori wildlife sanctuary and Dibru Saikhowa wildlife sanctuary.
- Wild-to-wild translocations were an essential part of IRV2020 – moving rhinos from densely populated parks like Kaziranga NP, to ones in need of more rhinos, like Manas NP.

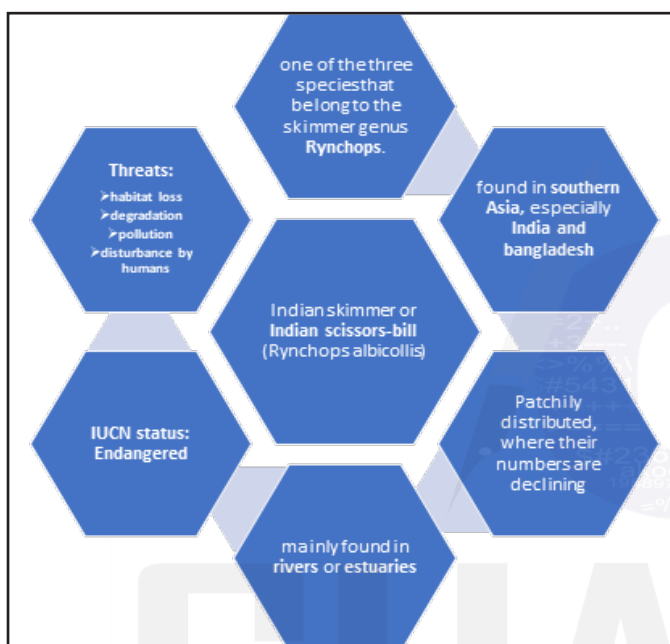
- It is a collaborative effort between various organisations, including the International Rhino Foundation, Assam's Forest Department, Bodoland Territorial Council, World Wide Fund - India, and the US Fish and Wildlife Service.
- In 2022, the IRV2020 partners met to outline goals for the coming years, with plans to build on the successes and learnings from the previous program.

## INDIAN SKIMMER

**Context:** The Godavari estuary in Andhra Pradesh has become a prime and safe habitat for the Indian skimmer (*Rynchops albicollis*).



### Key details:

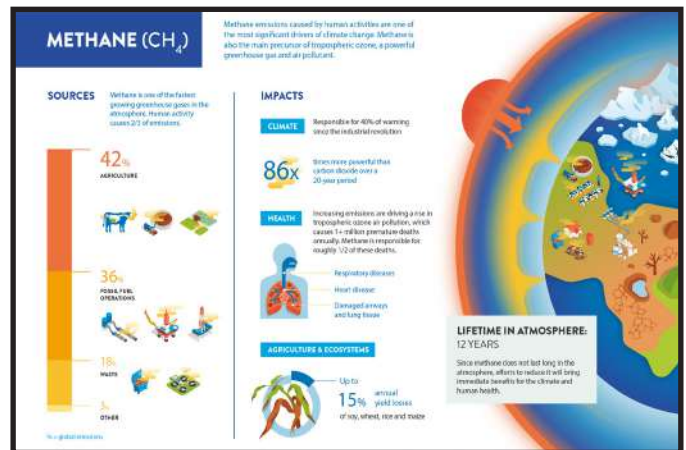


## METHANE EMISSIONS

**Context:** Microsoft co-founder Bill Gates has invested in an Australian climate technology start-up that aims to curtail the methane emissions of cow burps, according to a report in the BBC.

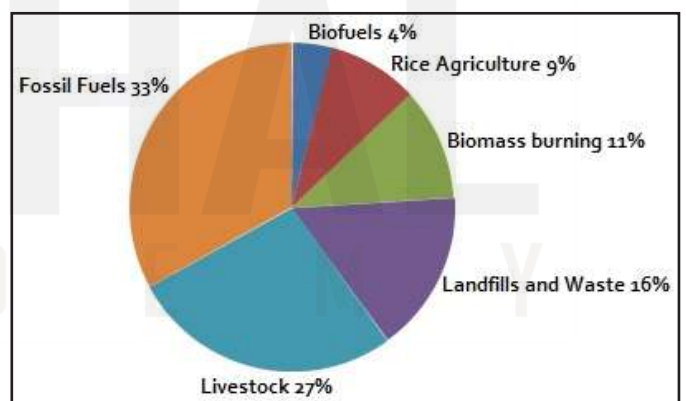
### What is methane?

- Methane (CH<sub>4</sub>) is a **colorless, odorless** and **highly flammable** gas.
- It is composed of **carbon** and **hydrogen**.
- It is also a potent **greenhouse gas**, meaning it affects climate change by contributing to increased warming.
- Methane enters the atmosphere via **human-related activities** and **natural sources**.



### Sources of methane

- Globally, **50 to 65%** of total methane emissions come from the following **human-caused activities**:
  - Raising **livestock**
  - Leaks from **natural gas** systems
  - **Landfills** and **waste** from homes and businesses
- **Agriculture** is the predominant source.
- **Livestock emissions** (from manure and gastroenteric releases) account for roughly **32 per cent** of human-caused methane emissions.
- **Paddy rice cultivation** in which flooded fields prevent oxygen from penetrating the soil, creating ideal conditions for **methane-emitting bacteria** – accounts for another **8 per cent** of human-linked emissions.



### Consequences of methane

- **Potency:**
  - Methane is about **80 times more powerful** at warming the atmosphere than carbon dioxide over a 20-year period.
- **Ozone formation:**
  - Methane also contributes to the **formation of ground-level ozone** a hazardous air pollutant and greenhouse gas.



- **Global warming:**

- Methane has accounted for roughly **30 per cent of global warming** since pre-industrial times and is proliferating faster than at any other time since record keeping began in the 1980s.

### How do cows and other animals produce methane?

- **Ruminants** such as **cows, sheep, goats, and buffaloes** have a special type of digestive system that allows them to break down and digest food that non-ruminant species would be unable to digest.
- Stomachs of ruminant animals have **four compartments**, one of which, the rumen, helps them to store partially digested food and let it ferment.
- This **partially digested and fermented food** is regurgitated by the animals who chew through it again and finish the digestive process.
- As grass and other vegetation ferments in the rumen, it **generates methane**, a potent greenhouse gas.
- Ruminant animals such as cows and sheep **release** this methane mainly through **burping**.
- Given the very **large numbers of cattle and sheep** on farms in dairy-producing countries, these emissions add up to a significant volume.
- It is estimated that the ruminant digestive system is responsible for **32 per cent** of all methane emissions from human activity.

### Way forward:

- The world needs to begin by **rethinking our approaches** to agricultural cultivation and livestock production.
- **That includes:**
  - leveraging new technology,
  - shifting towards plant-rich diets and
  - embracing alternative sources of protein.
- It will be key if **humanity is to slash greenhouse gas emissions** and limit global warming to **1.5°C**, a target of the **Paris climate change agreement**.
  - The Paris Agreement, often referred to as the **Paris Accords** or the Paris Climate Accords, is an **international treaty** on climate change.
  - Adopted in 2015, the agreement covers **climate change mitigation, adaptation, and finance**.



## Global and Indian Initiatives to tackle Methane Emissions

- **India Greenhouse Gas Program:**

- This Program is an **industry-led voluntary framework** aiming to help Indian companies **monitor progress** towards **measurement and management of GHG emissions** using tools and methodologies from WRI's (World Resources Institute) GHG Protocol.

- **Harit Dhara:**

- The Harit Dhara is an **anti-methanogenic feed supplement** prepared from the **natural phyto-sources**.
- It is found very effective in **reducing the enteric methane emission** upto **17% to 20%** when incorporated in the livestock feed.

- **Methane Alert and Response System:**

- UNEP's International Methane Emissions Observatory launched the Methane Alert and Response System (MARS) at **COP27**, a new initiative to **accelerate implementation of the Global Methane Pledge** by transparently scaling up global efforts to **detect and act on major methane emissions sources**.

- **Global Methane Pledge:**

- The Global Methane Pledge was launched at COP26 in November 2021 to catalyse action to reduce methane emissions.
- Led by the United States and the European Union, the Pledge now has 111 country participants who together are responsible for 45% of global human-caused methane emissions.
- By joining the Pledge, countries commit to work together in order to collectively reduce methane emissions by at least 30% below 2020 levels by 2030.

- **Global Methane Initiative:**

- The Global Methane Initiative (GMI) is an international public-private partnership focused on reducing barriers to the recovery and use of methane as a valuable energy source.

## HEAT DOME

*Context: Europe is experiencing an extreme warm spell because of the formation of a heat dome over the region.*

### What is a heat dome?

- A heat dome occurs when an **area of high-pressure traps warm air** over a region, just like a lid on a pot, for an **extended period of time**.
- The longer that air remains trapped, the **more the sun works to heat the air**, producing warmer conditions with every passing day.
- Heat domes generally stay for a few days but sometimes they can **extend up to weeks**, which might cause **deadly heat waves**.
- **High pressure and high temperature:**
  - Any region of **high pressure**, whether a heat dome or not, **forces air to sink** and once it reaches the ground, it gets **compressed** and becomes even warmer.
  - When air sinks, it gets **drier** and further **raises the temperature** of the area.

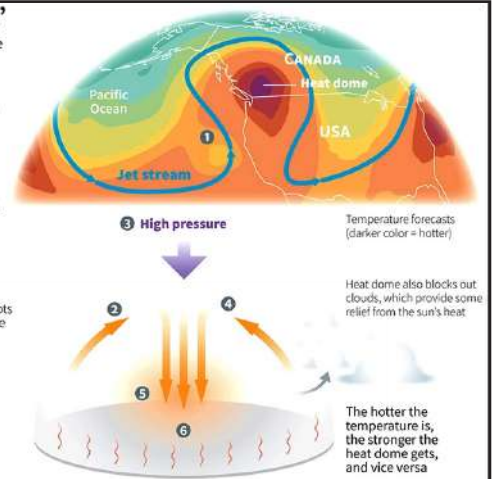
### How is a heat dome formed?

- The heat dome's formation is related to the **behaviour of the jet stream** (an area of fast-moving air high in the atmosphere).
- The jet stream is believed to have a **wave-like pattern** that keeps moving from **north to south** and then **north again**.
- When these waves **get bigger**, they move **slowly** and sometimes can become **stationary**.
- This is when a **heat dome forms**.
- Although heat domes are likely to have always existed, researchers say that **climate change may be making them more intense and longer**.

### The 'heat dome'

Occurs when the atmosphere traps hot ocean air like a lid or cap

- 1 In summer, the **jet stream** (which moves the air) shifts northward
- 2 Hot and stagnant air **expands upwards**
- 3 Strong and **high-pressure** atmospheric conditions combine with influences from La Nina act like a dome or cap
- 4 In a process known as **convection**, hot air attempts to escape but high pressure pushes it back down
- 5 Under the dome, the air **sinks and compresses**, releasing more heat
- 6 As winds move the hot air east, the jet stream traps the air where it sinks, resulting in **heat waves**



## MICROPLASTICS

*Context: Scientists from South Korea have developed a new water purification system that can quickly and efficiently filter out microplastics.*

### Key details:

- The **polymer** used is relatively **inexpensive** with excellent **adsorption performance** and good **photothermal properties**.
- In an experiment, **over 99.9 per cent of contaminants** were taken out of the water in **just 10 seconds**.
- Microplastics have inundated the world, finding their way into the **human food chain**.
- While some **traditional carbon-based filters** can filter out microplastics, they have **limitations** — the **adsorption rate is slow** and they are **not energy-efficient**.
- The Korean team's breakthrough system requires **lower levels of energy**, making it ideal for **solar-based use**.
- This is particularly useful for **developing countries** where power supply is inconsistent.

### What are Microplastics?

- Microscopic plastic/ microplastics are those particles with less than 5 millimeters (0.2 inches).

| Particle category   | Diameter range (mm = millimetres) |
|---------------------|-----------------------------------|
| Nanoplastics        | < 0.0001 mm (0.1µm)               |
| Small microplastics | 0.0001 - 1 mm                     |
| Large microplastics | 1 - 4.75 mm                       |
| Mesoplastics        | 4.76 - 200 mm                     |
| Macroplastics       | >200 mm                           |

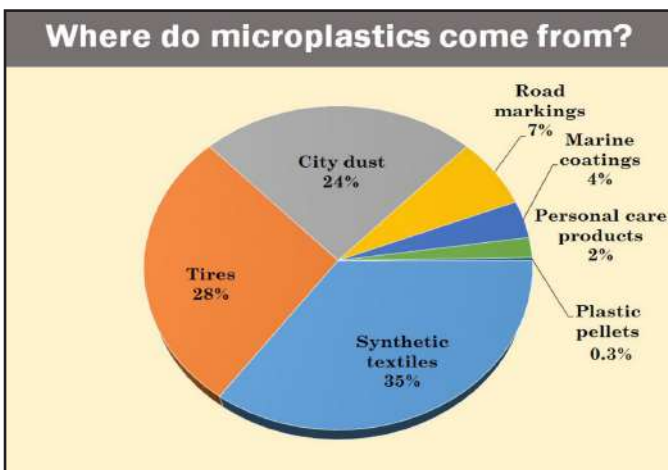
- There are two types:
  - primary microplastics and
  - secondary microplastics.

**primary microplastics**  
= 19 to 31% of microplastics in the oceans  
directly released into nature as small particles  
coming mainly from land activities e.g. cosmetics such as facial scrubs, car tyres or laundering of synthetic clothes

**secondary microplastics**  
= 69 to 81% of microplastics in the oceans  
originate from large pieces of plastic that fragment into smaller pieces in nature e.g. bottles, bags or fishing nets

**Where Do Microplastic Come From?**

- Plastic materials are either **originated at land or at the ocean.**
- Around **70-80% of ocean plastics have land-based sources**, while **20-30% of plastics come from marine sources.**
- Of the plastic materials coming from **marine sources**, half is estimated to be caused by **fishing fleets that leave behind fishing nets, lines, ropes, and sometimes abandoned vessels.**
- Regarding **land waste**, discarded plastic materials enter the marine environment as **trash, industrial discharge, or litter** via inland waterways, wastewater outflows, and wind transport.
- While 25% of land-based discharges come from within the waste management system, the largest slice, **75% is uncollected waste.**



**Are Microplastics Harmful and Dangerous for Human Health?**

**What are the effects of microplastics in humans?**

Microplastics (plastic particles <5 mm) can come from the breakdown of plastic objects, car tires, and clothing, but also from their use in cosmetics and other applications. They have diverse shapes and encompass a suite of chemical and biological constituents. Microplastics can enter the human body through ingestion and inhalation where they may be taken up in various organs and might affect health, for example, by damaging cells or inducing inflammatory and immune reactions.

**Where do microplastics come from?**

- Plastic bottles
- Baby bottles
- Tires
- Paint
- Cosmetics
- Clothes

**Microplastics are diverse in shape and composition.**

- Fibers
- Beads
- Foam
- Fragments

**Microplastics can enter the body.**

- Ingestion of contaminated food and water

**Possible health effects of microplastics?**

- DNA damage, cellular damage, inflammation?

**NOBLE'S HELEN**

**NOBLE'S HELEN**

**Context:** A swallowtail butterfly disappearing from its previously known ranges from Myanmar and southern China to Vietnam has been recorded for the first time in India.

**Key details**

- The Noble's Helen was once common in the **montane forest** at moderate elevations in northern Thailand.
- Montane ecosystems refer to any ecosystem **found in mountains.**
- It is now known to be **very rare** in the ranges it was previously recorded.
- The recording of Noble's Helen was for the **first time in India.**

**Importance of butterflies**

- Butterflies are considered **vital indicators** of the state of biodiversity and key ecosystem functions.
- Butterflies are **central pollinators** to many agricultural crops.
- Their ecological function is also a **food source** to predators like birds, spiders, lizards and other animals.

**HIMALAYAN GRIFFON VULTURE**

**Context:** A rare species of Himalayan griffon vulture was rescued by locals in Kanpur.

**Key details:**

- The Himalayan vulture or Himalayan griffon vulture as it is called is an **old-world vulture native to the Himalayas** and the adjoining **Tibetan Plateau.**
- **IUCN status:** Near Threatened.



- **Distribution:** From **Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan, Afghanistan and Iran to Pakistan to India, Nepal, Bhutan to western China and Mongolia.**

**VULTURE CONSERVATION IN INDIA**

- 96% of India's vulture population declined between 1993 and 2003.
- Therefore, the Central government put into place two action plans to protect the species at the national level – the first in 2006 and the second, ongoing plan for 2020–2025.
- One of the important action points in this nationwide plan is the formation of State-level committees to save the critically endangered population of vultures.



**VULTURE SPECIES IN INDIA**

- 9 species of vultures are found in India.
- Of these nine species, 4 are listed as **Critically Endangered** species of Vultures and one as endangered species in IUCN red list of endangered species.



**SPECIES OF VULTURES FOUND IN INDIA AND THEIR CONSERVATION STATUS**

1. Indian Vulture or Long-billed vulture (*Gyps indicus*)-Critically Endangered
2. Indian White-backed Vulture (*Gyps bengalensis*)-Critically Endangered
3. Red-headed Vulture (*Sarcogyps calvus*)- Critically Endangered
4. Slender-billed Vulture (*Gyps tenuirostris*) - Critically Endangered



## GREEN HYDROGEN MISSION

**Context:** The Union Cabinet recently approved the National Green Hydrogen Mission with an initial outlay of ₹19,744 crore, in a move aimed at making the country a global hub to produce, utilise and export green hydrogen and its derivatives.

### Objective:

- Mission aims to make India a Global Hub for production, utilization and export of Green Hydrogen and its derivatives.
- Mission will help in India becoming energy independent and in Decarbonisation of major sectors of the economy.

### Mission outcomes by 2030:

- Development of green hydrogen production capacity of at least 5 MMT (Million Metric Tonne) per annum with an associated renewable energy capacity addition of about 125 GW in the country;
- Over Rs. Eight lakh crores in total investments;
- Creation of over Six lakh jobs;
- Cumulative reduction in fossil fuel imports over Rs. One lakh crore;
- Abatement of nearly 50 MMT of annual greenhouse gas emissions;

### Benefits of the NGHM

- creation of export opportunities for Green Hydrogen and its derivatives;

- Decarbonisation of industrial, mobility and energy sectors;
- reduction in dependence on imported fossil fuels and feedstock;
- development of indigenous manufacturing capabilities;
- creation of employment opportunities; and
- development of cutting-edge technologies.

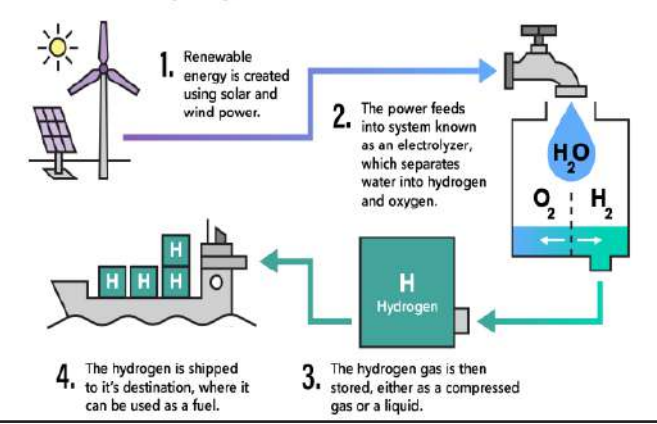
### Targets under the Mission:

- India's Green Hydrogen production capacity is likely to reach at least 5 MMT per annum.
- The targets by 2030 are likely to bring in over Rs. 8 lakh crore investments and create over 6 lakh jobs.
- Nearly 50 MMT per annum of CO<sub>2</sub> emissions are expected to be averted by 2030.

### Highlights of the NGHM:

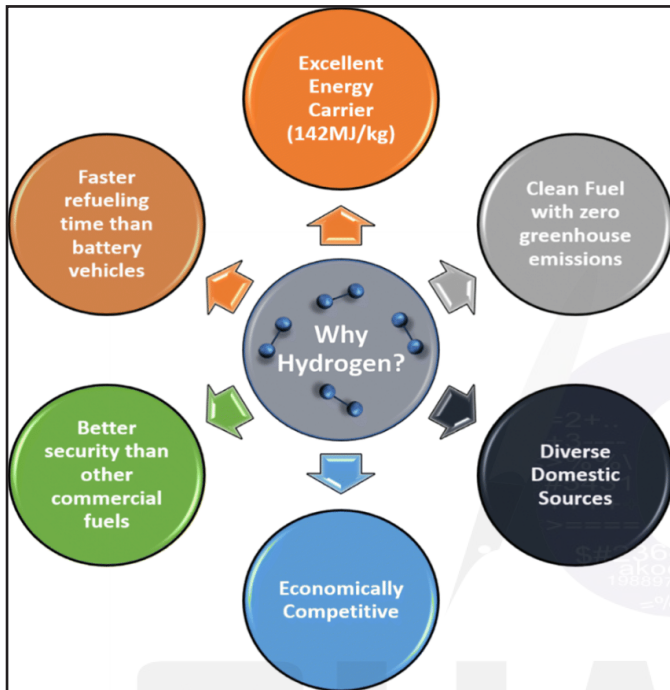
- MNRE will formulate the scheme guidelines for implementation of the respective components.
- The Ministry of New and Renewable Energy is expected to **operate a single-window clearance system for proposals.**
- Under the **Strategic Interventions for Green Hydrogen Transition Programme (SIGHT)**, two distinct **financial incentive mechanisms** will be provided under the Mission –
  - targeting domestic manufacturing of electrolysers and
  - production of Green Hydrogen.
- Regions capable of supporting large scale production and/or utilization of Hydrogen will be identified and developed as **Green Hydrogen Hubs.**
- An enabling **policy framework** will be developed to support establishment of **Green Hydrogen ecosystem.**
- A robust **Standards and Regulations framework** will be also developed.
- Further, a **public-private partnership framework** for R&D (Strategic Hydrogen Innovation Partnership – SHIP) will be facilitated under the Mission.
- A **coordinated skill development programme** will also be undertaken under the Mission.

### How is Green Hydrogen Produced?



### Fuel cells

- Hydrogen is an energy carrier, not a source of energy.
- Hydrogen fuel must be transformed into electricity by a device called a fuel cell stack before it can be used to power a car or truck.
- A fuel cell converts chemical energy into electrical energy using oxidising agents through an oxidation-reduction reaction.
- Fuel cell-based vehicles most commonly combine hydrogen and oxygen to produce electricity to power the electric motor on board.
- Since fuel cell vehicles use electricity to run, they are considered electric vehicles (EVs).
- Inside each fuel cell, hydrogen is drawn from an onboard pressurised tank and made to react with a catalyst, usually made from platinum.
- As the hydrogen passes through the catalyst, it is stripped of its electrons, which are forced to move along an external circuit, producing an electrical current.
- This current is used by the electric motor to power the vehicle, with the only byproduct being water vapour.
- Hydrogen fuel cell cars have a near zero carbon footprint.
- Hydrogen is about 2-3 times as efficient as burning petrol, because an electric chemical reaction is much more efficient than combustion.

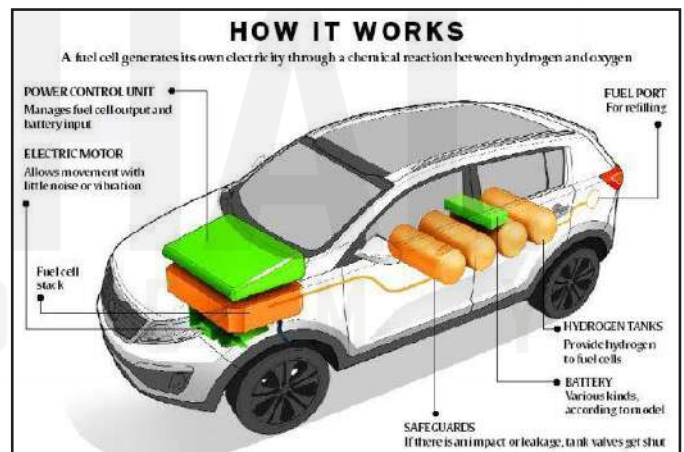


### The Colors of Hydrogen

|  |  |  |   |
|--|--|--|---|
| <b>Blue Hydrogen</b><br>Produced in a process known as steam methane reforming (SMR), in which natural gas is mixed with hot steam and a catalyst. | <b>Brown Hydrogen</b><br>The most environmentally damaging. It is produced from coal gasification, which generates carbon emissions. | <b>Green Hydrogen</b><br>Produced using electricity from renewable sources, such as hydro, solar, or wind power. | <b>Pink Hydrogen</b><br>Produced through electrolysis via nuclear energy.   |
| <b>Gray Hydrogen</b><br>Extracted from natural gas without recapturing the greenhouse gases released during the process.                           | <b>Turquoise Hydrogen</b><br>Produced using methane pyrolysis and solid carbon rather than gaseous emissions.                        | <b>Yellow Hydrogen</b><br>Produced through electrolysis using solar power.                                       | <b>White Hydrogen</b><br>Geological hydrogen found in naturally-occurring underground deposits created by fracking. |

### Advantages of Green hydrogen

- It is a clean burning molecule that can decarbonise a range of sectors including iron and steel, chemicals, and transportation.
- Renewable energy that cannot be stored or used by the grid can be channeled to produce hydrogen.
- Green hydrogen could eventually potentially replace fossil fuels and fossil fuel-based feedstocks in fertiliser production, petroleum refining, steel production, and transport applications.



### ASIAN ELEPHANT

*Context:* a recent article says the endangered Asian Elephant has lost most of its "optimal" habitat in the Nilgiri Biosphere reserve.

### About the Asian Elephant

- The Asian elephant also known as the Asiatic elephant, is the only living species of the genus **Elephas** and is distributed throughout the Indian subcontinent and Southeast Asia.



- The Asian elephant is the **largest living land animal in Asia**.
- **Threats:**
  - loss of habitat,
  - habitat degradation,
  - fragmentation and
  - poaching
- **Habitat**
  - Asian elephants inhabit **grasslands, tropical evergreen forests, semi-evergreen forests, moist deciduous forests, dry deciduous forests and dry thorn forests**, in addition to **cultivated and secondary forests and scrublands**.
- **Three subspecies are recognised:**
  - **the Sri Lankan elephant**
  - **the Indian elephant occurs in mainland Asia:**
    - **Bangladesh, Bhutan, Cambodia, China, India, Laos, Malay Peninsula, Myanmar, Nepal, Thailand, Vietnam**
- **In India the Indian Elephant is found in:**
  - Uttarakhand,
  - Uttar Pradesh
  - West Bengal
  - Western Assam
  - Arunachal Pradesh
  - Odisha
  - Jharkhand
  - Southern part of West Bengal
  - Karnataka
  - Tamil Nadu
  - Kerala
- **the Sumatran elephant**
- A **fourth potential subspecies, the Borneo elephant**, occurs in Borneo's northeastern parts, primarily in Sabah (Malaysia), and sometimes in Kalimantan (Indonesia).
- **Conservation status:**
  - **CITES:** The Asian elephant is listed on **CITES Appendix I**.
  - **IUCN:** Since 1986, the Asian elephant has been listed as **Endangered** on the **IUCN Red List**.

## INDIAN ELEPHANT VERSUS AFRICAN ELEPHANT

Visit [www.PEDIAA.com](http://www.PEDIAA.com)



**INDIAN ELEPHANT**

Indian elephant is a mega-fauna that inhabits southern Asia

Inhabit India, Bangladesh, Nepal, Myanmar, Sri Lanka, Bhutan, Malay, Laos, China, Cambodia, and Thailand

Mainly feed on the grass

A fully grown male elephant weighs between 3000-6,000kg

Only a small percentage of males have tusks

Ears are smaller in comparison

Have a twin-domed head with a notch in the middle

Skin is not as wrinkled

Have 19 to 20 pairs



**AFRICAN ELEPHANT**

African elephant is a mega-fauna native to Africa

Inhabit the rain forests of Central and West Africa, in sub-Saharan Africa, and the Sahel desert in Mali

A greater proportion of the diet consists of leaves of trees

An adult male elephant's weight is between 4,000-7,500kg

All males and females have tusks

Ears are larger in size and reach up over the neck

Have more rounded single dome heads

Have more wrinkled skin

Have 21 pairs of ribs

### SILENT VALLEY NATIONAL PARK

**Context:** A recent bird survey conducted at the Silent Valley National Park in Kerala identified 141 species, of which 17 were new. So far, 175 species of birds have been spotted in Silent Valley.

#### About Silent Valley National Park (Kerala)

- **Location:** Nilgiri hills, border of Kerala and Tamil Nadu
- It was explored in **1847** by the botanist **Robert Wight**.
- **Karimpuzha Wildlife Sanctuary** and **Mukurthi National Park** are located around it.
- **Bhavani River**, a tributary of Kaveri River, and **Kunthipuzha River**, a tributary of Bharathappuzha river, **originate in the vicinity of Silent Valley**.



- The **Kadalundi River** has also its origin in Silent Valley.
- Silent Valley is home to the **largest population of lion-tailed macaques**, an endangered species of primate.

## CLOUD FOREST

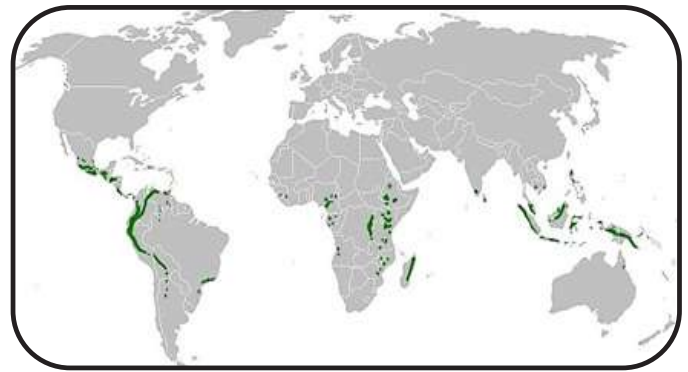
**Context:** A *Cloud Forest Bond* will incentivise governments to protect their cloud forests — forests that are on top tropical mountains, largely shrouded in mist, a new report advocated.

### Key details:

- Such a tool will **encourage carbon storage** and provide funding to set up **sovereign-level carbon finance schemes** as well as payments for ecosystem services.
- Cloud forests, which **occupy a limited area**, are under **great threat** and their **hydrological function** is of existential value to millions of people living downstream.
- Just **25 countries** hold **90 per cent of the world's cloud forests** that capture moisture from the air, providing fresh and clean water to people and industries below.
- These **twenty-five countries** are:
  - Indonesia, Tanzania, Democratic Republic of Congo, Colombia, Peru, Venezuela, Mexico, Papua New Guinea, Brazil, Ethiopia, Ecuador, Cameroon, Bolivia, China, Laos, Kenya, Malaysia, Angola, Uganda, Madagascar, Philippines, Gabon, Vietnam, Republic of Congo and Myanmar.
- The **Cloud Forest Bonds** will allow the **developing countries to improve their debt position** and fund the creation of new, long-term income streams from services provided by nature.
- These bonds can be in the form of **new bond issuances, debt-swaps** and **results-based financing instruments**.

### What is a Cloud Forest?

- Cloud Forests (**montane rainforests**) refer to the **vegetation of tropical mountainous regions** where there is **heavy rainfall** and **persistent condensation** resulting from the cooling of the moisture being pushed upwards by the mountains.
- They are usually characterized by a **persistent, frequent** and **seasonal low-lying layer of mist and cloud cover** usually at the **canopy level**.
- Cloud forests are rare since the exceptional conditions that create these forests are **only found in tropical areas with tall mountains**.



- Due to their unique characteristics, cloud forests are usually found **along the sides of the mountains** at elevations of between **3000 and 10000 feet** but as low as **1650 feet** in the **Tropics** between coordinates **23°N and 23°S**.
- **The Hydrological Cycle**
  - The **layer of clouds and mist** occurring in cloud forests form through the **evaporation of water forming warm air masses**.
  - The air mass is **carried upwards** by the **wind currents** until it **strikes the sides of the mountain** and are **deflected upwards** due to the naturally sloping land.
  - As the air masses **rise towards the mountains**, they **begin to cool**.
  - The **moisture** in the air masses **condenses** and begins to cool **forming clouds and mist**.
  - **Fog drips** usually occur when water droplets cling to the needle-shaped leaves and accumulate to large drops that drop to the ground, thus contributing to the hydrological cycle.
- **Characteristics of cloud forests**
  - Cloud forests form an ecosystem characterized by **dense forests** and **shorter trees**, coupled with **increased stem density** and a **lower diversity of woody plants**.
  - The trees here are **generally shorter** and their **leaves become thicker, harder, and smaller** as the altitude increases.
  - The diffuse light, high humidity, and crooked tree trunks with twisting branches provide a conducive environment for the **growth of epiphytic plants**.
  - The most famous of the epiphytes include **orchids**.

### Difference between cloud forests and rainforests

- The definition of cloud forests can be ambiguous with most countries adopting the terms **Afromontane** and **upper montane rain forests** to refer to these ecosystems.

- As such there is a **confusion between rainforests and cloud forests.**
- The two are **different ecosystems** where:
  - **rainforests** refer to **tropical forests** with an **annual rainfall of 100 inches** with **trees forming a canopy.**
  - Cloud forests are a **type of rainforests** but with **altitudes higher than 3000 feet** and characterized by an **overwhelming number of epiphytes** among the large trees.
  - The **distinguishing characteristics** are the **elevations** at which each ecosystem thrives and the **cloud cover** found in the cloud forests.
- Both rain forests and cloud forests **produce their own precipitation.**
  - The difference is that **with cloud forests, much of that precipitation comes directly from the clouds that filter through the trees.**

**Key details:**

- LNG is to **compensate for lost Russian gas supplies**, with four new terminals set to come online in Germany alone.
- With LNG creating almost **10 times more emissions than piped gas** by one estimate, its rapid expansion will likely **compromise climate targets.**

**What is liquified natural gas? (combine all the information in a single infographic if possible)**

**WHAT IS LNG?**

LNG stands for Liquefied Natural Gas. It's processed natural gas that has been turned into a liquid by chilling it to -162 degrees Centigrade.

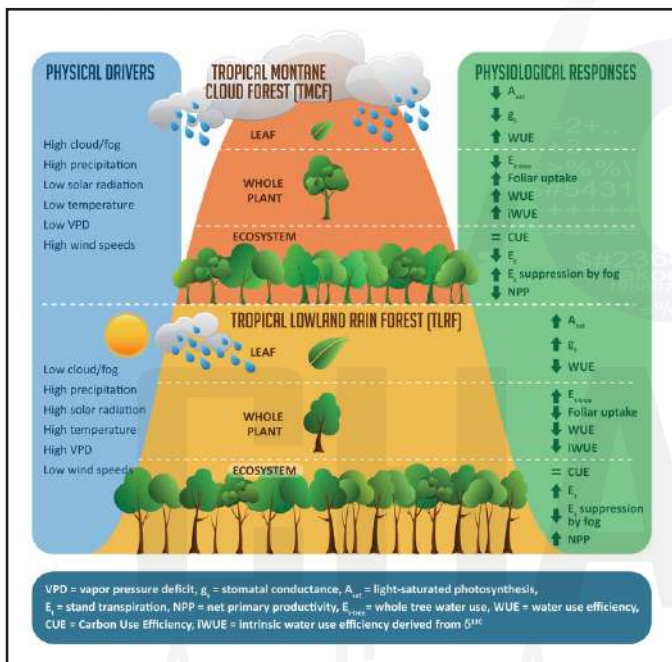
As a liquid, it takes up only 1/600th of the original gas volume, and that makes it easier to ship to overseas markets.

ENERGY.GOV

- **Why shipping of LNG from USA is bad decision for Germany.**

**Why shipping of LNG from USA is bad for Germany?**

- High cost of Liquefaction
- Methane leakage in LNG value chain will contribute to Global warming
- Higher operating and infrastructure cost for imported LNG from USA
- The LNG value chain would waste a lot of energy



**LIQUIFIED NATURAL GAS**

**Context:** As liquified natural gas tankers carrying fracked US gas start to land in northern Germany, climate activists are calling it a major setback in the effort to limit global heating.

**CARBON FOOTPRINT OF LNG**

- It emits about **twice as much greenhouse gas** as ordinary natural gas.
- Processing LNG is so energy- and carbon-intensive.
- It can **create almost 10 times more carbon emissions** than piped gas.
- For producing equivalent amount of power, LNG emits:
  - **14 times** as much carbon as solar power
  - **50 times** as much carbon as wind power



## KELP FORESTS

**Context:** *Kelp forests — underwater ecosystems formed in shallow water by the dense growth of several different species known as kelps — are declining because of climate change, showed a new study.*

### Key findings of the study:

- Kelp populations at **equatorward-range** edges are particularly **vulnerable** to climate change as these locations are undergoing **warming at or beyond thermal tolerance** thresholds.
- Due to this, the **unique adaptive or evolutionary genetic diversity** that the rear-edge populations (populations in warm, low-latitudes) may contain is also **under threat** due to rapid warming.
- Kelp forests provide **underwater habitats** to hundreds of species of invertebrates, fishes, and other algae and have great ecological and economic value.
- Loss of kelp forests will also lead to a **decline of the unique biodiversity** that they support.
- *Ecklonia radiata*, the **dominant and most widely distributed** Laminarian kelp in the southern hemisphere, rapidly **succumb to warmer temperatures** in spring and summer when temperatures exceed 27 degrees Celsius.
- Kelp can sometimes persist at **lower latitudes**, aided by **cool water upwelling** or in deep-water refugia where they are **protected by thermocline** (the transition layer between the warmer mixed water at the surface and the cooler deep water below).

### What is a kelp forest?

- Kelp is the name of various **large brown algae seaweed species** that are similar to plants and grow in waters.
- They prefer **shallow, relatively clear and cold waters** that are rich in nutrients.
- In the right condition, kelp form large underwater kelp forests that are among the **richest ecosystems on Earth**.
- The smaller areas populated by kelp are called **kelp beds**.

### Where are kelp forests found?

- The underwater forests that are made up of kelp prefer colder waters and can be found almost **anywhere close to polar latitudes**.
- Most of them can be found along the **Pacific Coast**, but they also appear by the **western coasts of South Africa and Europe**.

- The kelp forests off the coast of Scotland are mainly found on the West coast.

### Threats

- As a result of global warming, oceans are also warming up, **changing the right temperature** for kelp forests.
- If the shallow waters are too warm, they **don't provide enough nutrition** to kelp, making them shorter and weaker.
- Kelp forests are also in danger because of **overfishing**; the more fish are taken out of these habitats, the more the **food chain is affected**.
  - **Fewer fish mean fewer predators that can result in the overpopulation of certain species that are harmful to kelp.**
- **Coastal developments** also disrupt their natural balance.
- Just like with the oceans themselves, **pollution is a big issue** kelp forests are facing.

## ASSAM'S DEEPOPOR BEEL

**Context:** Deepor Beel, Assam's only Ramsar site, which is troubled by development projects and urban waste, has 30 more waterfowl species than the total counted in 2022, a bird survey has found.

### About Deepor Beel:

- Deepor Beel is located in **Assam**.
- It is a **permanent freshwater lake**, in a former channel of the **Brahmaputra River**.
- It is **also called a wetland** under the **Ramsar Convention** which has listed the lake in November **2002**, as a Ramsar Site.
- Beel means **wetland** or lake in Assamese.
- It is a representative of the wetland type under the **Burma monsoon forest biogeographic region**.

## OZONE HOLE

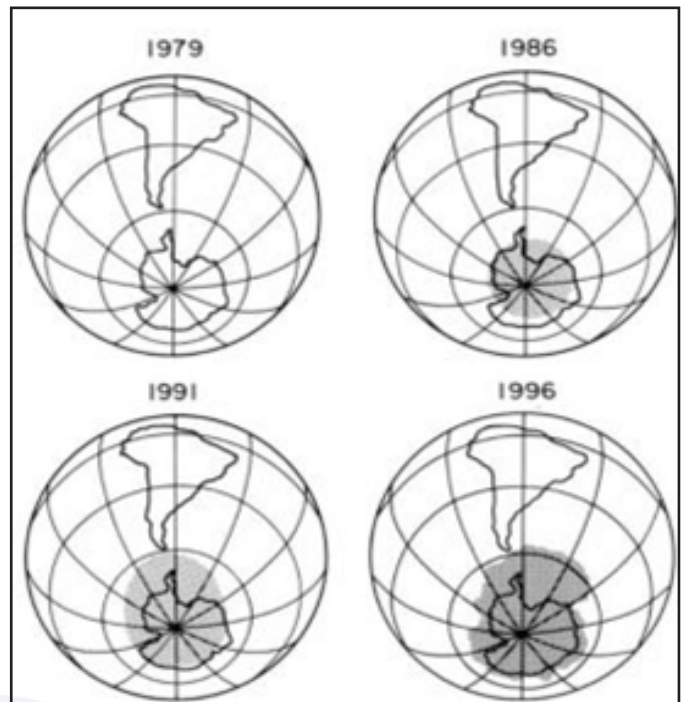
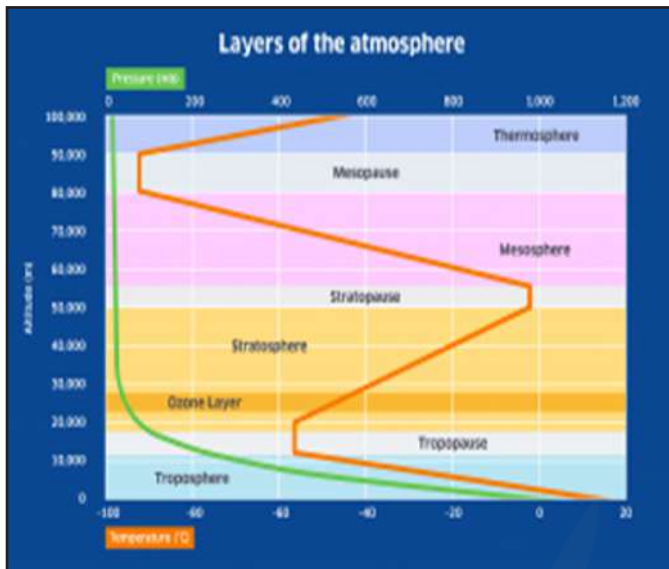
**Context:** *Earth's protective ozone layer is slowly but noticeably healing at a pace that would fully mend the hole over Antarctica in about 43 years, a new UN report says.*

### About ozone layer

- Oxygen (O<sub>2</sub>) makes up **21% of the Earth's atmosphere**, and **ozone** makes up **less than 0.001%**, so it is very small, however despite this, it has a very important contribution to our life.
- Ozone molecules are created by the **interaction of ultra-violet (UV) radiation** from the Sun with O<sub>2</sub> molecules to **form O<sub>3</sub> molecules**.

- Because UV radiation is more intense at higher altitudes where the air is thinner, it is in the stratosphere where most of the ozone is produced, giving rise to what is called the 'ozone layer'.
- The ozone layer extends between about **10 and 40km altitude**, peaking at about 25km.

- Because these chemicals are so inert, they are **able to stay in the atmosphere long enough** to be carried upwards to the stratosphere where they can damage the ozone layer.



### Where is ozone produced?

- Most of the **stratospheric ozone** is produced at **tropical latitudes**, but high altitude winds spread it over the whole planet.
- It is continually forming and breaking down, and its distribution **over the planet is not uniform or constant**.
- It is only in recent decades that **human activities** have led to ozone being destroyed much faster than it can be formed, thereby **creating the ozone hole** that exists today.
- Ozone can also be formed at **ground level** to produce '**photochemical smog**'; and, as **ozone** is a **toxic gas**, there is a health hazard when ozone reaches high levels.
- This problem occurs primarily in the summer in cities with a high amount of traffic when **sunlight interacts with car exhaust fumes** containing **nitrogen oxides**.

### Why has the ozone hole developed?

- The term 'ozone hole' refers to the **depletion of the protective ozone layer** in the upper atmosphere (stratosphere) over Earth's polar regions.
- The primary chemicals involved are **chlorofluorocarbons (CFCs for short)**, **halons**, and **carbon tetrachloride**.
- CFCs in particular were previously used for a wide range of applications, including **refrigeration, air conditioning, foam packaging, and making aerosol spray cans**.

### The Montreal Protocol

- CFCs were commonly found in refrigerants, solvents, propellants, and foam-blowing agents **before the Montreal Protocol** was agreed on in the **1980s**.
- It is an **international commitment to phase out ozone-depleting chemicals** that was universally ratified by all countries that participate in the UN.

### India and Ozone layer protection

- India became a party to the Montreal Protocol on Substances that Deplete the Ozone Layer in June 1992 and since then has ratified the amendments to the Montreal Protocol.
- India has successfully met the phase-out targets of all the Ozone Depleting Substances as per the Montreal Protocol Schedule.
- India is one of the first countries in the world to launch a cooling action plan in 2019.
- This comprehensive plan is aimed at reducing cooling demand, enabling refrigerant transition, enhancing energy efficiency and better technology options with a 20-year time horizon.
- India signed the Kigali Amendment to Montreal protocol to nudge the markets to make a faster transition from HFCs to cleaner gases.



- It would boost domestic manufacturing and employment generation goals.
- The ratification to Kigali agreement signifies that India is ready to compete in the market for low-Global Warming Potential GWP (climate-friendly) refrigerants, which will spur domestic innovation and attract international investments.
- The decision would pave the way for India to achieve its climate change mitigation goals and cooling commitments.
- India is among a small group of countries on track to meet its climate commitments under the Paris Agreement.

## ZEBRAFISH

**Context:** A protein found in the backbone of zebrafish that plays a positive role in disc maintenance and promotes regeneration in aged discs between vertebrae can have potential therapeutic implications to promote regeneration in degenerated human discs.



### What is Disc generation?

- In humans, **discs degenerate naturally**, leading to many related **health concerns**, including **low back, neck, and appendage pain**.
- Currently, only **symptomatic treatments** for disc degeneration are available, including **pain relievers or anti-inflammatories**.
- In severe cases, **disc replacement or disc fusion surgery** is performed.
- Thus, there is an urgent need to develop a treatment either to **suppress disc**

### About Zebrafish:

- Zebrafish are **tropical fresh-water fish** in the **minnow family**.
- It is **native to South Asia**.
- It is a popular **aquarium fish**.
- The zebrafish is an important and widely used **vertebrate model organism** in scientific research, for example in **drug development**, in particular **pre-clinical development**.
  - In this regard, zebrafish are useful because the **embryo is transparent**, it develops **outside of its mother**, and its development from eggs to larvae happens in just three days.

## LANTANA CAMARA

**Context:** Weeding out the invasive tropical American shrub, *Lantana camara*, appears to alter the composition of bird species in a forest, according to a new study conducted in Central India.

### WHY LANTANA CAMARA IS A PROBLEM

**Workers uproot lantana and put it upside down at Asola**

- > **Most aggressive invasive alien species**, it covers almost a **third of Delhi's Ridge**
- > Has invaded tropic and sub-tropical regions of all five continents
- > Introduced in India by Portuguese and others as an ornamental plant

**FINAL SOLUTION**

**CUT ROOTSTOCK METHOD**

- > Cut portion between stem and root using shovel
- > Lift and put the plant upside down
- > This creates a hormonal imbalance, so no new root is produced and lantana dries up
- > Clean the area of any germinating lantana
- > Plant native shrubs or creepers

Native to Central and South America | Spread by birds

**WHY IT'S DANGEROUS**

Alters the forest eco-system

Results in failure of regeneration of forests

Has invaded several million hectares of forests in India

Rate of growth is **1.5 inches** per day

Produces volatile chemical that bars insects from coming near it, except its native insect

## YANGTZE FINLESS PORPOISE

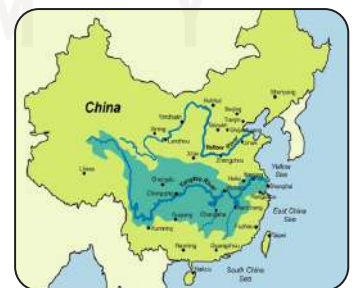
**Context:** Checking sand mining can help the population of the critically endangered Yangtze finless porpoise to rebound, scientists found.

### About Yangtze finless porpoise

- The Yangtze finless porpoise belongs to the group of animals which also includes **dolphins and whales**.
- It is the **only freshwater porpoise** in the world and **breeds just once in 18 months**.
- It is **endemic to the Yangtze River in China**, making it the country's **only known freshwater cetacean** following the **possible extinction of the baiji**.
- **IUCN status:** Critically Endangered

### Yangtze river:

- The Yangtze is the **longest river in Eurasia**, the **third-longest in the world**, and the **longest in the world to flow entirely within one country**.
- It rises at **Jari Hill** in the **Tanggula Mountains** of the **Tibetan Plateau** and flows into to the **East China Sea**
- Its **drainage basin** comprises **one-fifth of the land area of China**, and is home to nearly one-third of the country's population.



## China's finless porpoise

Rarer than pandas

### Yangtze finless porpoise

*Neomeris phocaenoides asiatica*

**Population**  
Estimated at 1,102 in 2017,  
compared to more than  
1,800 giant pandas

#### Characteristics

- Grey dolphin-like animal with a hint of a grin on bulbous face
- Does not have external ears; hears when sound reverberates through head, throat, jaw and acoustic fat pads
- Has spade-shaped teeth
- Usually in groups of 2-3 individuals

IUCN Red List of  
Threatened Species:  
**Critically endangered**

Photo: Yangtze finless porpoise swimming in a pool at Baiji dolphinarium in Wuhan, May 10 (Johannes Eisele)

#### Major threats

- Overfishing
- Increases in vessel traffic, pollution and habitat degradation
- Hydroelectric dams

#### Diet

Small fish, shrimp  
squid, octopus



**Habitat:**  
The porpoise are thought to remain in and around the vast river

## WHAT IS LAND SUBSIDENCE?

**Context:** Almost a week after cracks appeared in many roads and hundreds of houses of Joshimath, Uttarakhand, authorities declared it a landslide and subsidence-hit zone.

### What is land subsidence?

- According to the National Oceanic and Atmospheric Administration (NOAA), subsidence is the sinking of the ground because of underground material movement.
- Reasons can be man-made or natural:
  - removal of water, oil, or natural resources, along with mining activities
  - Earthquakes
  - Soil erosion
  - Soil compaction
- Reasons behind Joshimath subsidence:
  - unplanned construction,
  - over-population,
  - obstruction of the natural flow of water and
  - hydel power activities.
  - the area is a seismic zone, which makes it prone to frequent earthquakes.
  - the subsidence in Joshimath might have been triggered by the reactivation of a geographic fault — defined as a fracture or zone of fractures between two blocks of rock — where the Indian Plate has pushed under the Eurasian Plate along the Himalayas.

### Need of the hour:

- Finding other source of energy generation in long run.
- Developing sustainable infrastructure development strategy in fragile Himalayan ecosystem.
- Replace huge hydropower projects with small hydropower projects.
- Use traditional knowledge of local people.
- Put safety of people first.
- More intensive and continuous monitoring of the region through seismic monitoring, landslide monitoring and satellite imaging.
- Sustainable and controlled urbanisation.

### 1976 Mishra Committee Report suggestions:

- Restriction on heavy construction in the Joshimath region.
- Avoid removing boulders, pebbles and large stones from the base of the hills.
- Seal the cracks that are developed in bottom most points of the hills.
- Conserve the trees, avoid agriculture on steep slopes, prevent water seepage in loose soils etc.

## SENNA SPECTABILIS

**Context:** The Nodal Centre for Biological Invasions (NCBI) at the Kerala Forest Research Institute (KFRI) has come out with a management plan to eradicate *Senna spectabilis*.

### About *Senna spectabilis*

- Senna spectabilis* is a plant species of the legume family Fabaceae native to South and Central America.
- They are often grown as an ornamental.
- They are also known as golden wonder tree, popcorn tree, golden shower tree.
- The plant has become an invasive alien species in parts of and also in South-India.
- Currently, *S. spectabilis* is overtaking native tree species of forestry ecosystems around the world because of its ability to grow quickly.

## M-SAND

**Context:** Coal India Ltd to Launch M-Sand Projects.

### Key details:

- Sand is classified as a "minor mineral", under The Mines and Minerals (Development and Regulations) Act, 1957 (MMDR Act) and administrative control over minor minerals vests with the State Governments.

- **Sand Mining Framework (2018)** prepared by Ministry of Mines envisages alternative sources of sand in the form of **Manufactured Sand (M-Sand)** from crushed rock fines (crusher dust), sand from **Overburden (OB)** of coal mines.

### What is M-Sand?

- Manufactured sand (M-Sand) is a **substitute of river sand** for concrete construction.
- Manufactured sand is **produced from hard granite stone** by crushing.
- **Advantages**
  - M Sand has **higher Fineness Modules Index** compared to the natural river sand, which gives good workability for concrete.
  - M sand is **free from silt and clay particles** which offer better abrasion resistance, higher unit weight and lower permeability.
  - **Less disruptive** to the environment, as it reduces sand mining from river beds.
  - Perfect grading and cubical shape of M Sand gives **high strength and great durability** to concrete.
  - More **cost-effective** than river sand due to low transportation cost and consistency in availability.
- **Disadvantages**
  - Due to its smooth and angular textures, leads to **more water and cement requirement** to achieve the expected workability, thereby **increase in overall costs**.
  - If the M Sand contains a large number of micro fine particles, it can **affect the strength and workability of concrete**.

### KEWDA OIL

*Context: Families in the coastal pockets of Odisha's Ganjam district have been eking out a living by preparing aromatic kewda oil for years, and a recent growth in demand has put a smile on their faces.*



### Key details:

- **Ganjam kewda (Pandanus fascicularis)** oil is **steam-distilled** from the flower of the aromatic screw pine plant.
- It is used as an **aromatic** in the food industry and other sectors.

- It is registered under the **Geographical Indications of Goods (Registration and Protection) Act, 1999** by the Government of India.

### • About Kewra:

- Kewra is an **essential oil** distilled from the male flower of the fragrant screw pine.
- The plant is native to **Tropical Asia, Southeast Asia** and **Australasia**.
- Approximately **95% of kewra flowers** exported from India are collected from areas surrounding Berhampur city in **Ganjam district**.
- Kewra is also used in **traditional Indian perfumery**, both as functional fragrance and in ittar.

### • Kewra Oil

- The Kewra oil also known as **Pandanus odoratissimus** comes to be hydro-distilled from the flower part of the plant.
- Kewra oil is basically extracted out of the flowers of the kewra plant through the **steam distillation process**.

### • Uses:

- It is widely used in the **aromatherapy treatments** to calm down the body
- It is used as an active ingredient in various recipes. It gives a nice fragrance to the food and adds a unique flavor to the dishes. It makes the dish more relishing and delicious.
- It is extensively used as an **antibacterial and an antiseptic**.
- Since this oil has stimulant and antispasmodic properties, it is applied on the rheumatoid pains to get instant relief
- Leaves are used as a spice in South East Asia to flavor curries and desserts.
- In traditional medicine these leaves have been used to treat chest pains, reduce fevers, and inflammation from arthritis.
- Chewing the leaf helps oral health and stops bleeding gums.
- It is thought that they might have **anti-cancer properties** too and trials are being carried out to see if they are effective against cancer.
- The leaves contain a natural insecticide which has been effective in killing mosquitoes.





# SCIENCE & TECHNOLOGY

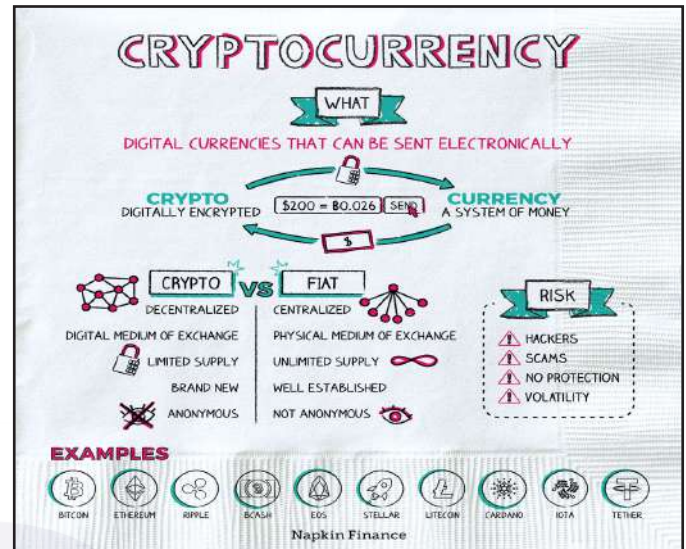
## CRYPTO AWARENESS CAMPAIGN

**Context:** The Investor Education and Protection Fund (IEPF) will launch an outreach programme soon to create awareness of **cryptocurrencies and online gaming**.

### Key details:

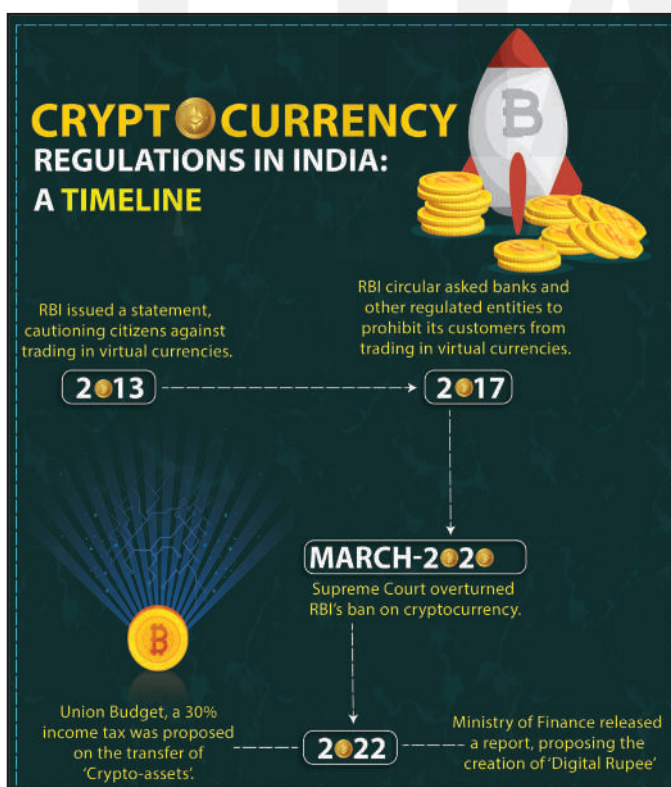
- **Need:**
  - The need for the outreach is based on the observation that both crypto-assets and online gaming (that extends to gambling and betting) are **still being promoted in a risky manner** despite the recent turmoil in the sector.
- **What is IEPF?**
  - The Investor Education and Protection Fund (IEPF) is **managed by the IEPF Authority**, which was **set up in 2016** under the provisions of the **Companies Act, 2013**.
- The Authority is entrusted with the responsibility of:
  - administration of the IEPF
  - promoting awareness among investors,
  - makes refunds of shares, unclaimed dividends, matured deposits and debentures to rightful claimants.

## What is cryptocurrency?



## Concern about crypto

- **Unregulated currency** can have **destabilizing effect** on monetary and fiscal stability of India.
- Allegedly used in **unlawful activities** such as **drug trafficking, money laundering, foreign exchange violation and GST evasion**.
- The **Reserve Bank of India (RBI)** has recommended framing legislation on the sector.
- **Online gaming**
  - The **Ministry of Electronics and Information Technology (MeitY)** has been appointed the nodal industry for online gaming in India.
  - For e-sports, the nodal agency is the **Department of Sports**, under the Ministry of Youth Affairs and Sports.
  - There is confusion about the definitions of a 'game of chance' like fantasy games, and a 'game of skill', a term which has been used in the **Public Gaming Act (1867)** but has not been spelt out.
  - In a 'game of skill', while the element of chance cannot be entirely ruled out, it is the 'element of skill' (mental or physical skill of the user) that plays a dominant role in determining the outcome of the game rather than pure chance.
  - A glance at the rulings of the **Supreme Court** and several **High Courts** clearly establish 'Games of Skill' as legitimate business activities protected under **Article 19(1)(g)** of the Indian Constitution.



## Difference between 'online gaming' and 'e-sports'

| Esports vs Gaming<br>Comparison Table |   |  |
|---------------------------------------|---|--|
| Characteristics                       | Esports   | Gaming   |
| <b>Definition</b>                     | Refer to professional and competitive video gaming in the form of competitions played by professional gamers                                      | Refers to the act of playing video games   |
| <b>Player characteristics</b>         | Takes the place of organized gaming competitions between teams or individual professional players with a large number of bystanders and audiences | Involves playing against non-player characteristics, commonly referred to as a bot |
| <b>Live matches</b>                   | Promotes live matches   | Does not promote live matches  |

## Difference between 'game of skills' and 'game of chance'



## 'SMART' PROGRAM

**Context:** The National Commission for Indian System of Medicine (NCISM) and the Central Council for Research in Ayurvedic Sciences (CCRAS) have launched 'SMART' (Scope for Mainstreaming Ayurveda Research in Teaching Professionals) program.

### Key details:

- It aimed to **boost scientific research** in priority healthcare research areas through Ayurveda colleges and hospitals.
- The 'SMART' program will have a **deep long term rejuvenating impact** on research in the field of Ayurveda.
- The proposed initiative is conceptualised with an objective to **identify, support and promote** innovative research ideas in healthcare research areas.
- The 'SMART' program will certainly **motivate teachers** for taking up projects in designated areas of healthcare research and create a large database.
- Ayush aims to open new avenues with the 'SMART' initiative for quality research in Ayurveda

## National Commission for Indian System of Medicines

### Composition

- The NCISM will consist of 29 members, appointed by the central government.
- A Search Committee will recommend names to the central government for the post of Chairperson, part time members, and presidents of the four autonomous boards set up under the NCISM.
- These posts will have a maximum term of four years.
- The Search Committee will consist of five members including the Cabinet Secretary and three experts nominated by the central government (of which two should have experience in any of the fields of Indian System of Medicine).

### Functions

- Framing policies for regulating medical institutions and medical professionals of Indian System of Medicine,
- Assessing the requirements of healthcare related human resources and infrastructure,
- Ensuring compliance by the State Medical Councils of Indian System of Medicine of the regulations made under the Bill, and
- Ensuring coordination among the autonomous boards set up under the Act.

## The Central Council for Research in Ayurvedic Sciences (CCRAS)

- The Central Council for Research in Ayurvedic Sciences (CCRAS), an autonomous body under Ministry of AYUSH, Govt. of India is an apex body in India for undertaking, coordinating, formulating, developing and promoting research on scientific lines in Ayurvedic Sciences.
- The activities are carried out through its 30 Institutes/Centres/Units located all over India and also through collaborative studies with various Universities, Hospitals and Institutes.
- The research activities of the Council include Medicinal Plant Research (Medico-Ethno Botanical Survey, Pharmacognosy and Tissue Culture), Drug Standardization, Pharmacological Research, Clinical Research, Literary Research & Documentation and Tribal Health Care Research Programme.

## AFRICAN ANIMAL TRYPANOSOMOSIS

**Context:** Ethiopia has released the first edition of an atlas to map Tsetse and Trypanosomosis affecting livestock in the country and the vector behind it.

### African Animal Trypanosomosis (AAT)

- Major livestock disease in sub-Saharan Africa.
- Caused by **parasite protozoa Trypanosomes** (also known as Nagana and Nagana pest).
- Transmitted by bite of **Tsetse flies**.
- infect the blood of the vertebrate host, causing fever, weakness, and lethargy, which lead to weight loss and anemia.
- **No vaccine** available.
- Existing drugs has become less effective due to development of resistance in parasites.

## KALA AZAR DISEASE

**Context:** The Prime Minister of India has expressed his happiness on the declining cases of Kala Azar disease.

### What is kala-azar or black fever disease?

- Kala-azar or **Visceral Leishmaniasis** is a **protozoan parasitic disease**, spread by **sandfly** bites.
- **Sandflies:**
  - Sandflies are **brown in colour** and have **hairs** on their bodies.
  - The flies are infected with the parasite called '**leishmania donovani**'.
  - The vector sandfly is known to **live in cracks** and **crevices** of muddy houses, especially in dark and humid corners.
- According to the **WHO**, there are **3 main forms** of leishmaniasis of which **kala-azar is the most serious form**.
- **The disease is linked to:**
  - **malnutrition,**
  - **population displacement,**
  - **poor housing,**

- **weak immune system**
- **deforestation**
- **urbanisation**
- **lack of financial resources**

### • Symptoms

- Irregular bouts of fever,
- weight loss,
- enlargement of the spleen and liver,
- anaemia

### • Treatment:

- Leishmaniasis is a **treatable and curable** disease.
- **Anti-leishmanial medicines** are available for treatment.
- **Vector control** is also recommended by the WHO, which means reducing or interrupting the transmission of disease by **decreasing the number of sandflies** in surroundings through insecticide spray, use of insecticide-treated nets, etc.



## HALTERIA

**Context:** Scientists made a monumental breakthrough by identifying an organism, *Halteria* that dines entirely on viruses.

### Key details:

- **Halteria** — microscopic ciliates (a single-celled organism with minuscule hairs) that populate freshwater worldwide — can thrive wholly on a **virus-only diet or 'virovory'**.
- **Virovory** is sufficient to support an organism's physiological development and even population increase.
- They're made up of **nucleic acids**, a lot of **nitrogen** and **phosphorous**.

## DEMENTIA

**Context:** According to a 2020 report, there are around five million people in India living with dementia.

### What is Dementia?

- Dementia is a **clinical syndrome** caused by a range of **diseases or injuries to the brain**.
- **Alzheimer's disease** is the most common type of dementia.
- Though dementia mostly affects older adults, it is **not a part of normal aging**.
- **Statistics:**
  - Worldwide, **47.5 million people** have dementia, and up to **135.5 million** could by **2050**.
  - According to a 2020 report, there are around **five million people in India** living with dementia.
- **Causes and Symptoms:**
  - The most common cause of dementia is **Alzheimer's disease**, which is implicated in up to **70%** of dementia diagnoses.
  - **Early symptoms include:**
    - absent-mindedness,
    - difficulty recalling names and words,
    - difficulty retaining new information,
    - disorientation in unfamiliar surroundings, and
    - reduced social engagement.
  - **Atypical symptoms** include:
    - **impairment in recognising visually presented objects** despite a normal visual field, acuity and colour vision
- Some might also experience **word-finding difficulties**.

### • Evaluation of Dementia:

- Dementia **affects cognition**.
- Therefore, a **cognitive assessment** is central to evaluating dementia, using certain **neuropsychological tests**.
- As of today, there is **no genetic or biomarker test** that can be used to diagnose dementia.

### • Preventing dementia

- Prevention programmes usually focus on **lifestyle risk factors** together with **mental well-being** and **risk of cardiovascular diseases**.
- There is also a **robust link between depression** in late life and the incidence of **sporadic dementia**.

### • Having depression almost doubles the risk of developing dementia.

- **Higher educational and occupational attainments** have consistently been implicated as **protection against developing dementia** later in life.

### • This is probably a result of the longer period of learning, which stimulates the development of larger and/or more complex neural networks.

### • Treatment of dementia:

- Dementia care has **four pillars**.

### • The first two include managing the important aspects of the disease, with a goal to reverse their effects or to delay its progression in the brain as well as managing the cognitive, neuropsychiatric, and functional symptoms.

### • The other two pillars involve providing systematic, evidence-based supportive care to patients and to carers.

### • Deep-rooted costs

- The disease has steep **personal and societal costs**.
- From an economic viewpoint, the **biggest driver of cost** is **home and hospital care**.
- **Indirect cost** includes **loss or reduction of income** of the patient and family members who need to care for them at home.
- **Direct cost** increases as the disorder progresses and a **formal caregiver** is required.
- According to a 2010 report, the **economic burden** of dementia in India was **₹147 billion**, which is expected to rise **three-fold by 2030**.
- **Governmental social security** is **minimal or non-existent** and well-managed old age homes a rarity.

- **Way forward:**

- Health care for patients with dementia has to be **continuous, holistic and integrated**.
- **Innovative care models** which are specific and cost effective for the Indian scenario have to be developed.
- **Copying Western models** (of more organised rehab or old age homes and social care institutions) would not be practical as there is **no social security** or resource available to cater to a population as huge as India's.
- **Comprehensive health-care provision** for dementia is a social necessity – one that will need political will and sustained efforts by public health policymakers in conjunction with health care and social care professionals.

## EBOLA DISEASE

*Context: Uganda declared the end of the Ebola disease outbreak caused by Sudan ebolavirus.*

### What is Ebola?

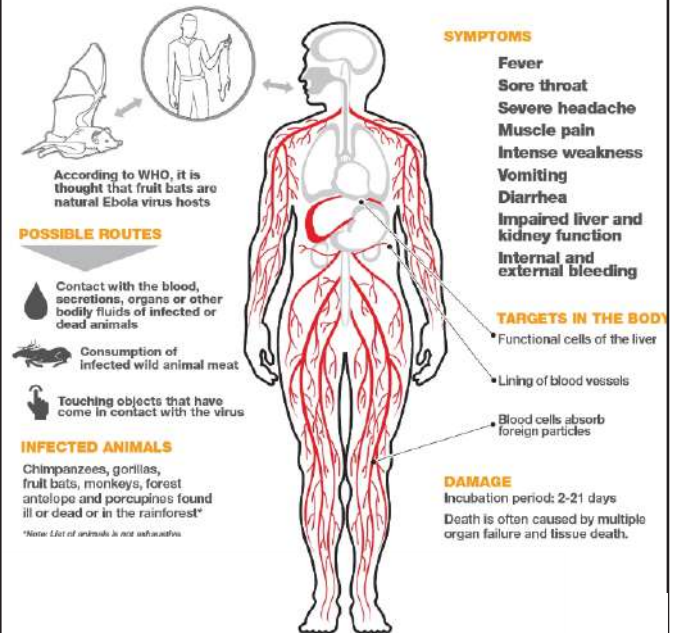
- Ebola spreads through EBOV (ebola virus) which is a virus belonging to the **Filoviridae family** of viruses.
- It is **mainly found in animals**.
- Ebola is a virus that causes **severe inflammation** and **tissue damage** throughout the body.
- It is known as a **hemorrhagic fever virus**, because it can cause problems with the clotting system of the body and lead to internal bleeding, as blood leaks from small blood vessels.
- **Six different species of the virus** have been found, but only **four are known to cause disease in humans**.
- Ebola is spread through **direct contact** with body fluids – blood, saliva, sweat, tears, mucus, vomit, feces, breast milk, urine and semen of people infected with it.
- It is also spread by **touching things** that have been contaminated with these fluids.
- The virus is named after the **Ebola River** (Republic of Congo) – as a village situated on its bank witnessed the first instance of the viral outbreak in 1976.

## Ebola Virus Disease

Ebola is most feared for the internal and external bleeding it can cause in victims owing to damage done to blood vessels.

It was discovered in 1976, and since then the majority of the outbreaks have appeared in parts of Africa.

At least 12,800 deaths have occurred globally since 1976.



### Treatment

- A vaccine for Ebola was **approved by the Food and Drug Administration in 2019**.
- It is a **one-dose shot** that protects against the variant of the Ebola virus that has caused the most serious outbreak so far.
- This vaccine is **not likely to be effective against the Ebola Sudan strain** that caused a 2022 outbreak in Uganda.

## Ebola: fighting a killer virus

There is no vaccine and no cure for the disease

### Symptoms

■ Early stage

■ Advanced

■ Headache

■ Sore throat

■ Muscle pain

■ Sudden fever

■ Intense weakness

■ Impaired kidney and liver

■ Rash

■ Vomiting

■ Internal and external bleeding

■ Diarrhoea

### Preventive measures

- Stop the consumption of animal meat
- Isolate the sick
- Prompt disposal of victims' bodies
- Trace those who had contact with infected
- Disinfect homes of the dead and the sick
- Protective clothing for health care workers, anyone handling infected animals

## SHUKRAYAAN I

**Context:** ISRO said that the organisation was yet to receive approval from the Union government for the Venus mission and that the mission could as a result be postponed to 2031.

### Key details:

- ISRO's Venus mission, Shukrayaan I, was expected to be launched in December 2024.
- Optimal launch windows from earth to Venus occur once around every 19 months.
- But even more optimal windows, which further reduce the amount of fuel required at lift-off, come around every eight years.
- Both the U.S. and the European space agencies had Venus missions planned for 2031 – referring to VERITAS and EnVision, respectively.

### About the mission:

- Shukrayaan I will be an orbiter mission.
- Its scientific payloads currently include a high-resolution synthetic aperture radar and a ground-penetrating radar.

- It is used for imaging the subsurface of the target, in this case, a planet, using radar pulses.
- It means that the investigation method for the study of asphalt, metals, etc, of ISRO's Venus orbiter will be non-intrusive.

- The mission is expected to study Venus's:
  - geological and volcanic activity,
  - emissions on the ground,
  - wind speed,
  - cloud cover, and
  - other planetary characteristics from an elliptical orbit.
- Shukrayaan-I' will most likely be launched on GSVL (Geosynchronous Satellite Launch Vehicle) Mk II.
- A Swedish-Indian instrument a Venusian Neutrals Analyser will be deployed with the orbiter.
  - It will help to understand how charged particles from the Sun interact with the atmosphere of Venus.
  - A similar analyser was also deployed with Chandrayaan-I.

| Name                     | Operator                     | Proposed launch year | Type                            | Status            |
|--------------------------|------------------------------|----------------------|---------------------------------|-------------------|
| Rocket Lab's Venus probe | MIT/Rocket Lab United States | May 2023             | atmospheric probe               | under development |
| Shukrayaan-1             | ISRO, India                  | December 2024        | orbiter and atmospheric balloon | under development |
| DAVINCI                  | NASA, United States          | 2029                 | atmospheric probe               | under development |
| Venera-D                 | Roscosmos, Russia            | 2029                 | orbiter and lander              | under development |
| EnVision                 | ESA                          | 2031                 | orbiter                         | under development |
| VERITAS                  | NASA, United States          | 2031                 | orbiter                         | under development |

## NOROVIRUS

**Context:** The Kerala Health Department confirmed two cases of the gastrointestinal infection norovirus.

### Key details:

- Norovirus, also called the "winter vomiting bug", is a stomach bug that causes vomiting and diarrhoea.
- It is an RNA virus of the family Caliciviridae.
- It is a human enteric pathogen that causes substantial morbidity across both health care and community settings.
- A 2022 study says that norovirus infections are more frequently detected in high income countries, with almost 40% cases being seen in long-term care facilities.

- In contrast, the cases in India have mostly been detected in settings like schools and hostels, where people share food.
- Even though more cases of norovirus are being detected, experts say that this is unlikely to lead to a large-scale outbreak.
- Symptoms:
  - Norovirus leads to diarrhoea, vomiting, nausea, and abdominal pain.
  - Being a diarrhoeal disease, it can lead to dehydration.
- How it spreads?
  - The infection can be transmitted through:
  - foods contaminated with the virus,



- **touching surfaces** that are contaminated with the virus, and
- being in **direct contact** with someone with the infection.

## WHAT IS NOROVIRUS?

According to Mayo Clinic Norovirus infection can cause the sudden onset of severe vomiting and diarrhea. The virus is highly contagious and commonly spread through food or water that is contaminated by fecal matter during preparation. You can also be infected through close contact with an infected person.



### SYMPTOMS:

Appear between **24** and **48** hours and can last 1-3 days

- Nausea
- Vomiting
- Abdominal Pain or Cramps
- Watery or Loose Diarrhea
- Malaise
- Low-grade Fever
- Muscle Pain



### WHO IS MOST LIKELY TO GET NOROVIRUS?

- Everyone is susceptible to Norovirus
- Most common in infants, older adults and people with underlying disease

## What are NTDs?

- NTDs are a diverse group of **20 conditions** mainly **prevalent in tropical areas** – caused by various **pathogens**, including **viruses, bacteria, parasites, fungi and toxins**.

## Why are they called neglected?

- They are 'neglected' because they are **almost absent from the global health agenda**.
- Even today, when the focus is on **Universal Health Coverage**, NTDs have very **limited resources** and are **almost ignored by global funding agencies**.
- NTDs are **diseases of neglected populations** that perpetuate a cycle of poor educational outcomes and limited professional opportunities.

## Tackling NTDs

- Addressing NTDs requires **cross-sectoral approaches** that span from bringing medicines to the 'end of the road' thus making "**universal health coverage**" (UHC).
- **Vector control, veterinary public health and WASH** are key complements to intervention targeting humans.

## India and NTDs:

- India's still had a **high proportion of morbidity** with more than **290 million Indians** suffering from Neglected Tropical Diseases (NTDs).
- Although India and South Asia had made significant economic progress, NTDs continued to perpetuate a **cycle of poverty** among its most disadvantaged populations.
- **These NTDs include:**
  - **visceral leishmaniasis**, also known as "**kala-azar**,"
  - **lymphatic filariasis**, which causes elephantiasis,
  - leprosy,
  - dengue fever,
  - rabies and
  - soil transmitted helminth.
- **Measures for leprosy:**
  - Over the years, the **Indian Council of Medical Research (ICMR)** has produced **new tools**, which include two **rapid diagnostic tests** and a **uniform multidrug regimen** for all types of leprosy.
  - This has **shortened treatment duration** to 6 months and is improving adherence.

## NEGLECTED TROPICAL DISEASES

*Context: Neglected Tropical Diseases (NTD) continue to disproportionately impact the most impoverished members of the international community, living in areas with inadequate water safety, sanitation and access to health care, said a new World Health Organization (WHO) report.*

### Key details:

- **Global report on neglected tropical diseases 2023** report highlighted the **advancement and challenges** in delivering NTD care worldwide against a backdrop of COVID-19-related disruptions.
- Some **16 countries** accounted for **80 per cent of the global NTD burden**.
- Globally, nearly **1.65 billion people** were estimated to require treatment for at least one NTD.

- An indigenous vaccine **mycobacterium indicus pranii** (MIP), will be administered to people living in close contact with patients.
- The vaccine offers **60% protection to people** living with leprosy patients for up to 4-5 years.

- **Measures for lymphatic filariasis:**

- In the case of lymphatic filariasis, better known as **elephantiasis**, the government is targeting a population of 600 million with **mass drug administration** (MDA).
- Mass administration of **DEC-fortified salt** to accelerate elimination of lymphatic filariasis is being tried.

- **Measures for leishmaniasis:**

- The other key intervention is for visceral leishmaniasis (VL) or kala-azar, which is transmitted through the **bite of the female sandfly**.
- In India, a majority of cases are reported in **Bihar, Jharkhand, Uttar Pradesh and West Bengal**.
- **Rapid diagnostic tests** followed by **single day treatment** now makes rapid cure possible.
- Sandflies breed on mud walls, so **vector control by indoor spraying** with insecticides and ultimately with improved housing can result in the control of sandflies.

### Way forward:

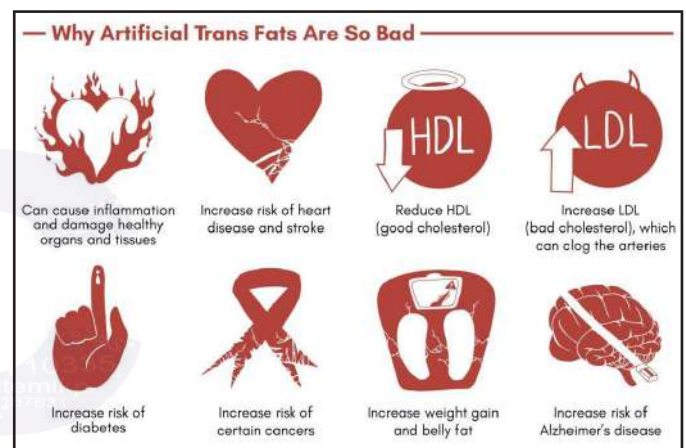
- For these programmes to succeed, it is important to **maintain constant vigilance** through **robust surveillance and reporting mechanisms**.
- **Partnerships** with **diverse stakeholders** including the **private sector**, community-based organisations, and community leaders are specifically **useful in creating awareness**, improving **case detection**, **treatment completion** and, most importantly, **managing stigma** associated with these diseases.
- While tackling NTDs, it will be important to remember that along with **timely diagnosis** and **treatment access** in unreached areas, focussing on the **fundamentals of preventive interventions**, **nutrition**, **safe drinking water**, **sanitation** and **hygiene** are essential in fast-tracking the ultimate goal of elimination.

## WHO REPORT ON GLOBAL TRANS FAT ELIMINATION

**Context:** Five billion people globally are exposed to harmful trans-fat, increasing their heart disease and death risk, according to a new report by the World Health Organization (WHO).

### Key details:

- **43 countries** have put **best-practice regulations** against trans fat in food, covering 2.8 billion people worldwide, showed the report.
- However, despite significant progress, this still **exposes five billion people** to the devastating health effects of trans fat, making the 2023 target unattainable.
- Industrially produced trans fat is usually found in **packaged foods, baked items, cooking oils and spreads**.



### What are trans fats?

- Trans fats, or trans-fatty acids, are a form of **unsaturated fat**.
- They come in both **natural** and **artificial forms**.
  - **Natural**, or **ruminant**, trans fats occur in the **meat and dairy** from ruminant animals, such as cattle, sheep, and goats.
  - They **form naturally** when bacteria in these animals' stomachs digest grass.
  - These types typically comprise **2-6% of the fat** in dairy products and **3-9% of the fat** in cuts of beef and lamb.
  - **Artificial trans fats**, otherwise known as **industrial trans fats** or partially hydrogenated fats are **hazardous to health**.
  - These fats occur when **vegetable oils** are **chemically altered** to stay solid at room temperature, which gives them a **much longer shelf life**.

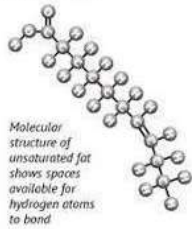
## Different Kinds of Fat

Fatty acids, which are the building blocks of fat, are long chains of carbon and hydrogen atoms. Essential fatty acids are those needed by the human body that can only be obtained through food. Some fats are harmful, however.



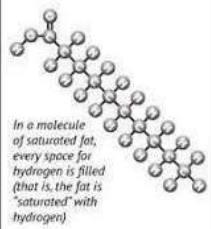
### UNSATURATED FATS

The so-called "good" fats can be found in nuts, avocados and other vegetables. The molecular structure of unsaturated fat causes it to be lower in calories than other fats.



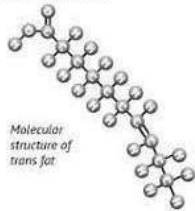
### SATURATED FATS

These fats are found mostly in animal products. It is recommended that people reduce their consumption of saturated fats in order to stay healthy.



### TRANS FATS

Trans fats are unsaturated (good) fats which have been partially saturated with hydrogen to extend their shelf life. Unfortunately, these trans fats are found to elevate "bad" cholesterol and should be avoided.



SOURCES: UC-CLERMONT COLLEGE; ALLIANCE FOR A HEALTHIER GENERATION; DREAMSTIME

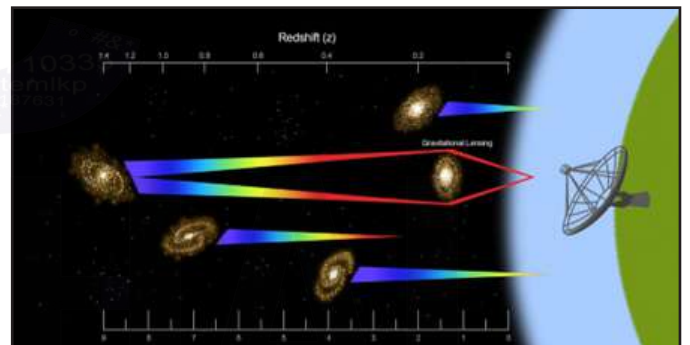
## GIANT METREWAVE RADIO TELESCOPE

**Context:** A radio signal originating from atomic hydrogen in an extremely distant galaxy was detected by the Giant Metrewave Radio Telescope (GMRT) located in Pune.



### What is Atomic hydrogen?

- Atomic hydrogen is the **basic fuel** required for **star formation** in a galaxy.
- When **hot ionised gas** from the surrounding medium of a galaxy falls onto the universe, the **gas cools and forms atomic hydrogen**.
- This then becomes **molecular hydrogen** and eventually leads to the **formation of stars**.
- Atomic hydrogen **emits radio waves** of 21 cm wavelength, meaning the wavelength is a direct tracer of the atomic gas content in nearby and distant galaxies.
- However, this radio signal is **feeble and nearly impossible to detect** the emission from a distant galaxy using current telescopes due to their **limited sensitivity**.



### GMRT (Location: Pune)

- GMRT is a **low-frequency radio telescope** that helps investigate various radio astrophysical problems ranging from nearby solar systems to the edge of the observable universe.
- It is an array of **thirty fully steerable parabolic radio telescopes** observing at **metre wavelengths**.
- **Operated by:** National Centre for Radio Astrophysics (NCRA)
- It was recently upgraded with new receivers, after which it is also known as the **Upgraded Giant Metrewave Radio Telescope (uGMRT)**.
- One of the aims for the telescope during its development was to **search for the highly redshifted 21-cm line radiation** from primordial neutral hydrogen clouds in order to **determine the epoch of galaxy formation** in the universe.

## IMMUNE IMPRINTING

**Context:** A slew of recent studies has shown that a phenomenon in our bodies, called immune imprinting, might be making new Covid boosters far less effective than expected.

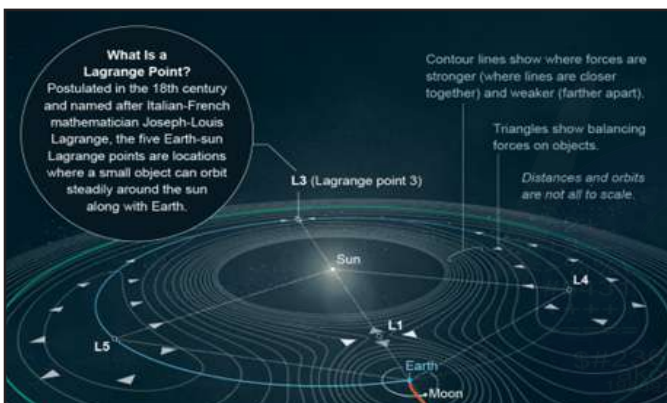
### What is immune imprinting?

- Immune imprinting is a **tendency of the body to repeat its immune response** based on the **first variant** it encountered (through infection or vaccination) when it comes across a newer or slightly different variant of the same pathogen.
- Imprinting acts as a **database for the immune system**, helping it put up a better response to repeat infections.
- **B cells connection:**
  - After our body is exposed to a virus for the first time, it **produces memory B cells** that **circulate in the bloodstream** and quickly produce antibodies whenever the same strain of the virus infects again.
  - The **problem occurs** when a **similar, not identical, variant of the virus** is encountered by the body.
  - In such cases, the immune system, rather than generating new B cells, **activates memory B cells**, which in turn produce antibodies that bind to features found in both the old and new strains, known as **cross-reactive antibodies**.
  - Although these cross-reactive antibodies do offer some protection against the new strain, they **aren't as effective as the ones produced by the B cells** when the body first came across the original virus.





- **Plasma Analyser Package for Aditya (PAPA):**
  - To understand the composition of solar wind and its energy distribution.
- **Solar Low Energy X-ray Spectrometer (SoLEXS):**
  - To monitor the X-ray flares for studying the enigmatic coronal heating mechanism of the solar corona.
- **High Energy L1 Orbiting X-ray Spectrometer (HEL1OS):**
  - To observe the dynamic events in the solar corona and provide an estimate of the energy used to accelerate the solar energetic particles during the eruptive events.
- **Magnetometer:**
  - To measure the magnitude and nature of the interplanetary magnetic field.



## EXOPLANETS

**Context:** The National Aeronautics and Space Administration (NASA) announced that the James Webb Space Telescope has discovered its first new exoplanet.

### Key details:

- It has been labelled as **LHS 475 b**, and it's roughly the **same size as Earth**.
- Located just 41 light-years away, the planet orbits very close to a red dwarf star and completes a full orbit in just **two days**.

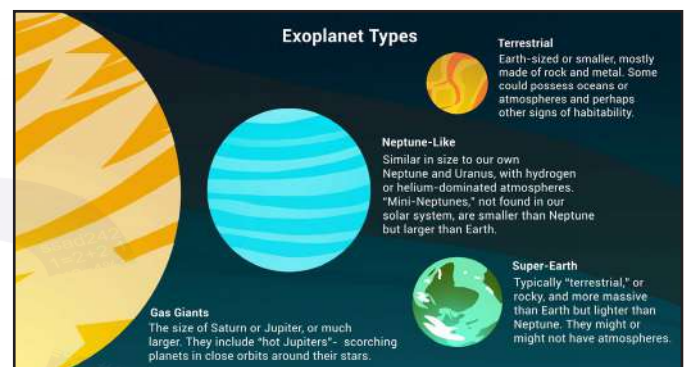
### What are exoplanets?

- Exoplanets are planets that **orbit other stars** and are **beyond our solar system**.
- According to NASA, to date, **more than 5,000 exoplanets** have been discovered.
- Scientists believe that there are **more planets than stars** as each star has at least one planet orbiting it.
- Exoplanets come in a host of **different sizes**.
- They can be **gas giants** bigger than Jupiter or as **small and rocky** as Earth.

- They are also known to have **different kinds of temperatures** — boiling hot to freezing cold.
- Scientists rely on indirect methods for discovering exoplanets, such as the **transit method**, which is **measuring the dimming of a star** that happens to have a planet pass in front of it.

### What are red dwarf stars?

- Such types of stars are the **most common** and **smallest** in the universe.
- As they **don't radiate much light**, it's very tough to detect them with the naked eye from Earth.
- However, as red dwarfs are **dimmer than other stars**, it is **easier to find exoplanets** that surround them.
- Therefore, red dwarfs are a **popular target for planet hunting**.



### About James Webb Space Telescope:

- It is an infrared space observatory that was launched in **2021**, from ESA's launch site at Kourou in French Guiana.
- It has **large infrared telescope with a 6.5-meter primary mirror**. Therefore, it will complement and extend the discoveries of the Hubble Space Telescope, with longer wavelength coverage and greatly improved sensitivity.
- The longer wavelengths enable Webb to look much closer to the beginning of time and to hunt for the unobserved formation of the **first galaxies**, as well as to look inside dust clouds where stars and planetary systems are forming today.
- It is an international collaboration **between NASA, ESA (the European Space Agency), and the Canadian Space Agency (CSA)**.
- It is **deployed in a solar orbit near the Sun-Earth, second Lagrange point (L2)** which is a **spot in space near Earth that lies opposite from the sun**;



- This orbit will allow the telescope to **stay in line with Earth** as it orbits the sun.
- It has been a popular spot for several other space telescopes, including the **Herschel Space Telescope** and the **Planck Space Observatory**.

# James Webb: World's largest space telescope



Joint project of NASA, European and Canadian space agencies

## OPERATION TIME

5 years (minimum)

Launch date: 25.12.2021

## WEIGHT

6.2 tons (approx.)

## EXPLORE FARTHEST GALAXIES

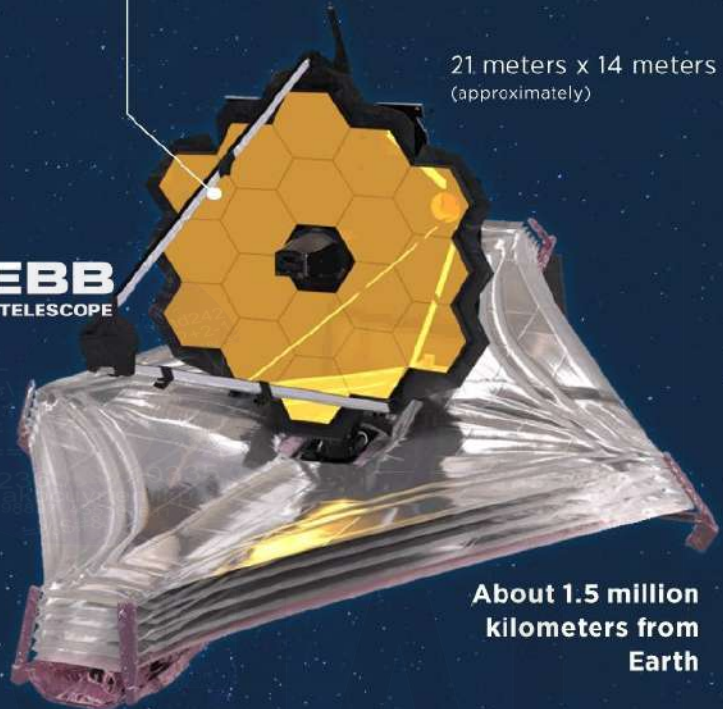
Webb's infrared capabilities allow it to see deeper back in time to the **Big Bang**, which happened **13.8 billion years ago**

## 6.5-METER MIRROR

Thanks to its extendable mirror, it collects **a lot of light and observes more details**

21 meters x 14 meters (approximately)

**WEBB**  
SPACE TELESCOPE



About 1.5 million kilometers from Earth

CHAHAL  
A C A B E M Y

NOTES



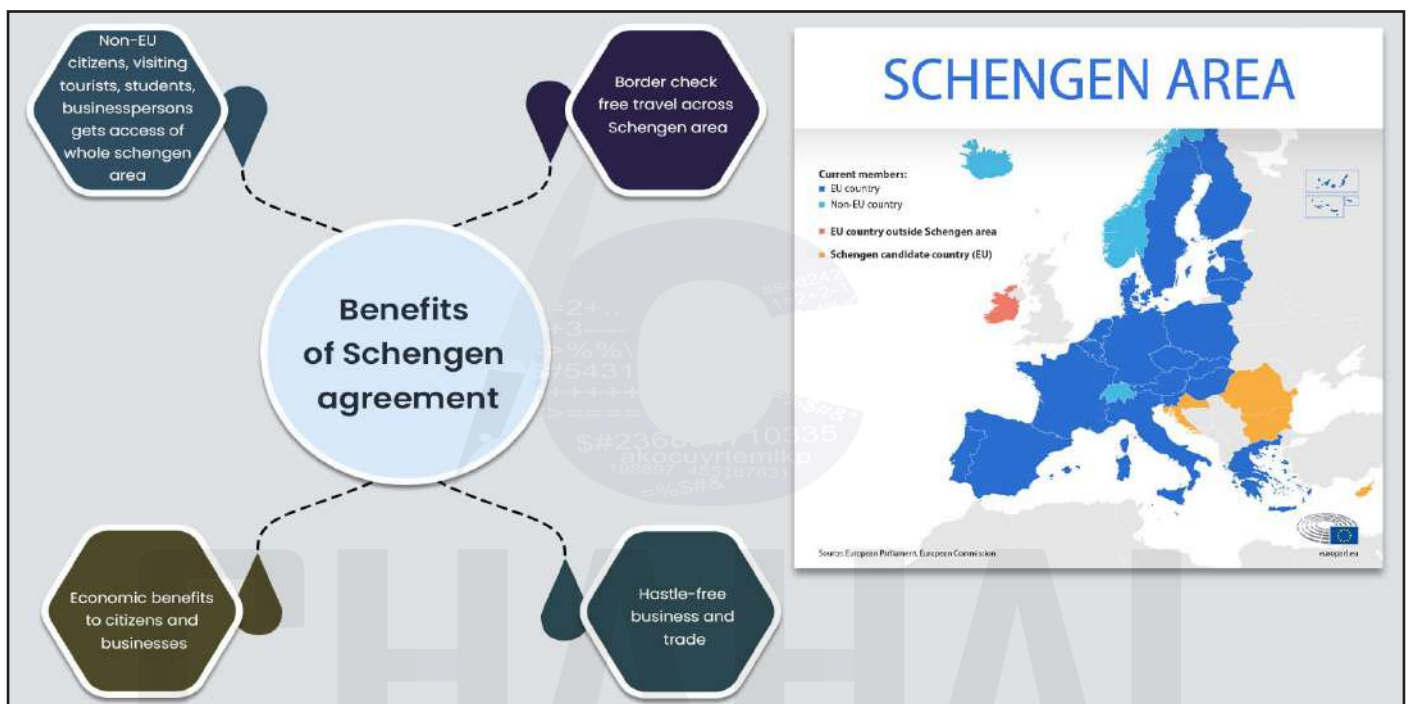
# INTERNATIONAL RELATIONS

## SCHENGEN AREA

**Context:** Croatia recently switched to the euro and entered Europe's borderless zone. The Balkan nation bid farewell to its kuna currency and became the 20th member of the eurozone. It is also now the 27th nation in the passport-free Schengen zone.

### Why is the name 'Schengen area'?

- Schengen is the name of a small village in Luxembourg, on the **border with Germany and France.**
- Schengen Agreement and the Schengen Convention were **signed in 1985 and in 1990** respectively at the Schengen village.



### What is Schengen area?

- The Schengen area **started in 1985** as an **intergovernmental project** between five EU countries- **France, Germany, Belgium, the Netherlands and Luxembourg.**
- It has gradually expanded to become the **largest free travel area in the world.**
- The set of rules governing the Schengen area is called **Schengen Borders Code.**

### Who are the member countries?

It includes **26 countries:**

- **22 of the 27 EU member states**
- **all members of the European Free Trade Association** (Iceland, Liechtenstein, Norway and Switzerland)

- **Non-Schengen European Union Countries** are Bulgaria, Romania, Cyprus, Ireland, United Kingdom

### All About Croatia

- Its coast lies entirely on the Adriatic Sea.
- It borders Slovenia to the northwest, Hungary to the northeast, Serbia to the east, Bosnia and Herzegovina and Montenegro to the southeast, and shares a maritime border with Italy to the west and southwest.
- Its capital and largest city is Zagreb.
- It is a member of the European Union, the Eurozone, and the Schengen Area, NATO, the United Nations, the Council of Europe, the World Trade Organization, and a founding member of the Union for the Mediterranean.



- Rajiv Gandhi (1985);
- P V Narasimha Rao (1995);
- IK Gujral (1997); and
- Dr. Manmohan Singh (2009, NAM Summit).

#### ● Bilateral trade relations

- **The India-Egypt bilateral trade agreement has been in operation since March 1978 and is based on the most-favoured nation clause.**
- Most-Favoured-Nation (MFN) treatment requires Members to **accord the most favourable tariff and regulatory treatment** given to the product of any one Member at the time of import or export of “like products” to all other Members.
- This is a **founding principle** of the WTO.
- The bilateral trade has **increased more than five times** in the past 10 years.

#### ● Other areas of cooperation

- **Egypt**, which is facing a **shortage of food grains** as its major sources were the warring Ukraine and Russia, **wants to buy wheat from India.**
- In May last year, India — which had put a **ban on sale of wheat** — **allowed export of 61,000 tonnes to Egypt.**
- While there has been no request for budgetary support, India is looking at increasing investments in the country, especially in **major infrastructure projects** in and around the **Suez Canal**, in terms of special economic zones in **Alexandria and Cairo.**
- Egypt has also been invited to participate in the **Aero-India 2023** at Yelahanka Air Force Station, Bengaluru.
- **A military contingent from the Egyptian Army** will participate in the Republic Day parade.
- The two countries will also look at the **education sector**, where **Indian higher educational institutions** can set up **campuses in Egypt.**
- A proposal for **establishing an IIT in Egypt** is in the works.

## INDIA'S-EGYPT TIES

**Context:** *Egypt's President Abdel Fattah El-Sisi was the chief guest for the Republic Day celebrations this year.*

- The Prime Minister of India and Egypt's President agreed to elevate the India-Egypt bilateral relationship to a “strategic partnership”.
- The strategic partnership will have broadly four elements: **political, defence, and security; economic engagement; scientific and academic collaboration; cultural and people-to-people contacts.**

**SIGNIFICANCE OF A REPUBLIC DAY INVITE**

- An invitation to be the Republic Day chief guest is **highly symbolic** from the Indian government's perspective.
- The choice of chief guest every year is dictated by a number of reasons:

Strategic and diplomatic

Business Interests

International Geo-politics




### About India-Egypt Relations

- The **joint announcement** of establishment of diplomatic relations at the **Ambassadorial level** was made on **August 18, 1947.**
- **NAM:**
  - India's first Prime Minister **Jawaharlal Nehru** and Egypt's President **Gamal Abdel Nasser** signed the **Friendship Treaty** between the two countries, and they were key to forming the **Non-Aligned Movement (NAM)** along with Yugoslav President **Josip Broz Tito.**
- Since the 1980s, there have been **four Prime Ministerial visits from India to Egypt:**

## GLOBAL SOUTH SUMMIT

**Context:** *India will host a virtual 'Voice of the Global South' summit.*

### Key details:

- More than **120 countries** are invited for the summit.
- **Theme:** “Unity of Voice, Unity of Purpose”.



- The summit envisaged bringing together **countries of the Global South** to share their perspectives and priorities on a common platform.

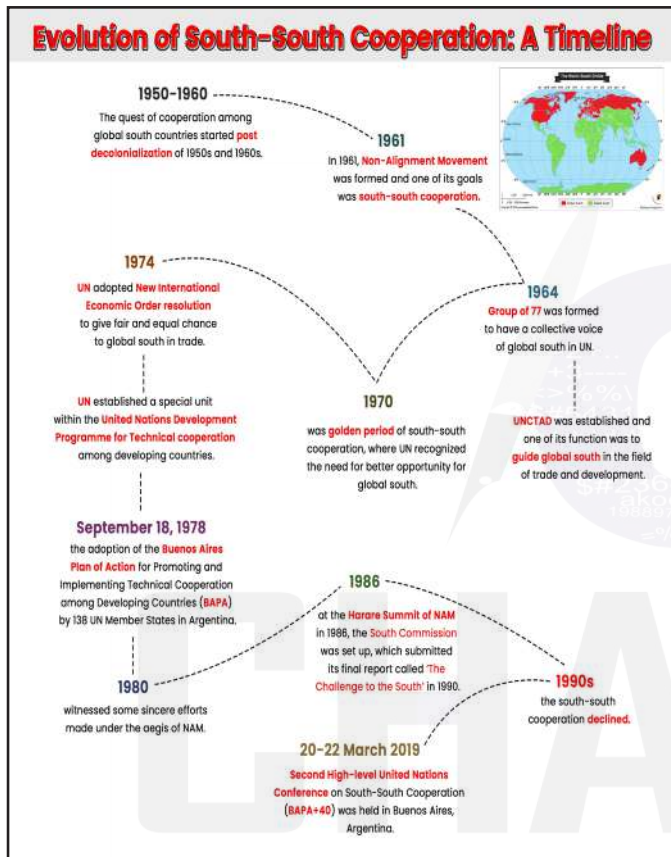
**What is Global South?**

- Global South refers to the **developing and the less-developed countries** of the world.
- The Global South is a term often used to identify regions within **Latin America, Asia, Africa, and Oceania**.
- It is one of a family of terms, including **"Third World"** and **"Periphery"**, that denote regions outside Europe and North America.
- The majority of the Global South countries are located in or near the tropics.

**Various classifications**

- **Overseas Indians** are classified into three categories:
  - **Non-Resident Indians (NRI):**
  - NRIs are Indians who are **residents of foreign countries**.
  - **Persons of Indian Origin (PIOs):**
  - **Overseas Citizens of India (OCIs):**

| A PERSON OF INDIAN ORIGIN (PIO)  | PIO VS OCI | OVERSEAS CITIZEN OF INDIA (OCI)  |
|--|------------|--|
| <ul style="list-style-type: none"> <li>➤ Means a <b>foreign citizen</b> (except a national of Pakistan, Afghanistan Bangladesh, China, Iran, Bhutan, Sri Lanka and Nepal)</li> <li>➤ A <b>foreign citizen</b> whose one of the parents/grandparents/ great grandparents was born and a permanent resident of India</li> <li>➤ Who is a <b>spouse</b> of a citizen of India or a PIO</li> </ul>   |            | <p>A <b>foreign national</b>, who was <b>eligible to become citizen of India on 26.01.1950</b> or was a citizen of India on or at anytime after <b>26.01.1950</b> or belonged to a territory that became part of India after <b>15.08.1947</b> is eligible for registration as <b>Overseas Citizen of India (OCI)</b>. Minor children of such person are also eligible for OCI. However, if the applicant had ever been a citizen of Pakistan or Bangladesh, he/she will not be eligible for OCI.</p>                          |
| <p><b>BENEFITS</b></p> <ol style="list-style-type: none"> <li>1. PIO card holders <b>do not require a visa to visit India</b> for a period of 15 years from the date of issue of the PIO card.</li> <li>2. They are <b>exempted from registration at FRRO/ FRO</b> if their stay does not exceeds 180 days, in case if the stay exceeds 180 days, they shall have to register with FRRO/ FRO within the next 30 days</li> <li>3. They <b>enjoy parity with NRIs in economic, financial and educational benefits</b></li> <li>4. All <b>future benefits</b> that would be exempted to NRIs would also be available to the PIO card holders</li> </ol> |            | <p><b>BENEFITS</b></p> <p>OCIs are <b>entitled to a multipurpose, multiple entry, lifelong visa</b> allowing them to visit India at any time, for any length of time and for any purpose</p> <ul style="list-style-type: none"> <li>➤ <b>Exempted from police reporting</b> for any length of stay in the country</li> <li>➤ <b>Have also been granted all rights in the economic, financial and education fields in parity with NRIs</b> except, the right to acquisition of agricultural or plantation properties</li> </ul> |



**Numbers and geographical spread**

- According to a **2022 report** of the Parliamentary committee on external affairs, as on December 31, 2021, there were **4.7 crore** Indians living overseas.
- The number includes NRIs, PIOs, OCIs, and students.
- **Excluding students**, the number stands at **3.22 crore**, including:
  - 1.87 crore PIOs and
  - 1.35 crore NRIs.
- According to the **World Migration Report**, prepared by the International Organisation for Migration under the United Nations, India has the **largest migrant population** in the world, making it the **top origin country** globally, followed by Mexico, Russia and China.
- Numbers shared by the government in Parliament in 2022 show that the **geographical spread of the Indian diaspora is vast**.

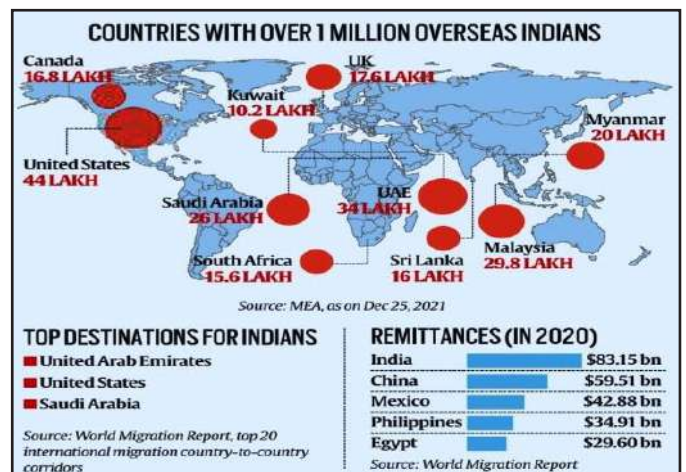
**INDIAN DIASPORA**

**Context:** Inaugurating the 17th Pravasi Bharatiya Divas convention recently, Prime Minister of India said Indians living overseas are "brand ambassadors" of the country on foreign soil.

**History of the Indian expat**

- The term diaspora traces its roots to the Greek diaspeiro, which means dispersion.

|   |   |   |
|---|---|---|
| <p><b>1st Wave of Migration</b></p> <p>The first batch of Indians were taken to countries in the east pacific and the Caribbean islands under the 'Girmitiya' arrangement as indentured labourers. They were shipped to work on British Plantations in British Colonies to compensate the 'labour crisis' arose due to abolition of slavery in 1833-34.</p> | <p><b>2nd wave of Migration</b></p> <p>As part of the second wave of migration, nearly 20 lakh Indians went to Singapore and Malaysia to work in farms.</p> | <p><b>3rd Wave of Migration</b></p> <p>The third and fourth wave saw professionals heading to western countries and workers going to the Gulf and west Asian countries in the wake of the oil boom.</p> |
|---|---|---|





## Remittances

- The latest **World Bank Migration and Development Brief**, released in 2022, said that for the **first time** a single country, **India**, is on track to receive **more than \$100 billion** in yearly remittances.
- The World Migration Report notes that **India, China, Mexico, the Philippines and Egypt** are (in descending order) among the **top five remittance recipient countries**.
- Although **India and China** were well above the rest.
- In 2020, the two neighbours received the **largest amounts of international remittances in Asia**, with a **combined total of more than \$140 billion**.

## Involvement in politics

- The **Hindu American Foundation**, a Hindu advocacy group based in the US, was set up in **2003**.
- The same year the **Pravasi Bharatiya Convention** was launched.

## INDUS WATERS TREATY

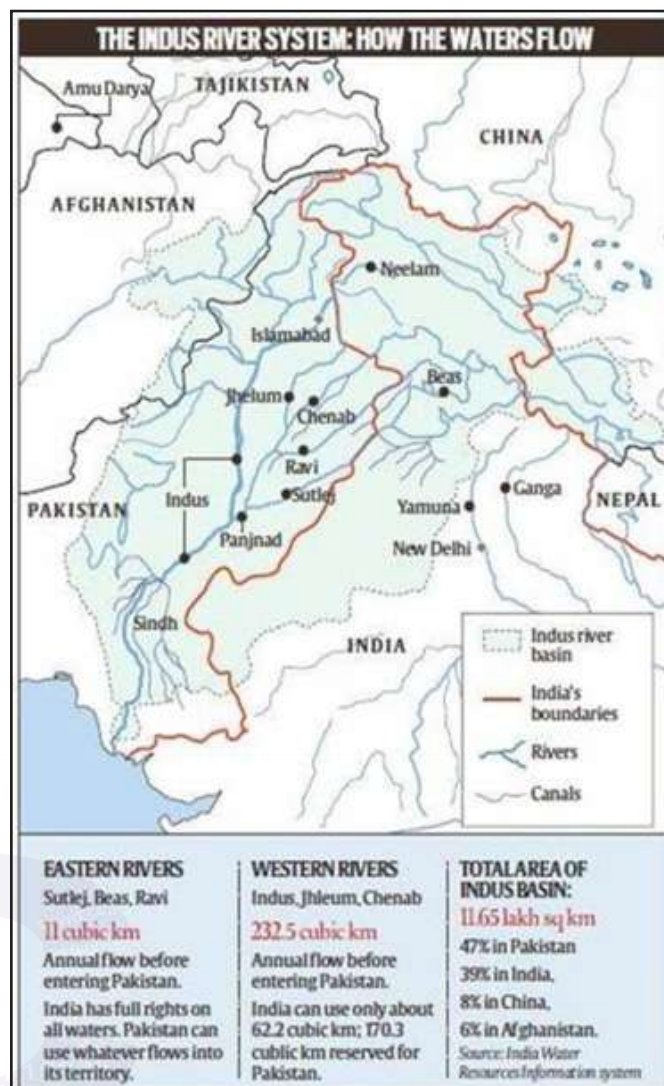
**Context:** *India has issued notice to Islamabad seeking modification of the more than six-decade-old Indus Waters Treaty (IWT) in view of Pakistan's "intransigence" in implementing it.*

### What is this notice that India has sent?

- The notice will **open the process of making changes** to the treaty, the sources said.
- They said that the notice for modification was to provide Pakistan with an **opportunity to enter into intergovernmental negotiations** within 90 days to rectify the material breach of IWT.

### What is the Indus Waters Treaty?

- The IWT was signed on **September 19, 1960**, by Prime Minister **Jawaharlal Nehru** and Pakistan's President **Mohammed Ayub Khan** in Karachi after nine years of **World Bank-brokered negotiations** between India and Pakistan.
- The treaty defines the water-sharing arrangement for **six rivers** of the Indus basin that flow through both India and Pakistan.
- **As per the treaty's provisions:**
  - **India** can make **"unrestricted use"** of all the water of the **"Eastern Rivers"** – Sutlej, Beas, and Ravi
  - **Pakistan** shall get water from the **"Western Rivers"** – Indus, Jhelum, and Chenab.



### What is the dispute in this case?

- India is constructing two **hydroelectric power projects (HEPs)**:
  - the **Kishenganga HEP** on the Kishenganga, a tributary of the Jhelum and
  - the **Rattle HEP** on the Chenab.
- **Pakistan has objected** to these projects.
- In 2015, **Pakistan** asked that a **Neutral Expert** should be appointed to examine its technical objections to the Kishenganga and Rattle HEPs.
- But the following year, **Pakistan unilaterally retracted this request**, and proposed that a **Court of Arbitration** should adjudicate on its objections.
- Accordingly, **India made a separate request** for the matter to be referred to a **Neutral Expert**.
- Despite repeated efforts by India to find a mutually agreeable way forward however, **Pakistan refused** to discuss the issue during the five meetings of the **Permanent Indus Commission** from 2017 to 2022.
- At Pakistan's continuing insistence, the **World Bank recently initiated actions on both the Neutral Expert and Court of Arbitration processes**.

- But such parallel consideration of the same issues is **not covered under any provision of IWT.**

### Kishenganga Hydroelectric Project

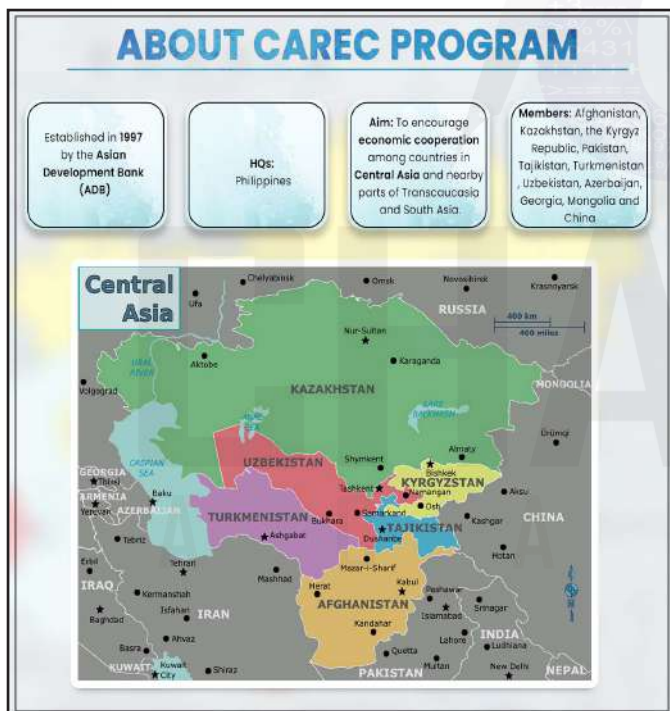
- The Kishenganga project is located in village Kralpora on the Kishenganga River in Bandipora district of the Union Territory of **Jammu & Kashmir.**
- According to an official statement issued in 2018, the project will **benefit**, apart from J&K, the states of **Chhattisgarh** and **Uttar Pradesh.**

### Ratle Hydroelectric Project

- The project is proposed on the river **Chenab** in Kishtwar district of **Jammu & Kashmir.**
- It is a **run-of-the-river project**, with a 133-m-high concrete dam.

### CENTRAL ASIA REGIONAL ECONOMIC COOPERATION PROGRAM

**Context:** *The Central Asia Regional Economic Cooperation (CAREC) region faces severe food safety challenges due to fractured safety control systems, according to Asian Development Bank (ADB) 's working paper.*



### What is food safety?

The Food and Agriculture Organization of the United Nations (FAO) defines food safety as **“the absence—or safe, acceptable levels—of hazards in food that may harm the health of consumers.”**

In 2018, the United Nations General Assembly established **World Food Safety Day (June 7)** to raise awareness regarding food safety.

### Connection between food safety and food security

**Food security** means having regular access to enough **safe and nutritious food** to lead an active and healthy life. That makes **food safety an integral part of food security.**

To end hunger and achieve food security, we must ensure access to safe food for all.

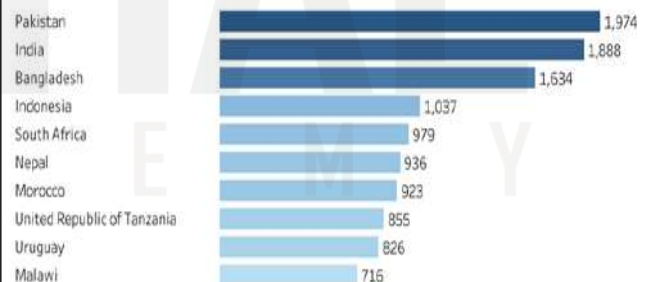
### UN PEACEKEEPING MISSION

**Context:** *The Prime Minister of India has expressed pride as Indian Army deploys its largest contingent of women peacekeepers in United Nation mission at Abyei, UNISFA.*

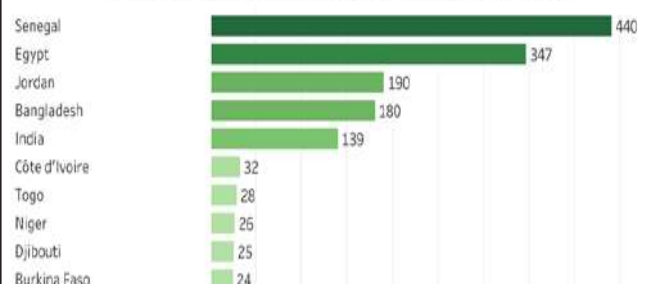
### What is the U.N. Peacekeeping mission?

- The U.N. Peacekeeping mission is a **joint effort** between the **Department of Peace Operations** and the **Department of Operational Support**, and aims to **assist host countries to transition from situations of conflict to peace.**
- The U.N. began its Peacekeeping efforts in **1948** when it deployed military observers to West Asia.
- U.N. Peacekeepers **provide security** as well as **political and peacebuilding support** to conflict-ridden countries.
- The **three basic principles** that guide U.N.'s Peacekeeping missions are:
  - Consent of the parties
  - Impartiality
  - Non-use of force except in self-defence and defence of the mandate

### Top ten military contributors (as of November 2021)



### Top ten police contributors (as of November 2021)



## India's contribution towards United Nations Peacekeeping forces

- Over 200,000 Indians have served in **49 U.N. Peacekeeping missions since 1948**.
- **Currently**, 5,581 Indians are part of various U.N. Peacekeeping missions.

|  <b>Uniformed Personnel Contributing Countries by Ranking</b><br>Experts on Mission, Formed Police Units, Individual Police, Staff Officer, and Troops<br>As of: 31/03/2022 |      |            |      |        |       |             |
|--|------|------------|------|--------|-------|-------------|
| Line Number  | Rank | Country    | Male | Female | Total | Report Date |
| 1  | 1    | Bangladesh | 5247 | 461    | 6710  | 31/03/2022  |
| 2  | 2    | Nepal      | 5337 | 369    | 5706  | 31/03/2022  |
| 3  | 3    | India      | 5479 | 102    | 5581  | 31/03/2022  |
| 4  | 4    | Rwanda     | 4788 | 467    | 5255  | 31/03/2022  |
| 5  | 5    | Pakistan   | 4041 | 82     | 4123  | 31/03/2022  |
| 6  | 6    | Ethiopia   | 3346 | 414    | 3760  | 31/03/2022  |
| 7  | 7    | Egypt      | 2708 | 84     | 2792  | 31/03/2022  |
| 8  | 8    | Indonesia  | 2522 | 148    | 2670  | 31/03/2022  |
| 9  | 9    | Ghana      | 2162 | 411    | 2575  | 31/03/2022  |
| 10   | 10   | China      | 2136 | 101    | 2237  | 31/03/2022  |

- In **2007**, India became the first country to deploy an all-women contingent to a U.N. Peacekeeping mission.
- Despite its presence in several countries as part of the Peacekeeping missions, India has routinely expressed its displeasure at a similar mission headquartered in Srinagar and Islamabad.
- The **United Nations Military Observer Group** in India and Pakistan (UNMOGIP) was established on January 24, **1949** to supervise the ceasefire between India and Pakistan.
- UNMOGIP has remained in the region to observe hostilities between the neighbouring countries and report ceasefire violations along the Line of Control (LoC).

### India's contribution to UNPK

- India was a pioneer in responding to requests from the UN to provide troops to maintain world peace and security from the first UN Peacekeeping mission in **1948** to monitor the ceasefire agreement between Israel and its Arab neighbours.
- India took the initiative to participate in UN Peacekeeping activities during the **Korean Crisis in the 1950s**.
- India took the lead during the 1950s Korean Crisis by providing troops and medical professionals to the UN Repatriation

Commission in Korea, which was also led by an Indian general named **Thimmaya**.

- In the **Congo Crisis of the 1960s**, Indian forces made the ultimate sacrifice. As a result, **Captain Gurbachan Singh Salaria**, the only UN peacekeeper, was awarded India's highest military honour, the **Param Vir Chakra**, for giving his life in defence of the UN's Congo mandate.
- Since then, more than **2,50,000 Indian soldiers** have participated in **49 of the 71 missions UNPKOs** have gone for.
- The greatest sacrifice of **177 Indian service members**, the largest ever committed by a single troop-contributing country, was made due to India's **fifth-biggest** troop and police personnel contribution.

## ECONOMIC COOPERATION AND TRADE AGREEMENT

**Context:** The Australian Prime Minister's upcoming visit is aimed at expressing Australia's political will for furthering bilateral ties that received a boost with the implementation of the Economic Cooperation and Trade Agreement (ECTA).

### About the ECTA:

- The ECTA, a less than comprehensive **bilateral trade pact**, was signed on **April 2, 2022** by India and Australia.
- The India-Australia FTA, officially called the **Australia-India Economic Cooperation and Trade Agreement**, is the **first trade agreement signed by India with a developed economy** after more than a decade.
- It will not only **eliminate or lower tariffs** on a large number of goods but also **address the non-tariff barriers** such as technical barriers to trade, apart from sanitary and phytosanitary restrictions.
- **Significance for India:**
  - According to government estimates, trade in goods is likely to almost **double to \$50 billion in five years from about \$27 billion** at present.
  - **India is not part of any significant regional trading bloc** and most major economies the world over are forging bilateral or regional trade pacts with other countries.
  - Hence it is **important for India**, too, to **sign similar agreements**, so that it **does not lose out on preferential market share and weaken its export competitiveness**.



## The tariff reduction

- **Benefit to India:**
  - Australia will provide **zero-duty market access for 96.4 per cent value of Indian exports** (98 per cent of tariff lines).
  - **Exports of several labour-intensive sectors**, currently facing **import duty of 4-5 per cent** in Australia, will gain from the immediate **duty-free access**.
  - These include most **textiles and apparel**, a few **agricultural and fish products**, **leather, footwear, furniture and sports goods, jewellery, engineering goods**, and selected **pharmaceuticals and medical devices**.
  - Tariffs on the remaining 113 tariff lines, amounting to 3.6 per cent of India's exports, will be **phased out in five years**.
- **Benefit for Australia:**
  - Australia, too, will gain considerable market access in India with tariffs being **eliminated on more than 85 per cent** of the Australian goods exports immediately, **rising to almost 91 per cent in over 10 years**.
  - Import duties will also be **slashed on Australian wines**, though **not eliminated**.

## India's dairy sector

- India has managed to **completely shield its dairy sector** from any tariff reduction under the FTA while **excluding most sensitive agriculture items** such as chickpeas, walnut, pistachio nut, wheat, rice, bajra, apple, sunflowers seed oil and sugar.
- Other items in the **exclusion list**, where **no concessions** have been extended, include **silver, platinum, jewellery, iron ore, and most medical devices**.

## Provisions for services

- Both countries have decided to facilitate the **recognition of professional qualifications, licensing, and registration procedures** between professional services bodies.
- In a boost to Science, Technology, Engineering or Mathematics (STEM), and information and communications technology (ICT) sectors, the **length of stay for an Indian student** with a bachelor's degree with first-class honours in the areas will be **extended from two to three years**.
- Australia will also provide **new access for young Indians** to participate in working holidays in the country.

## Other trade agreements, which are in pipelines:

| Country/trade bloc | when did the talks start | Scope of the deal   | What has been achieved so far  | Timeline for conclusion   |
|--------------------|--------------------------|---|--|---|
| United Kingdom     | January                  | Comprehensive FTA to cover areas such as goods and services, including financial services and telecommunications, investment, intellectual property, Customs, sanitary & phytosanitary measures, technical barriers to trade, gender, sustainability, geographical indicators, among others | <p>Six rounds of negotiations completed;</p> <p>the next round will take place early 2023</p> <p>More than 16 of 25 policy areas have been closed</p> <p>Some of the contentious issues are:</p> <p>UK wants India to lower tariff on automobiles, and automobile components, scotch whisky;</p> <p>UK has interest in legal, financial, architectural services, which has been a problem for India;</p> <p>India wants easier movement of skilled professionals, audio-visual services in UK has been one of the key demands from India</p> | Diwali (October 2022) was missed. Besides political tensions in the UK, elections in key states in India slowed the talks. India is hoping to finalise the deal by March 2023 |

|                          |              |   |  |   |
|--------------------------|--------------|---|--|---|
| Canada                   | March        | Early progress trade agreement to include goods, services, rules of origin, sanitary & phytosanitary measures, technical barriers to trade, dispute settlement, any other areas mutually agreed upon by both sides  | Fifth round of talks took place in November<br><br>Apart from traditional areas, the early progress trade agreement/interim agreement will cover areas such as small and medium enterprise, trade and gender, environment, and labour  | The earlier deadline was December 2022. India has reiterated that it will not chase deadline anymore and focus on the right deal that benefits both nations |
| European Union           | June         | Will cover separate agreements on trade, investment, and geographical indicators. Negotiating areas to include goods, Customs, sanitary & phytosanitary measures, trade remedies, services & investment, digital trade, government procurement, intellectual property, SMEs, sustainable food systems, among others | The third round of negotiations took place between November 28 and December 2<br><br>Negotiations on investment protections and geographical indicators took place earlier this month<br><br>The aim of the third round of talks was to get into real negotiations, and begin consolidating texts<br><br>The next round of negotiations will be held in Brussels from March 13 to 17, 2023 | End of 2023 or early 2024   |
| Gulf Cooperation Council | Yet to begin | Not known   | GCC had expressed its interest in the resumption of FTA negotiations<br><br>Currently, both sides are negotiating the terms of reference of FTA<br><br>Negotiations are expected to start between January and March 2023   | Yet to be decided   |

Source: Department of Commerce, Department of International Trade UK, European Commission

## KUKI-CHIN REFUGEES

**Context:** As another round of refugee crisis brews on the Mizoram-Bangladesh border, several members of the Kuki-Chin community were "pushed back" by the Border Security Force (BSF).

### Why are the Kuki Chins Fleeing Bangladesh?

- People from the Kuki-Chin community, who are **ethnically and culturally different** from the **majority Muslim population** of Bangladesh, are fleeing Bangladesh to **escape the fighting** between the Bangladesh Army and the Kuki Chin National Army (KNA), an ethnic insurgent group in Bangladesh.
- The KNA and its political wing Kuki-Chin National Front (KNF) has been **demanding a separate state** and better facilities for the **Kuki Chins** in Bangladesh.
- The **Arakan Army**, the military wing of the United League of Arakan is fighting for an **independent Rakhin State** (Arakan) and are on a cleansing spree.

### Who are the Kuki Chins?

- Kuki-Chin, the **Christian community** from Bangladesh's Chittagong Hill Tracts, share close ethnic ties with people in Mizoram.
- The **Chins** of Myamnar, the **Mizos** of Mizoram and the **Kukis** of Bangladesh are of the **same ancestry** and belongs to the **Kuki ethnic group native to the Mizo hills**.
- They are collectively called the **Zo people**.
- The Kuki Chin people are settled in the **Chittagong Hill Tracts** in Bangladesh.
- It **borders Myanmar** on the southeast, **Tripura** on the north, **Mizoram** on the east and the **Chittagong district** in west.

### What is the government of India Stand?

- India is **not a signatory** to the **United Nations Refugee Convention of 1951** and its **1967 Protocol**.
- It **does not recognise refugees**, and the undocumented migrants are **liable to be prosecuted for violating the Foreigners Act**.

# UN Refugee Convention 1951 and India's justification for not signing it

## UN Refugee Convention, 1951

- The 1951 Convention relating to the Status of Refugees was the first comprehensive attempt to define refugees and charted a detailed guideline for host countries to ensure the adequate protection and preservation of the rights of all refugees.
- It puts out clearly who a refugee is and what kind of assistance, rights and legal protection a refugee is entitled to receive.
- It also lays down the **obligations of refugees** towards the host countries.
- The Convention also specifies certain categories of people, such as war criminals, who do not qualify for refugee status.



## Definition of Refugee

The 1951 convention defines a refugee as:

- A person who is outside his or her country of nationality or habitual residence
- Has a well-founded fear of being persecuted because of his or her race, religion, nationality, membership of a particular social group or political opinion
- Unable or unwilling to avail him— or herself of the protection of that country, or
- Unable to return there, for fear of persecution



## Various Rights conferred to Refugees

- The right not to be expelled, except under certain, strictly defined conditions.
- The right not to be punished for illegal entry into the territory of a contracting State.
- The rights to work, housing, education, public relief and assistance, freedom of religion, access courts, and freedom of movement within the territory.
- The right to be issued identity and travel documents.
- The right to be protected from refoulement apply to all refugees.



## Why hasn't India signed this convention?

- Dispute over definition of refugee
- Concern about national security
- Porous, open and poorly guarded borders can attract huge illegal immigration
- Threat to native tribes and indigenous population (In North-east)
- Huge strain on economy
- Diversion of welfarist measures from poor in India to foreigners
- Signing of the convention could amount to loss of sovereignty
- Ad-hocism of convention





## YOUNG PROFESSIONALS SCHEME

**Context:** The governments of India and the U.K. marked Pravasi Bharatiya Divas on January 9 by kicking off the Young Professionals Scheme, which will permit up to 3,000 of their degree-holding citizens aged between 18 and 30 to live and work in each other's countries for a period of two years.

### Key details:

- The launch of the scheme, which was conceived as part of an **India-U.K. Migration and Mobility MoU signed in May 2021**.
- **Young Indians and Britons** would be able to **travel to each other's countries** either for work or study, or visit, for **two years**.
- The scheme allows for **exchange visas** for up to 3,000 individuals per year.

### India-UK relations in education field

- The UK-India Education and Research Initiative (UKIERI) was launched in 2005 with a focus on higher education and research, schools and professional and technical skills
- Joint Working Group on Education, Newton-Bhabha Fund and Scholarship schemes are some other educational initiatives by the two countries for maintaining the bilateral relationship
- During the visit of the Prime Minister to the UK in November 2015, the following announcements relating to education were made:
  1. 2016 was announced as the UK-India year of Education, Research and Innovation
  2. Virtual partnerships would be initiated at the school level to enable young
  3. People of one country to experience the school system of the other
  4. Country and develop an understanding of the culture, traditions and social and family systems
  5. UK's plans for 25,000 UK students to go to India through the Generation UK- India programme by 2020, including 1000 UK interns with Tata Consultancy Services in India by 2020
  6. Launch of the 3rd phase of the UK India Education and Research Initiative
- UK also supports the Skills India Mission and announced a fresh commitment of up to £12 million

## WORLD ECONOMIC FORUM SUMMIT

**Context:** WEF's annual summit kicks off in the Alpine haven of Davos.

### What is WEF?

The World Economic Forum (WEF) is a **non-governmental** and **lobbying** organisation based in **Geneva, Switzerland**.

- It was founded in **1971** by German engineer and economist **Klaus Schwab**.
- The foundation is **mostly funded by its 1,000 member companies** as well as **public subsidies**
- **Mission: Improving** the state of the world by engaging **business, political, academic, and other leaders of society to shape global, regional, and industry agendas**.
- The WEF is mostly known for its **annual meeting** at the end of January in **Davos**, a mountain resort in the eastern Alps region of Switzerland.
- The forum functions with a **three-point vision set**:
  - Mastering the Fourth Industrial Revolution
  - Solving the problems of the global commons
  - Addressing the global security issues

### The WEF partners

- The WEF is largely funded by its **partnering corporations**.

- These are generally **global enterprises** with annual turnover **greater than \$ 5 billion**.
- WEF also partners with **public subsidies**.

### WEF on polycrisis

- Ahead of this yearly meet, the World Economic Forum **published the Global Risks Reports 2023** in which it warned that the world may see a '**polycrisis**' centred around natural resource shortages by 2030.
- **What is polycrisis?**
  - A problem becomes a crisis when it **challenges our ability** to cope and thus threatens our identity.
  - In the polycrisis the **shocks are disparate**, but they interact so that the **whole is even more overwhelming** than the sum of the parts.
  - Another explanation of polycrisis would be when **multiple crises in multiple global systems** become causally entangled in ways that significantly **degrade humanity's prospects**.
  - These interacting crises **produce harms greater than the sum** of those the crises would produce in isolation, were their host systems not so deeply interconnected.
- The WEF report said that the **world is facing a set of risks** that feel both wholly new and eerily familiar.
- The report goes on to state that these risks **may converge into a polycrisis** by the end of the decade.
- The report elaborated that the **current Ukraine war** has plunged Europe into a **major energy crisis** and set **inflation** on an upward spiral, pushing up the cost of living and **creating a food crisis** that spreads far beyond Europe.
- According to the WEF, the rising cost of living, slow economic growth, and tight global food and energy supplies rank as **pressing short-term global risks**.
- On the other hand, the **long-term risks** over the coming decade are **failure to mitigate climate change**, failure to adapt to climate change, extreme weather events, and the threat of **biodiversity collapse**.

### Reports/Indices/rankings published by WEF

1. Global Competitiveness Report
2. Global Information Technology Report
3. Global Gender Gap Report
4. Global Risks Report
5. Global Travel and Tourism Report
6. Global Enabling Trade Report
7. Environmental Performance Index
8. Human Capital Report

### PRAVASI BHARATIYA SAMMAN AWARD

**Context:** *Guyana's President Mohamed Irfaan Ali, US-based businessman Darshan Singh Dhaliwal, and DSB Group CEO Piyush Gupta are among 21 recipients of the 17th Pravasi Bharatiya Samman Award (PBSA).*

#### About the award

- **highest Indian award for NRIs and OCIs** or an **organization/institution** established and run by NRIs/POIs.
- It was constituted by the **Ministry of Overseas Indian Affairs**
- Distributed on **Pravasi Bharatiya Divas** (Non-Resident Indian Day)
- honours NRIs/POIs for exceptional and meritorious contribution in their chosen field/profession.
- is given by the **President of India**.
- It is **conferred for outstanding contributions** in any of the following areas:
  - **Better understanding** of India
  - **Support to India's causes** and concerns in a tangible way
  - Building **closer links between India, the overseas Indian community** and their country of residence;
  - **Social and humanitarian causes** in India or abroad
  - **Welfare** of the local Indian community
  - **Philanthropic and charitable work**
  - **Eminence** in one's field or outstanding work, which has **enhanced India's prestige** in the country of residence;
  - **Eminence in skills** which has **enhanced India's prestige** in that country (for non-professional workers).

## The Pravasi Bharatiya Divas (PBD)

- Celebrated on 9<sup>th</sup> January every year.
- Denotes return of Mahatma Gandhi to India on 9 January 1915.
- marks the **homecoming of the Indian diaspora**.
- Formal recognition of PBD came in 2003.
- Revised in 2015 and since then it has been organized every two years.
- The theme of the 17<sup>th</sup> Pravasi Bharatiya Divas (PBD) Convention 2023 is: "**Diaspora: Reliable Partners for India's progress in Amrit Kaal**".

### • Aims:

- to **highlight the contribution** of Overseas Indians (OICs) towards India's development,
- to **showcase India as a dynamic and attractive destination** for investment, tourism, and business, and
- to **recognize the services of the Indian diaspora** in strengthening India's ties with other countries.



## NOTES





# DEFENCE & SECURITY

## K9-VAJRAS

### K9-Vajras

**Context:** The Defence Ministry has started the process for the procurement of 100 more K9-Vajra tracked self-propelled howitzers, which are built in India using technology transferred from South Korea.

#### About the gun

- The K9-Vajra is a 155-mm, 52-calibre tracked self-propelled howitzer based on the K9 Thunder built by Hanwha Defense.
- K9-Vajra offers a high rate of fire at long-range.
- It is compatible with Indian standard.
- It is made of all-welded steel armour protection material.
- In India the K9 gun has been developed under the Buy Global programme of the Defence Procurement Procedure (DPP) where foreign companies are allowed to participate.
  - ▶ For K9-Vajra, Hanwha Techwin of South Korea is the technology partner of L&T.
- The first 10 guns have been imported from South Korea and assembled in India.
- The remaining 90 guns were largely manufactured in the country.



- Under the new scheme, the persons leading the VDGs will be paid Rs 4,500 per month by the government, while others will get Rs 4,000 each.
- In the VDCs, only the Special Police Officers (SPOs) leading them were provided a remuneration, of Rs 1,500 monthly.
- The SPOs, the lowest rank in the J&K Police, used to be retired army, para military or police personnel.
- The VDGs, officials said, will function under the direction of the SP/SSP of the district concerned.

## Composition of VDCs

- A minimum of 10-15 ex-servicemen, ex-policemen and able-bodied local youth were enrolled in each VDC on a voluntary basis.
- The allotment of weapons could go up depending on the credentials of the volunteers, total population of a village and its security requirements.

## VILLAGE DEFENCE COMMITTEES

**Context:** After militants killed six people in two days in the Upper Dangri village of Jammu and Kashmir, Lt Governor assured the people that they would get a Village Defence Committee (VDC) on the lines of those in Doda district.

### What is a VDC?

- The VDCs were first formed in the erstwhile Doda district (now Kishtwar, Doda and Ramban districts) in mid 1990s as a force multiplier against militant attacks.
- The then Jammu and Kashmir administration decided to provide residents of remote hilly villages with weapons and give them arms training to defend themselves.
- The VDCs have now been renamed as Village Defence Guards (VDG).
- The new scheme to set up VDGs in vulnerable areas of J&K was approved by the Union Ministry of Home Affairs
- Like a VDC member, each VDG will be provided a gun and 100 rounds of ammunition.

### VDGs & VDCs

- Both VDG and VDC is a group of civilians provided guns and ammunition to tackle militants in case of attack until the arrival of security forces.

## EXERCISE VEER GURDIAN 2023

**Context:** To promote Air Defence cooperation between the countries, India and Japan are all set to hold the joint Air Exercise, 'Veer Guardian-2023' involving the Indian Air Force and Japan Air Self Defence Force (JASDF) at Hyakuri Air Base, Japan.

### Key details:

- The inaugural exercise will include the conduct of various aerial combat drills between the two Air Forces.
- They will undertake multi-domain air combat missions in a complex environment and will exchange best practices.

## EXERCISE 'VARUNA' – 2023

**Context:** The 21<sup>st</sup> Edition of the Bilateral Naval Exercise between India and France – Exercise Varuna commenced recently.

### Key details:

- The bilateral exercise between the two navies was initiated in 1993.
- It was christened as 'VARUNA' in 2001 and has become a hallmark of India – France strategic bilateral relationship.

- The joint-exercises are held either in the **Indian Ocean** or **Mediterranean Sea** with the aim of **improving Indo-French coordination** on capabilities like:
  - cross-deck operations,
  - replenishment-at-sea,
  - minesweeping,
  - anti-submarine warfare and
  - information sharing.

## PRITHVI-II

**Context:** A successful training launch of a Short-Range Ballistic Missile, Prithvi-II was carried out recently from the Integrated Test Range, Chandipur off the coast of Odisha.

### Key details:

- Prithvi II is capable of carrying out **nuclear attacks**.
- Prithvi II is also the **first missile to be made under the Integrated Guided Missile Development Program (IGMDP)** by the Defence Research and Analysis wing of Ministry of Defence, known as the Defence Research and Development Organization (DRDO).
- It is a series of **short-range ballistic missiles** launched to combat opponents in war like situations.
- It also assists in **surface-to-surface fighting** and precisely hitting their intended target.
- This missile has been developed mainly to be used by the **Indian Air Force (IAF)**.
- The first test fire of this missile was carried out in **1996** and its development stage was **completed in the year 2004**.
- Currently, this potent missile has the strike range of **350 kilometers** and can carry the load of **nuclear warhead up to 1000-kilogram mass**.
- It is a **single-stage missile** that falls under the liquid fuelling category and is known to have a maximum warhead mounting capability
- The missile is a proven system and is capable of striking targets with a very **high degree of precision**.
- The state-of-the-art missile uses an advanced **inertial guidance system** with manoeuvring trajectory to hit its target

## Other variants of Prithvi

- The Prithvi missile project involved developing **three variants**:
  - **Prithvi I (SS-150) – Army version**, 150 km range with a payload of 1,000 kg.
  - **Prithvi II (SS-250) – Air Force version**, 350 km range with a payload of 500 kg.
  - **Prithvi III (SS-350) – Naval version**, 350 km range with a payload of 1,000 kg.

**Indigenously developed**  
**Nuclear capable**  
**Surface-to-surface**

# Prithvi-II missile

**Test-fired**

As part of a user trial by the Army

**Strike range: 350 km**  
**Payload: 500-1,000 kilogram of warheads**

**Thrustured by liquid propulsion twin engines**  
**Uses advanced inertial guidance system with manoeuvring trajectory to hit its target**

The entire launch activities were carried out by the specially formed Strategic Force Command of Army and monitored by scientists of DRDO as part of training exercise

Chandipur  
ODISHA

Balasore

## Integrated Guided Missile Development Programme

- The IGDMP was conceived by Dr APJ Abdul Kalam to enable India attain self-sufficiency in the field of missile technology.
- It got approval for Government in 1983.
- Keeping in mind the requirements of various types of missiles by the defence forces, the team recommended development of **five missile systems**:
  - Short Range Surface to Surface Missile (SSM) 'Prithvi'
  - Long Range Surface to Surface Missile (SSM) 'Agni'
  - Medium Range Surface to Air Missile (SAM) 'Akash'
  - Short Range Surface to Air Missile (SAM) 'Trishul'
  - Anti-tank Guided Missile (ATGM) 'Nag'

## ADISHAURYA

**Context:** *Minister of State of Defence and Tourism graced the concluding day of the Adi Shaurya Parv.*

### Key details:

- It was launched by the Ministry of Tribal Affairs, in **partnership** with the **Ministry of Defence** and the **Indian Coast Guard**.
- It showcased **tribal dances and performances** by the **Armed forces** to **commemorate** the 126th birth anniversary of **Netaji Subhash Chandra Bose** (Parakram Diwas).

## SUBMARINE VAGIR

**Context:** *Indian Navy is set to commission the fifth Kalvari class submarine Vagir.*

### Key details:

- These submarines are being built in India by the **Mazagon Dock Shipbuilders Limited (MDL)** Mumbai, under collaboration with **France**.
- **Four of the Kalvari class of submarines** have already been commissioned into the Indian Navy.
- **Background:**
  - The **erstwhile Vagir**, submarine from **Russia** was commissioned in **1973** and undertook numerous operational missions including deterrent patrols.
  - The submarine was **decommissioned** in **2001** after serving the nation for about three decades.

## About Vagir

- INS Vagir is the **fifth submarine** of the first batch of **six Kalvari-class submarines** for the Indian Navy.
- It is a **diesel-electric attack submarine** based on the **Scorpène class**, designed by **French** naval defence and manufactured by **Mazagon Dock Limited**, an Indian shipyard in Mumbai, Maharashtra.
- It is named after the **Sand Fish** of the Indian Ocean.
- It is designed to **operate in all theatres of operation**.
- It can launch attacks with **both torpedoes and tube launched anti-ship missiles**, whilst underwater or on surface.

## Kalvari class Submarine

- The Kalvari class is a class of **diesel-electric attack submarines** based on the **Scorpène-class submarine** being built for the Indian Navy.
- The class and submarines take their names from the **first submarines inducted in the Indian Navy**.
- The Kalvari class is capable of **offensive operations** across the entire spectrum of naval warfare including:
  - anti-surface warfare,
  - anti-submarine warfare,
  - intelligence gathering,
  - mine laying and
  - area surveillance

## NOTES



# CULTURE

SATYENDRA NATH BOSE

## SATYENDRA NATH BOSE



**Context:** On Satyendra Nath Bose's 129th birth anniversary, we take a look at the Indian physicist's illustrious legacy and stellar achievements.

### Key contributions of Bose:

- Born on January 1, 1894, Bose grew up and studied in Kolkata, where he solidified his position as an exemplary academician.
- While teaching **Planck's formula** for the **distribution of energy from black body radiation**, Bose began questioning the way particles were counted.
- His basic argument was that one photon of light is **not distinguishable from another** of the same colour and came up with his own derivation, instead of **relying on classical electrodynamics**.
- Bose first sent his findings, recorded in a paper titled **Planck's Law and the Hypothesis of Light Quanta**, to a famous science journal called The Philosophical Magazine.
- However, the **paper was rejected** and he made the bold decision of **sending his research to Einstein**.
- He also joined the laboratory of Maurice de Broglie where he learnt techniques of **X-ray spectroscopy and crystallography**, the branch of science that deals with the **arrangement of atoms in crystalline solids**.
- Bose was awarded **Padma Vibhushan**, one of the highest civilian awards in the country, by the Indian government in .
  - Five years later he was appointed as **National Professor**, the highest honour in India for scholars.
  - He lived the remainder of his life in Kolkata, until his **death in 1974**.



## BOSE-EINSTEIN CONDENSATE (BEC)

- Bose-Einstein condensate (BEC), a state of matter in which separate atoms or subatomic particles, cooled to near absolute zero (0K, -273.15°C, or -459.67°F; K = kelvin), coalesce into a single quantum mechanical entity—that is, one that can be described by a wave function—on a near-macroscopic scale.
- This form of matter was predicted in 1924 by Albert Einstein on the basis of the quantum formulations of the Indian physicist Satyendra Nath Bose.
- Although it had been predicted for decades, the first atomic BEC was made only in 1995, when Eric Cornell and Carl Wieman of JILA, a research institution jointly operated by the National Institute of Standards and Technology (NIST) and the University of Colorado at Boulder, cooled a gas of rubidium atoms to  $1.7 \times 10^{-7}$  K above absolute zero.
- Along with Wolfgang Ketterle of the Massachusetts Institute of Technology (MIT), who created a BEC with sodium atoms, these researchers received the 2001 Nobel Prize for Physics.
- Research on BECs has expanded the understanding of quantum physics and has led to the discovery of new physical effects.

## SAVITRIBAI PHULE

## SAVITRIBAI PHULE

**Context:** 192nd birth anniversary of Savitribai Phule was marked recently



## WHO WAS SAVITRIBAI PHULE?

- India's 1st woman teacher.
- Born in a dalit Mali community, on January 3, 1881, in Maharashtra.
- Married to Jyotirao Phule at the age of 10.
- Opened a school for girls in Bhidewada, Pune, in 1848 (India's 1st girl school).
- Schools for girls and Sudra/Ati-Sudras were Opposed by Extremist nationalist like Bal Gangadhar Tilak (blamed for not following Sanatan Dharma/Jaati Dharma, going against nationalism).

## PHULE'S ROLE AS A SOCIAL REFORMER

- Started Balhatya Pratibandhak Griha ('Home for the Prevention of Infanticide') for pregnant widows facing discrimination.
- Advocated inter-caste marriages, widow remarriage, and eradication of child marriage, sati and dowry systems, among other social issues.
- Set up the Satyashodhak Samaj ('Truth-seekers' society') in 1873.



- The society was open to all, irrespective of their caste, religion or class hierarchies, with the sole aim of bringing social equity.
- Started '**Satyashodhak Marriage**' – a rejection of Brahmanical rituals where the marrying couple takes a pledge to promote education and equality.

### SAVITRIBAI'S LITERARY WORKS

- Published her first collection of poems, called **Kavya Phule** ('Poetry's Blossoms'), at the age of 23 in 1854.
- Published **Bavan Kashi Subodh Ratnakar** ('The Ocean of Pure Gems'), in 1892.
- Her letters to her husband have also been published.
- Besides these works, **Matushri Savitribai Phulenchhi Bhashane va Gaani** (Savitribai Phule's speeches and songs) was also published.

### SATYASHODHAK SAMAJ

- The **Satyashodhak Samaj** was founded by **Jyotiba Phule and Savitribai Phule**.
- It was **against brahminical dominance** and favoured of the **emancipation of the lower castes, untouchables, and widows**.
- **Objective**
  - **Education, access to social rights, and civil liberties for people from lower castes, the underprivileged, and women.**
  - **To condemned caste-based and religious exploitation.**
  - **To liberate the Shudras and ati Shudras from Brahmins' exploitative policies.**
  - **To completely eliminate the aristocratic bureaucracy, as well as the social status of Brahmins.**

### SWAMI VIVEKANANDA

# Swami Vivekananda

**Context:** 12th January 2023 marks the 161st birth anniversary of Swami Vivekananda, observed as National Youth Day.

### TEACHINGS OF SWAMI VIVEKANANDA

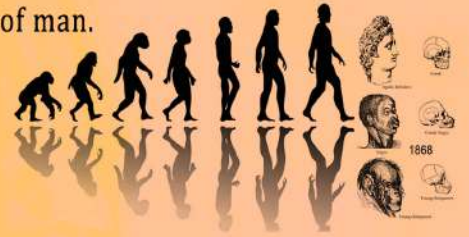
#### • Vedantic Humanism

- ▶ Vivekananda believed that there is only one Self in the universe.
- ▶ He saw the entire universe as a manifestation of the absolute One.
- ▶ On coexistence of various faiths, he believed religious acceptance, and not tolerance, was important.
- ▶ He claimed that tolerance comes out of a superiority complex.





- ▶ The most desirable path for self-realisation was selfless service of man.
- ▶ He articulated that external rituals of religion are of secondary importance but the spiritual essence of a religion should be preserved and accepted.



## • Divinity within ourselves

- ▶ Swami Vivekananda asserted that each soul is potentially divine.

## • Karma Yoga, Bhakti Yoga, Raja Yoga

- ▶ Vivekananda talked about the four pathways of attaining moksha from the worldly pleasure and attachment in his books, three of them are:

### • Karma Yoga

- ▶ Vivekananda, emphasising the importance of work, said that God can be attained through work.

The key to this secret lies in Karma Yoga, as it teaches how to employ to the maximum advantage all our energies in our work.



### • Bhakti Yoga

- ▶ Bhakti Yoga teaches that love is the vital element of all human beings.
- ▶ It teaches how to love bereft of any ulterior motives.



### • Raja Yoga

- ▶ Raja Yoga opens up the psychological way to union with God.
- ▶ This Yoga teaches that in order to acquire knowledge, we'd have to use a method called concentration.



### • Faith in oneself

- ▶ He emphasises that the ideal of faith in ourselves is of the greatest help to us as whatever you think, that you will be.
- ▶ One has to know that all knowledge, power, purity, and freedom is in oneself.
- ▶ Vivekanand also urged people to not shy away from taking responsibility for their actions.

## SAGOL KANGJEI

**Context:** India's Home Minister tweeted that it is believed that Sagol Kangjei, the modern-day Polo game originated in Manipur.

## SANGOL KANGJEI

- A sport indigenous to Manipur, dated back to 14th C.
- Modern polo originated from it.
- Players used to ride Manipur Ponies.
- Associated with ancient manuscript like Kangjeirol.
- Absence of goalpost in Sangol Kangjei unlike modern polo.



## Popular games that originated in India

### Chess

- Chess was devised in India, and was known as Ashtapada (which means 64 squares).
- Unlike how the game is played today, it used to be played with a dice on a checkered board, but without black and white squares.
- A few years later, the game was called Chaturanga (quadripartite).
- It was divided into four parts called angas, which were symbolic of the four branches of an army.

- Just like the real ancient Indian army, it had pieces called elephants, chariots, horses and soldiers, and was played to devise war strategies.
- In 600 CE, Persians learned this game and named it Shatranj. 'Checkmate' comes from the Persian term in the game, 'Shah-Mat', meaning 'the king is dead'.

### Ludo:

- Ludo is a board game that we've all played at least once.
- Earlier in India it was called Pachisi, and the board was made out of cloth or jute.
- A depiction of Pachisi is found in the caves of Ajanta in Maharashtra, showing that the game was quite popular in the Medieval Era.
- The Mughal Emperors of India, such as Akbar, also liked playing Pachisi.
- In the late 19th century, different variations of the same game were played in England; in 1896, a similar game appeared that was called Ludo, and thus the name was patented.

### Snakes & Ladders:

- In ancient India, Snakes & Ladders was called Moksha Patam, Mokshapat and Parama Padam.
- Created by Sant (saint) Gyandev in the 13th century, this game of vice and virtues was used in Hindu Dharma to teach good values to children.
- The snakes represented vice and the ladders virtues.
- The squares where the ladders were found depicted virtues; for example, square 12 was faith, 51 was reliability, 76 was knowledge, and so on.
- Similarly, the squares where the snakes were found were known as vices; square 41 was disobedience, 49 was vulgarity, 84 was anger, etc.
- The hundredth square represented Moksha or Nirvana.

### Kabaddi:

- Kabaddi is a contact sport that is around 4,000 years old.
- It is another sport that started in Tamil Nadu, and developed from ancient village defense tactics and group hunting.
- Kabaddi is an umbrella term and has many

other forms under it—Sanjeevani, Amar, Punjabi and Gaminee—as well as some international rules.

- Combining characteristics of rugby and wrestling, kabaddi requires great power and skill.
- The game goes for 40 minutes and has seven players on each side.

### Card Games:

- Ancient India was the birthplace of card games and since then, a large number of card games are played all over the world.
- Games such as blackjack, baccarat and poker are famous all over the world.
- This game was patronised by the nobility and royalty.
- This game was called Kridapatram in ancient times; in Middle Ages, it was known as Ganjifa.

## GANDHI SMARAK BHAWAN

### THE GANDHI SMARAK BHAWAN

**Context:** The former in-charge of the Gandhi Smarak Bhawan in Punjab was arrested and remanded him in three days of police custody.



#### What is Gandhi Smarak Bhawan?

- Gandhi Smarak Bhawan, which is spread over a 5,000 sq yards area is one of the units of Gandhi Smarak Nidhi, Punjab, Haryana, Himachal, a trust which was constituted after the assassination of Mahatma Gandhi in 1948.
- At the outset, the trust was named Gandhi Smarak Nidhi (GSN).



- In 1963, the Punjab State Gandhi Smarak Nidhi was registered as an independent trust named Gandhi Smarak Nidhi Punjab.
- When Punjab state was divided into three states, then the Trust was renamed the Gandhi Smarak Nidhi Punjab, Haryana & Himachal Pradesh.

## SAMMED SHIKAR AND SHETRUNJAY HILL

**Context:** Members of the Jain community have been staging protests in Gujarat, Rajasthan, Madhya Pradesh, Maharashtra, and New Delhi over demands related to two holy sites — Sammed Shikhar on Parasnath hill in Jharkhand and Shetrunjay hill in Palitana of Gujarat.

### About Sammed Shikharji (Jharkhand)

- It is considered to be the **biggest pilgrimage site** by both the Digambaras and the Svetambaras as it is located on the Parasnath hill.



- It is believed that it is the place where **20 of the 24 Jain tirthankaras**, along with many other monks attained 'moksha'.
- The word 'Shikharji' in itself means a 'venerable peak'.
- The word 'Parasnath' comes from 'Parshvanatha', the **23rd Jain tirthankara** who attained moksha here.

### Shetrunjay hill (Gujarat)

- This place is **sacred to Jains** and has a total of **865 temples**.
- Jains believe that **Adinath**, who is the **founder of Jainism**, had meditated beneath the tree at the summit of this place.
- The temple complex here also has a shrine of a Muslim saint, **Angar Pir**.
- The most important temple of all here is the **Adinath Temple**, located on the highest point of the place.

### Other Holiest Sites in Jainism

#### Pawapuri, Nalanda district in Bihar:

- The last tirthankar Mahavira was cremated here.

#### Dilwara temples, Mount Abu in Rajasthan:

- It has five marvellous temples built of marble with intricate carvings.
- The oldest of which Vimal Vasahi temple was built by Vimal Shah in 11th century AD.
- The other temples are Luna Vasahi, Pittalhar, Parshvanath and Mahavir Swami, built through 13th-17th century.

#### Shravanabelagola in Karnataka:

- The Gomateswara statute is of Lord Bahubali, the son of the first Jain Tirthankar.
- It was built in 10th century AD by a minister in Ganga dynasty empire, Chamundaraya.
- It has several 'Basadis' or Jain temples.

#### Shantinath temple complex in Deogarh, Lalitpur district in Bundelkhand region of Uttar Pradesh:

- It has 31 temples with beautiful iconography.

#### Bawangaja, Barwani district in Madhya Pradesh:

- It has an 84 ft tall statue of Lord Adinath carved out of a single rock.
- Various temples at Gwalior, Chanderi and Khajuraho in Madhya Pradesh

#### Ranakpur temples, Pali district in Rajasthan:

- It was built in 15th century and has got some similarities with Hoysala architecture and not Nagara.
- There are over 1400 pillars and are carved in great detail and are unique to each other.
- Discovery of Jain bronze statues in Chausa (Bihar) and Hansi (Hissar, Haryana), Akota (Vadodara, Gujarat).

#### Kankali Tila, near Mathura in Uttar Pradesh:

- Here, there was discovery of a type of votive tablets known as Ayagapata used for donation and worship under Jainism in early centuries.
- These tablets are decorated with objects and designs central to Jain worship such as the stupa, dharmacakra and triratna.
- They present simultaneous trends or image and symbol worship.
- The practice of donating these tablets is documented from 1st century BCE to 3rd century CE.

#### Udayagiri and Khandagiri Caves in Odisha:

- They date back to the 2nd-1st century BC and are dedicated to Jainism and carved out during the reign of King Kharavela.
- The number of existing caves at Udayagiri is 18, while Khandagiri has 15.
- Famous caves here include Hathi Gumpha, Rani Gumpha and Ganesh Gumpha.
- They are rich with carvings of Jain tirthankaras and deities with inscriptions including the Hathigumpha inscription.
- The Hathigumpha inscription, written by Raja Kharavela, consists of 17 lines incised in deep cut Brahmi letters and mainly mentions the various conquests of this king.

#### Nasiyan Temple in Ajmer, also known as Soniji Ki Nasiyan:

- It was constructed in 19th century and dedicated to Lord Rishabhdev, the first Jain tirthankara.

#### Hathee Singh Jain Temple, Ahmedabad

#### Sittanavasal Caves in Tamil Nadu

#### Mangi-Tungi located near Tahrabad in Maharashtra.

- It is a twinpinnacled peak with plateau in between and dedicated to Jainism and considered as a gateway to the state of enlightenment.



- It enshrines images of Tirthankaras in several postures including Padmasana and kayotsarga and were made around 6th century AD.

## 50 ASI-PROTECTED MONUMENTS UNTRACEABLE

**Context:** Fifty of India's 3,693 centrally protected monuments have gone missing; the Ministry of Culture has told Parliament.

### What are centrally protected monuments?

- The **Ancient Monuments and Archaeological Sites and Remains Act (AMASR Act)** regulates the **preservation of monuments and archaeological sites of national importance.**
- The **Archaeological Survey of India (ASI)**, which is under the aegis of the **Union Ministry of Culture**, functions under this Act.
- The ASI was **founded in 1861** by **Alexander Cunningham**, when he realised the need for a permanent body to oversee archaeological excavations and conservation.
- The Act protects monuments and sites that are **more than 100 years old**, including:
  - temples,
  - cemeteries,
  - inscriptions,
  - tombs,
  - forts,
  - palaces,
  - step-wells,
  - rock-cut caves,
  - even objects like cannons and mile pillars that may be of historical significance.
- According to the provisions of AMASR Act, ASI officials are supposed to **regularly inspect the monuments** to assess their condition.
- Apart from various **conservation and preservation** operations, ASI officials can also:
  - file police complaints,
  - issue show cause notices for the removal of encroachments, and
  - communicate to the local administration the need for demolition of encroachments.

### How can a monument go "missing"?

- Many monuments and sites were lost to activities like **urbanisation, construction of dams and reservoirs**, and even **encroachments.**
  - 14 monuments have been lost to rapid urbanisation,
  - 12 are submerged by reservoirs/dams,
  - while 24 are untraceable, which brings the number of missing monuments to 50.

- Monuments which **could not be traced on ground** for a considerable time because of multiple factors, despite the strenuous efforts of ASI through its field offices, were referred as **Untraceable monuments.**

### Which monuments are missing?

- The Barakhamba Cemetery in Delhi
- The Guns of Emperor Sher Shah, Tinsukia (Assam);
- The Ruins of Copper Temple, Paya, Lohit (Arunachal Pradesh);
- Kos Minar, Mujesar, Faridabad (Haryana);
- Kutumbari Temple, Dwarahat, Almora (Uttarakhand);
- Rock Inscription, Satna (Madhya Pradesh);
- Old European Tomb, Pune (Maharashtra);
- 12th Century Temple, Baran (Rajasthan);
- Telia Nala Buddhist ruins, Varanasi (Uttar Pradesh).

## ASSAM'S CHARAIDEO MAIDAMS TO VIE FOR UNESCO TAG

**Context:** The Centre has decided to nominate Assam's Charaideo Maidams — the Ahom equivalent of the ancient Egyptian pyramids — for the UNESCO World Heritage Site status this year.



### Key details:

- There is currently **no World Heritage Site in the category of cultural heritage in the northeast.**
- The Ahom rule lasted for about **600 years** until the British annexed Assam in 1826.
- **Charaideo**, more than 400 km east of Guwahati, was the **first capital of the Ahom dynasty** founded by **Chao Lung Siu-Ka-Pha** in 1253.
- Out of 386 Maidams or Moidams explored so far, **90 royal burials** at Charaideo are the best preserved, making them showpieces of mound burial tradition of the Ahoms.
- The Charaideo Maidams enshrine the **mortal remains of the members of the Ahom royalty**, who used to be buried with their **paraphernalia.**
- After the 18th century, the Ahom rulers **adopted the Hindu method** of cremation and began entombing the **cremated bones and ashes in a Maidam at Charaideo.**

### UNESCO World Heritage tag:

- The **United Nations Educational, Scientific, and Cultural Organization (UNESCO)** identifies World Heritage Sites that have been nominated by nations that have signed the **UNESCO World Heritage Convention 1972.**
- The sites include:
- **Monuments** such as:

- architectural works,
- monumental sculptures,
- inscriptions,
- groupings of structures, and
- places comprise cultural heritage including archaeological sites.
- **Natural heritage:**
  - physical and biological formations,
  - geological and physiographical formations - including habitats of vulnerable species of animals and plants, and
  - natural locations that are valuable for science, conservation, or natural beauty.
- India signed the treaty in **1977**.
- In India, there are now **40 World Heritage Sites**:
  - 32 are cultural,
  - 7 are natural, and
  - 1 is mixed.
- India has the **world's sixth-highest number** of sites.

## SARI FESTIVAL "VIRAASAT"

**Context:** *The second phase of the Sari Festival "VIRAASAT"- Celebrating 75 handwoven Saris of India will begin at New Delhi.*

### Key details:

- **Organised by:** Ministry of Textiles
- It brings **enhanced attraction by participation** of famous Handcrafted varieties of Saris.
- The first phase of "VIRAASAT"- Celebrating **75 handwoven Saris of India** concluded recently.
- The event is likely to bring **renewed focus** on the **age-old tradition of Sari weaving** and thereby improve earnings of the handloom community.
- Handloom saris drawn from some of the exotic locations of India are on display and sale at the exhibition. A brief list is given below: -

| States          | Prominent sari varieties  |
|-----------------|---|
| Andhra Pradesh  | Uppada Jamdhani Sari, Venkatagiri Jamdani Cotton Sari, Kuppadam Sari, Chirala Silk Cotton Sari, Madhavaram Sari and Polavaram Sari  |
| Kerala          | Balaramapuram Sari and Kasavu Sari  |
| Telangana       | Pochampally Sari, Siddipet Gollabamma Sari and Narayanpet Sari  |
| Tamilnadu       | Kancheepuram Silk Sari, Arni Silk Saris, Thirubuvanam Silk Sari, Vilandai Cotton Sari, Madurai Sari, Paramakudi Cotton Sari, Aruppukottai Cotton Sari, Dindigul Cotton Sari, Coimbatore Cotton Sari, Salem Silk Sari and Coimbatore (Soft) Silk Saris & Kovai Kora Cotton Saris |
| Maharashtra     | Paithani Sari, Karvath Kathi Sari and Nagpur Cotton Sari  |
| Chhattisgarh    | Tussar Silk Sari of Champa  |
| Madhya Pradesh  | Maheshwari Sari and Chanderi Sari   |
| Gujarat         | Patola Sari, Tangaliya Sari, Ashawali sari and Kuchchi Sari/ Bhujodi sari   |
| Rajasthan       | Kota Doria Sari   |
| Uttar Pradesh   | Lalitpuri Sari, Banaras Brocade, Jangla, Tanchoi, Cutwork, and Jamdani  |
| Jammu & Kashmir | Pashmina Sari   |
| Bihar           | Bhagalpuri Silk Sari and Bawan Buti Sari  |
| Odisha          | Kotpad Sari and Gopalpur Tassar Sari  |
| West Bengal     | Jamdani, Santipuri and Tangail  |
| Jharkhand       | Tussar and Gichha Silk Sari   |
| Karnataka       | Ilkal Sari  |
| Assam           | Muga Silk Sari, Mekhla Chadar (Sari)  |
| Punjab          | Embd. & Croch (Phulkari)  |

## JALLIKATTU

**Context:** With the Supreme Court recommencing its work after the winter vacation, all eyes in Tamil Nadu are on the verdict of a five-member Constitution Bench of the Court on a batch of petitions seeking to strike down a 2017 Tamil Nadu law that protects jallikattu, a traditional event involving bulls.

### What is Jallikattu?

- Jallikattu is a **bull-taming sport** that has traditionally been part of the festival of **Pongal**.
- The festival is a **celebration of nature**, and **thanksgiving** for a bountiful harvest, of which cattle-worship is part.
- The elite **Jallikattu breeds** test the strength and guile of farm hands in especially-constructed **arenas**.
- It is a **violent sport**, and there is **only one winner, man or bull**.
- **Bos indicus** bulls are **bred specifically** by people of the village for the event.
- Bulls that are able to participate successfully in the jallikattu event are used as **studs for breeding**.
- These bulls also **fetch higher prices** in the markets.

### Jallikattu controversy: a Timeline

- In 2006, Madurai bench Of Madras High Court banned the jallikattu.
- In 2009, Government of Tamil Nadu brought Tamil Nadu Regulation of Jallikattu Act (TNRJA) to overturn the ban.
- In 2010, Animal Welfare Board of India filed a petition in Supreme Court (SC) to ban Jallikattu.
- In Nov. 2010, SC permitted the Government of Tamil Nadu to **allow jallikattu** for five months in a year.
- In 2011, Ministry of Environment and Forest issued a notification prohibiting use of bull as performing animal (technically banning Jallikattu).
- In 2014, SC struck down the TNRJA and banned the Jallikattu.
- In **2017**, the governor of Tamil Nadu issued a **new ordinance** that authorized the **continuation of jallikattu events**.
- Later, the Tamil Nadu legislative passed an act **exempting jallikattu from the Prevention of Cruelty to Animals Act (1960)**.

### How is the case being presented now?

- The primary question involved is **whether jallikattu should be granted constitutional protection** as a collective cultural right under **Article 29 (1)** (a fundamental right guaranteed under Part III of the Constitution to protect the educational and cultural rights of citizens).
- The court examined if the laws – the **Prevention of Cruelty to Animals (Tamil Nadu Amendment) Act of 2017** and the **Prevention of Cruelty to Animals (Conduct of Jallikattu) Rules of 2017** “perpetuate cruelty to animals” or were actually a means to ensure “the **survival and well-being of the native breed of bulls**”.
- The SC scrutinised the question of whether the new jallikattu laws were relatable to **Article 48** of the Constitution which urged the state to endeavour to organise agriculture and animal husbandry on **modern and scientific lines**.
- The Constitution Bench also looked into whether jallikattu and bullock-cart race laws of **Karnataka** and **Maharashtra** would actually sub-serve the **objective of prevention of cruelty to animals** under the **Prevention of Cruelty to Animals Act of 1960**.

| Arguments for and against Jallikattu                      |   |
|---|---|
| For   | Against   |
| It is a religious and cultural event in Tamil Nadu        | Various practices like sati and Devadasi too had religious and cultural significance. |
| Tool for conservation of indigenous breed of livestock.   | Deaths and injuries are caused to humans as well as bulls.                            |
| It did not violate principles of compassion and humanity. | Extreme cruelty was inflicted on the animals.   |
|   | Liberty is inherent in every living being and is recognized by constitution of India. |



## Some other controversial sports involving animals in India

**Cockfight:** A cockfight is a blood sport between two roosters (cocks), or more accurately gamecocks, held in a ring called a cockpit. The birds are specially bred for the matches. They are sometimes attached with either metal spurs (called gaffs) or knives, tied to the leg in the area where the bird's natural spur has been partially removed. While not all fights are to the death, the cocks may endure significant physical trauma. Cockfights are popular in Andhra Pradesh during the festival of Sankranti.

**Kambala:** Kambala Kannada is an annual Buffalo Race (he-buffalo) held traditionally under the auspices of local landlords and households or Patel of the village, in coastal Karnataka, India. The 'track' used for Kambala is a paddy field filled with slush and mud. The contest takes place between two pairs of buffaloes, each pair raced in wet rice fields, controlled by a whip-lashing farmer. In olden days, the winning pair of buffaloes was rewarded with coconuts and a bunch of plantains and nowadays, the winners are given gold coins, silver coins. Cash awards are also in vogue.

**Bail Gadi Saiyat:** In parts of rural Maharashtra, bullock cart races have, for long, been a source of recreation and entertainment. Bullock races last around 25 seconds. Maximum distance is 500 metres. For many people, it is a status symbol, while many farmers take it up as a hobby, no betting involved in these races held in village fairs.

**Camel Race:** Horse and camel race during the Pushkar fair period attract the most crowds, and the winner gets a cash prize from the government of Rajasthan. The camels are trained to take part in the race and to emerge as winners. The race takes place amidst a celebration of folk dancing and music. There is also a camel beauty contest. Another competition makes large numbers of people sit on the camel's back and usually fall. The camel that accommodates the maximum number of people on its back wins the competition.

**Bulbul Fight:** Every Makar Sankranti, which coincides with Assam's harvest festival Bhogali Bihu, bulbul fights are organised in the Hayagriva-Madhava Temple in Hajo, 30 km from Guwahati. People of surrounding villages catch bulbul chicks and rear them for a few weeks before they are taken to the temple premises on Makar Sankranti; the owners of the winners get various prizes. The birds sustain injuries during the fight and losers are let off after trimming the crest so that they do not enter a contest again. There is no betting on the fights.

## Animal Welfare Board of India

### About:

- AWBI is a statutory advisory body under the Union Ministry of Fisheries, Animal Husbandry and Dairying (Department of Animal Husbandry and Dairying)
- It derives its legal structure from the Prevention of Cruelty to Animals Act, 1960.
- It was established in 1962
- It was started under the stewardship of Late Smt. Rukmini Devi Arundale, well known humanitarian.

**Headquarters:** Ballabgarh in Faridabad District of Haryana (Chennai earlier)

### Mandate:

- It frames rules on how animals ought to be humanely treated everywhere.
- It has also frequently litigated to have stricter laws to ensure animals were not unduly harassed or tortured.

### Membership:

- Several government organisations, along with animal rights activists and parliamentarians, are represented on the Board.
- The Board consists of 28 Members.
- The term of office of Members is for a period of 3 years.

## MUGHAL GARDENS

**Context:** *The iconic Mughal Gardens at the Rashtrapati Bhavan in Delhi have been renamed.*

### Key details:

- The collective identity of all the gardens at Rashtrapati Bhavan will be 'Amrit Udyan'.
- **History of Mughal Gardens in India**
  - This style was influenced by the **Persian gardens** particularly the **Charbagh structure**.
  - It is intended to create a **representation of an earthly utopia** in which humans co-exist in perfect harmony with all elements of nature
  - In **Babur Nama**, Babur says that his favourite kind of garden is the Persian **charbagh style** (literally, four gardens).
  - From the gardens surrounding **Humayun's Tomb** in Delhi to the **Nishat Bagh** in Srinagar, all are **built in this style** – giving them the moniker of **Mughal Gardens**.

### • Features:

- **Use of waterways**, often to demarcate the various quadrants of the garden.
- These were not only **crucial to maintain the flora** of the garden, they also were an **important part of its aesthetic**.
- **Fountains** were often built, symbolising the “**cycle of life.**”

## UTTARAYAN

**Context:** *The Prime Minister of India has greeted the people on the occasion of Uttarayan.*

### What is Uttarayan?

- Uttarayan is a festival in celebration of the **winter solstice** and the **transition to springtime**, as well as the **harvest**.
- The name Uttarayan often refers to the **period between the winter solstice and the summer solstice**.
- In some places, Uttarayan is celebrated with **kite flying**, and the name Uttarayan is sometimes used as the name of a **kite festival**, notably in **Gujarat**.
- Uttarayan is sometimes called **Makar Sankranti**.
- Similar festivals that take place at the same time are known as **Pongal** and **Lohri**.

### Difference between Uttarayan and Dakshinayan

- **Uttarayan** refers to the period when the **sun moves towards the northern hemisphere**, beginning on **Makar Sankranti** (January 14) and lasting for six months until the start of the monsoon season.
  - Many festivals and pilgrimages take place during this time, and it is believed that the **positive energy and spiritual vibrations** of the universe are at their **strongest**.
  - In some states, people also fly kites to make most of the **increased sun exposure**.
- **Dakshinayan** refers to the period when the **sun moves towards the southern hemisphere**, beginning after the monsoon season and lasting until **Makar Sankranti**.
  - This period is characterised by shorter days and longer nights and is considered a time of **spiritual decline and darkness**.
  - Therefore, many religious activities such as **fasts, yagyas, and worship** are performed to **overcome diseases and sorrows**.

## MAGH BIHU

### MAGH BIHU



**Context:**  
The Prime Minister of India has greeted the people on the occasion of Magh Bihu.

**Key details:**

- Magh Bihu also called Bhogali Bihu is a **harvest festival** celebrated in **Assam** which marks the **end of harvesting season** in the month of **Magh** (January-February).
- A **bonfire (Meji)** is lit for the ceremonial conclusion and prayer to the **God of Fire**.
- The festival is developed by the **Tibeto-Burman and Indo-aryan cultures**.

## MAGHI MELA

**Context:** *This year, the festival of Maghi Mela is being celebrated on January 14.*

### A history of Maghi Mela

- Maghi Mela has been celebrated in the city of **Sri Muktsar Sahib** in Punjab for centuries in memory of 40 Sikh warriors who were killed fighting the Mughals in the **Battle of Khidrana** in **1705**.
- It was after this battle that **Khidrana** was named **Muktsar**, or the pool of liberation.
- It is held in the holy city of Sri Muktsar Sahib **every year in January**, or on the month of **Magh** according to the **Nanakshahi calendar**.
- It is one of the most important festivals for **Sikhs**.
- The festival marks the martyrdom of 40 Sikh soldiers in a battle against the Mughals. In the 1700s, the Mughals and Sikhs were at constant war with each other.

### The story of the Battle of Khidrana

- In **1704**, during the **siege of Anandpur Sahib** by the Mughals, 40 Sikh soldiers deserted their posts and fled.
- Upon arriving at their village near Amritsar, a woman named **Mai Bhago** scolded them and rallied the fighters to **return to Anandpur Sahib** in the service of their Guru.
- The freshly motivated soldiers along with **Mai Bhago** set off towards Anandpur Sahib to **help Guru Gobind Singh** hold fort against the Mughals.
- They met the **Guru at Khidrana** where they took on a large Mughal army, **sacrificing their lives in the process**.

- The **actual martyrdom day** of 40 Sikh soldiers (Muktas) falls in the month of **Vaisakh**, and Gurdwaras continue to pay tributes to the martyrs in that month.
- About a century ago, however, due to the **scarcity of water** in the region, the mela started being organised on the **Sankrant of Magh** month.

### MAKARAVILAKKU FESTIVAL



### PAIGAH TOMBS COMPLEX

**Context:** *The necropolis (a large, designed cemetery with elaborate tomb monuments) of noblemen dating from the Asaf Jahi era known as Paigah Tombs complex in Hyderabad is set to be restored with funding by the U.S. Ambassadors Fund for Cultural Preservation.*

#### Key details:

- Paigah Tombs or **Maqbara Shams al-Umara**, are the tombs belonging to the **nobility of Paigah family**, who were fierce **loyalists of the Nizams**.
- The Paigah tombs are among the **major wonders of Hyderabad State** which known for their architectural excellence.
- These tombs are **200 years old** which represent the final resting places of several generations of the Paigah Nobles.
- **Architecture:**
  - These tombs are made out of **lime and mortar** with beautiful inlaid **marble carvings**.
  - The Indo-Islamic architecture is a mix of both the **Asaf Jahi and the Rajputana styles** of architecture.
  - The style of architecture of the Paigah Tombs is an amalgam of **Mughal and Moorish styles** resulting in a unique synthesis.

- These tombs are magnificent structures, decorated in **stucco work**, and represent the **Mughal, Greek, Persian, Asaf Jahi, Rajasthani and Deccani style** of architecture.
- **Stucco** or render is a **construction material** made of **aggregates, a binder, and water**.
- Stucco is **applied wet and hardens** to a very dense solid.
- It is used as a **decorative coating** for walls and ceilings, exterior walls, and as a **sculptural and artistic material** in architecture.

### The U.S. Ambassadors Fund for Cultural Preservation

- The United States demonstrates its respect for the cultural heritage of **India and Bhutan** through the **U.S. Ambassador's Fund for Cultural Preservation (AFCP)**.
- This grant program draws on U.S. resources to support the preservation of historic buildings and monuments, archeological sites, museum collections, ethnographic objects, paintings, manuscripts and indigenous languages and other forms of traditional cultural expression.
- Through the U.S. Ambassadors Fund for Cultural Preservation, the American people have invested **\$2 million over the past 20 years** in the documentation, conservation, and restoration of 21 key historic sites and intangible heritage in India.
- AFCP projects typically involve widespread community engagement.
- The U.S. Embassy in New Delhi and Consulates in Chennai, Hyderabad, Kolkata, and Mumbai supported Indian partners, who combine conservation with environmental and socioeconomic development, working with local artists and artisans, and other community stakeholders.



## RAMCHARITMANAS OF TULSIDAS

**Context:** Bihar Education Minister said the Ramcharitmanas spreads hatred in society, and that Goswami Tulsidas's epic poem along with the Manusmriti and M S Golwalkar's Bunch of Thoughts should be burned.

### The Ramcharitmanas

- The poem was written in the **16th century** in the **Awadhi dialect** that is mainly spoken in the areas that are today's Lucknow, Prayagraj, and Ayodhya districts.
- It is divided into seven chapters (Kand) that tell the **story of Lord Ram** from birth to his becoming King of Ayodhya.
- The Ramcharitmanas is **based on the Ramayana**, sage Valmiki's great epic.

### Goswami Tulsidas

- Tulsidas, a Brahmin whose original name was **Ram Bola Dubey**.
- He **composed the Ramcharitmanas** on the bank of the Ganga in Varanasi.
- **Tulsidas** lived in the time of **Emperor Akbar**, and some believe that he was in touch with Abdurrahim Khan-e-Khanan, the son of Akbar's commander Bairam Khan, and they possibly exchanged some poetic communication as well.
- Tulsidas made the story of Lord Ram **popular among the masses** because he wrote in the regional dialect that most people understood.
- This earned him the **ire of Sanskrit scholars** of the time.

## KASHMIR'S PASHMINA SHAWLS

**Context:** Kashmir's famed pashmina shawls, known for centuries for their intricate buta or paisley patterns, got a French touch when an artist turned the fabric into a canvas for contemporary art forms at a Parisian exhibition, in a rare bid to cater to Western sensibilities.

### What is Pashmina?

- Pashmina is the **art of handcrafting** luxury wraps, shawls, scarves, and stoles - from fine **Cashmere**.
- The word Pashmina comes from '**Pashm**'.
- Pashm is a Persian word that literally translates to '**soft gold**'.
- In Kashmir, Pashmina is the art of **transforming soft Cashmere** wool into luxury shawls, stoles, or wearable accessories.
- The finest raw Cashmere is sourced from **Ladakh**, and **processed in Kashmir**.

- **China** accounts for **70%** of the world's cashmere production, **Mongolia 20%**, and the remaining **10%** of production is in **Afghanistan, Australia, India, Iran, Nepal, Pakistan, the United States**, the Central Asian republics and elsewhere.

- Only a **small percentage** of this production is the ultra-fine cashmere known as **pashmina**.

- **Changthang region** of Ladakh hosts an exotic variety of goats, which grow Cashmere as down fibre.

- This down fibre is **acquired in the Summer season** and processed to make Pashmina products

### History of Pashmina Shawls in Kashmir

- In the 16th century, a saint, named **Shah E Hamdan**, from Persia, traveled to Kashmir for religious preaching.

- It was him who **discovered Raw Cashmere** for the first time in Ladakh.

- A major portion of Europeans visited Kashmir regularly, and later **Pashmina shawls were exported in bulk to European countries**.

### How is Pashmina obtained?

- Over the mighty Himalayas, the **Capra Hircus goat** is found in Changthang, Ladakh.

- For this reason, it is also known as **Changthangi goat**.

### GI tag:

- Kashmiri Pashmina was given the **Geographical Indication (GI)** as an authenticity stamp.

- The GI mark is a certification of the given product ascertaining that its **unique qualities are not found anywhere else in the world** and that it belongs to a certain geographical area.

## ETIKOPPAKA WOODEN TOY CRAFT

**Context:** The Union government choose to confer Padma Shri for etikoppaka toy craft in the art category.

### Key details:

- Etikoppaka is a **small village** on the banks of **Varaha River** at a distance of **64 Kms** away from **Visakhapatnam** district of **Andhra Pradesh**.

- The name Etikoppaka is synonymous with the beautiful **wooden artifacts**.
- The toys are made with **lacquer color** and are traditionally known as **Etikoppaka toys** or **Etikoppaka Bommalu**.
- The village is very famous for its toys **made of wood**.
- The toys are also called as **lacquer toys** because of application of lacquer coating.
- The toys are made out of wood and are **coloured with natural dyes** derived from seeds, lacquer, bark, roots and leaves.
- The **wood** used to make the toys is **soft** in nature and the art of toy making is also known as **Turned wood Lacquer craft**.
- While making the Etikoppaka toys, **lac**, a **colourless resinous secretion** of numerous insects, is used.
- **GI tag**
  - Etikoppaka Toys have obtained their GI tag under **Handicrafts category** in the state of **Andhra Pradesh**.
  - Agricultural, natural or manufactured goods are registered as Geographical Indications (GI) by the Geographical Indications Registry as per the provisions of the **Geographical Indications of Goods (Registration & Protection) Act, 1999**.

## CHAMUNDI HILLS

**Context:** *The citizens' committee to save the Chamundi Hills has resolved to press for clearance from the heritage committee before the implementation of development works at the hill top under Pilgrimage Rejuvenation and Spiritual Heritage Augmentation Drive (PRASHAD).*

### Key details:

#### About Chamundi hills

- The Chamundi Hills are located 13 km east of **Mysore, Karnataka**.
- The name comes from the **Chamundeshwari Temple** at the peak.

#### Chamundeshwari Temple

- Patronised for centuries by Mysore rulers, it was renovated during the time of **Krishnaraja Wodeyar III (1827)**.
- It is named after the **Goddess Chamundi**.
- The main hill itself features an ancient stone stairway of 1,008 steps leading to its summit.
- Approximately halfway to the summit is **statue of bull Nandi**, the **vahana**, or "**vehicle**" of **Lord Shiva**, which is carved out of a single piece of **black granite**.
- A key feature is the **statue of Mahishasura** bearing a sword in his right hand and a cobra in the left.

#### PRASAD scheme

- The Government of India launched the PRASAD scheme in the year **2014-2015** under the **Ministry of Tourism**.
- It **aims** to integrate pilgrimage destinations in a prioritised, planned and sustainable manner to provide a **complete religious tourism experience**.



## NOTES



# SOCIAL ISSUES

## NEW UGC NORMS

### New UGC norms

**Context:** The University Grants Commission (UGC) announced that foreign universities can soon set up their domestic campuses in India, suggesting an overhaul of the country's higher education field. The UGC also unveiled a draft regulation for the same which is presently open for public feedback.

#### Highlights of the draft:

- **It seeks to allow foreign universities –**
- To set up their campuses in India.
- Decide their admission process, fee structure (to be reasonable), etc.
- To repatriate funds (to be governed by the Foreign Exchange Management Act, 1999) to their parent campuses.
- **complete autonomy to hire faculty and other staff** members either from abroad or in India.
- **The operation of Foreign Higher Educational Institutions shall not be contrary to the –**
- Sovereignty and integrity of India
- Security of the State
- Friendly relations with foreign States
- Public order, decency, morality
- Standards of higher education in India
- **Who are eligible: Top 500 global rankings** or "reputed" universities are eligible to apply and will be granted approval to operate for 10 years.
- **The UGC will have the right to inspect** the campuses at any time and such campuses will not be outside the purview of anti-ragging and other criminal laws.

#### The application process:

- A web-based portal maintained by the UGC will receive proposals A committee formed by the UGC will evaluate the applications and make recommendations within 45 days. The selected applicants will be given about 2 years to set up campuses.
- They will have to mandatorily impart education in offline mode.
- The regulation would be beneficial, as it would–
- Ease the process for the foreign universities to open campuses in India;
- Save foreign reserve outflow from India (in 2022, 5 lakh students spent apprx \$28-30 billions)
- Indian students would get the diverse courses of global reputation.
- **Some concerns regarding the regulations are–**
- The national security clause is too restrictive and vaguely defined in the draft.
- Campuses in Gujarat's GIFT will remain outside the purview of the UGC regulations.



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### University Grants Commission

- University Grants Commission (UGC) is a **statutory body** set up by the Department of Higher Education, Ministry of Education in accordance to the **UGC Act 1956**.
- It is **charged with coordination, determination and maintenance of standards of higher education** in India.
- It provides **recognition to universities** in India, and **disbursements of funds** to such recognized universities and colleges.
- **Headquarter:** New Delhi.
- **Six regional centres:**
  - Pune
  - Bhopal
  - Kolkata
  - Hyderabad
  - Guwahati
  - Bangalore

### Benefits and concerns of allowing foreign universities in India

#### Benefits:

- **Encourage competition:** The establishment of foreign university branch campuses would encourage competition mainly between existing private universities and foreign branch institutions.
- **Promotes new ideas:** Branch campuses could bring much needed new ideas about curriculum, pedagogy, and governance to Indian higher education.
- **Opportunity to learn business:** Foreign countries and universities will be providing opportunities for home campus students to learn about Indian business, society, and culture to participate in growing trade and other relations.

- **Skill generation:** Branch campuses would be helpful in addressing skill requirements and providing examples of different approaches to higher education.
- **Ease in policy implementation:** After examining national experiences elsewhere, clear policies can be implemented that may be attractive to foreign universities.
- International branch campuses can also help in reducing the foreign exchange outflow. Subsequently, it will help retain the best of Indian talent by controlling the problem of brain drain.

#### Concerns:

- It will not be easy to attract foreign universities to India and even more difficult to create the conditions for them to flourish.
- Many of these top universities are already fully engaged overseas and would likely require incentives to set up in India.
- There is also an issue of dilution of standards of teaching and delivery in a foreign campus. There is a lot of investment in training local staff to adhere to standards and without a strong legal and financial structure it becomes a risky plan.
- A big challenge will be India's "well-known" bureaucracy, especially the multiple regulators.

### DRAFT RULES FOR ONLINE GAMING

**Context:** A self-regulatory body, mandatory know-your-customer norms for verification, and a grievance redressal mechanism are among the key proposals in the **draft rules for online gaming**, released by the Ministry of Electronics and IT (MeitY) recently.

#### The draft rules

- The proposed rules, aimed at **safeguarding users** against potential harm from skill-based games, have been introduced as an **amendment to the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021**.
- The attempt is to **regulate online gaming platforms** as intermediaries and place due diligence requirements on them.
- Online games will have to **register with a self-regulatory body**, and **only games cleared by the body will be allowed to legally operate** in India.
- Online gaming companies will **not be allowed to engage in betting** on the outcome of games.

- **The self-regulatory body:**
  - The self-regulatory body will have a **board of directors with five members** from diverse fields, including online gaming, public policy, IT, psychology and medicine.
  - It must ensure that the registered games don't have anything which is **not in the interest of:**
    - **sovereignty and integrity** of India,
    - **defence** of India,
    - **security** of the state,
    - **friendly relations** with foreign states or
    - **public order**, or
    - **incites** the commission of any **cognizable offence** relating to the aforesaid.
- There could be **more than one self-regulatory body** and all of them will have to **inform the Centre** about the games they have registered along with a report detailing the criteria for registering.
- Like an **intermediary**, online gaming firms will be required to undertake **additional due diligence**, including:
- **KYC of users:**
  - For KYC, they will have to follow norms laid down for entities **regulated by the Reserve Bank of India (RBI)**
  - transparent withdrawal and refund of money, and
  - a fair distribution of winnings.
- Gaming companies will also have to secure a **random number generation certificate**, which is typically used by platforms that offer card games to ensure that **game outputs are statistically random and unpredictable**.
- They will also have to get a **"no bot certificate"** from a reputed certifying body.
- Similar to social media and e-commerce companies, online gaming platforms will also have to appoint:
  - a **compliance officer** who will ensure that the platform is following norms,
  - a **nodal officer** who will act as a liaison official with the government and assist law enforcement agencies, and
  - a **grievance officer** who will resolve user complaints.

### Online gaming sector in India

- The revenue of the Indian mobile gaming industry is expected to reach **\$5 billion in 2025**.

- The industry grew at a **compound annual growth rate (CAGR) of 38 per cent** in India between 2017-2020, as **opposed to 8 per cent in China and 10 per cent in the US**.
- It is **expected to grow** at a rate of **15 per cent** to reach Rs 153 billion in revenue by 2024, as per a report.

### MARRIAGE LAWS FOR MINORS

*Context:* The Supreme Court announced that it would examine whether minor girls, as young as 15 years, can marry on the basis of custom or personal law when such marriages are considered an offence in statutory law.

#### Key details:

- **Legal age in India:**
  - The legal age for marriage is **18 years for women and 21 years for men**.
  - Marriage below this age is considered to be **child marriage**, and hence an **offence**.
  - In 2017, the Supreme Court had ruled that **sexual intercourse by a man with his wife, who is below 18 years, is rape**.
  - In this judgment the SC read down **Exception 2 to Section 375** (rape) of the Indian Penal Code which **allowed** the husband of a girl child between 15 and 18 years of age to have **non-consensual sex with her**.
- **Question before the Supreme Court:**
  - The Supreme Court said it would **examine** whether girls as young as **15 years old** can enter into wedlock if **their personal law allows it**.
  - The **National Commission for Protection of Child Rights (NCPCR)** argued that when girls as young as 14 and 15 are being married off, a **plea of personal law and custom cannot be used when the POCSO Act and the Indian Penal Code** make such marriages an **offence**.
  - The Supreme Court has also **appealed to Parliament to lower the age of consent** under the POCSO Act and the IPC which **set it at 18 years**, thus criminalising all adolescent consensual sexual activity.

## What is POCSO Act?

- **About the Act:**
  - The POCSO Act, 2012 is a comprehensive law enacted with the objective of **protecting children** from a slew of **sexual offences** like sexual assault, sexual harassment and pornography while **safeguarding the interests of the child** at every stage of the judicial process.
  - It introduced a **child-friendly mechanism** for reporting, recording of evidence, investigation and speedy trial of offences through special courts.
- **Definition of child:**
  - This law defines a child as **any person below the age of 18 years**.
  - It defines different forms of **sexual offences** including penetrative and non-penetrative assault, and even sexual harassment and pornography.
- **Punishment:**
  - The maximum term of **rigorous imprisonment for life and fine**.
- **It is gender neutral:**
  - The Act sets a gender-neutral tone for the **legal process for any child victims**.
  - It is also **mandatory to report the obligation**.

## Various laws that govern marriage in India

- There are many marriage laws in India such as:
  - Hindu Marriage Law
  - Christian Marriage Law
  - Muslim Marriage Law
  - Special Marriage Law
  - Parsi Marriage Law
- **The Hindu Marriage Act, 1955**
  - The persons getting married **must be unmarried and must not have a living spouse** from their previous marriage
  - The **legal age for a woman is 18 years and for a man is 21 years**
  - The **sanity of mind** is necessary for both the parties and they must be capable to give their **consent** to the marriage freely
  - The persons getting married must be **mentally fit** for the marriage.
- **The Special Marriage Act, 1954**
  - The special marriage laws are applicable to citizens of India **irrespective of their religion, caste or culture**.
  - Under provisions of the Act, people from a **different religion, caste or community** are **allowed to get married**, provided **certain conditions** are met:
    - **Marriage registration** in India is **compulsory** to solemnize a marriage under this Act.
    - The **age** of both bride and groom must be **18 and 21 years** respectively
    - Both of them must be of **sound mind**
    - Both the bride and groom **cannot share common ancestors** or be **blood relatives**.
    - In accordance to the Act, there are **37 relations forbidden**, in which **no wedding can be performed between them**
- **The Indian Christian Marriage Act, 1872**
  - The **age** of bridegroom and bride should be **21 years and 18 years** respectively
  - Both bride and groom must give their **consent voluntarily** and under no compulsion from anyone
  - Both the parties to the marriage **should not have an existing partner** from any former marriage at the time of marriage
  - Both parties to the marriage **must be sane**
- **Muslim Personal Law (Shariat) Application Act, 1937**
  - This Act applies to **all Indian citizens**, whether residing in India or abroad.
  - Both parties to the marriage **should belong to the Muslim religion**.



- Each party should have completed the necessary **age requirement** and should have the **mental capacity** to consent to the marriage.
- Consent to marriage **should not be obtained by force**.

#### • Parsi Marriage and Divorce Act, 1936

- The parties to the marriage must have completed the **age of 21** in case of the **groom** and **18 years** in the case of the **bride**.
- **Neither** of the parties **should be related** to each other by **consanguinity**,
- The marriage should be performed as per the **religious ceremony of the Ashirvaad**.
- **Neither party** to the marriage should have a **spouse living** at the time of marriage.

#### The problem

- Under the Indian Christian Marriage Act, 1872, Parsi Marriage and Divorce Act, 1936, Special Marriage Act, 1954 and Hindu Marriage Act, 1955, the **minimum age** of marriage for a **man** is **21 years** and for a **woman** it is **18 years**.
- However, under the **Muslim personal law** in India, persons who have **attained puberty** are **eligible to get married** i.e. on attaining the age of **15 years**, while they are still minor.

#### Prevalence of Child marriage in India:

- An analysis of Child Marriage in India based on **Census 2011**, identified 70 districts spread across 13 States including **Assam, Bihar, Gujarat, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Uttar Pradesh** and **West Bengal** where prevalence of child marriage is **high**.
- In Jharkhand **32.2% women** married **before they turned 18**.
- In West Bengal, **41.6%** women got married before they turned 18.
- Madhya Pradesh has seen a **reduction** in child marriage (from 32.4% in NFHS-4 to 23.1% in NFHS-5), though the **infant mortality rate is high** – 41.3 per 1000 live births.

#### Effects of early marriage

- **Lack of reproductive choice:**
  - Girls who got married before turning into adults **lacked reproductive choices** and were denied a host of other rights, including education, autonomy and often a lack of livelihood.

#### • Health effects:

- 59% of Indian girls in the 15–19 group suffer from **anaemia**
- Early child-bearing could result in **poor maternal and child health and poor nutritional status**.

#### Way forward:

- As per the National Family Health Survey (2019–2021), **23.3% of women aged 20–24 years married before 18**, which shows that the **Prohibition of Child Marriage Act, 2006**, has **not been wholly successful** in preventing child marriages, especially among the poor.
- Parents often **use this Act to punish their daughters** who marry against their wishes or elope to evade forced marriages, domestic abuse, and lack of education facilities.
- Within a patriarchal setting, it is more likely that the **change in the age limit will increase parents' authority over young adults**.
- The **focus** must be on **creating social awareness** about women's sexual and reproductive health and rights, and **ensuring girls are not forced** to drop out of school or college.
- A **2008 Law Commission report** on family law reform recommended a **uniform age** of marriage for boys and girls at 18 years and not 21.
- It held that since 18 is the age at which a citizen can vote, they should be **allowed to marry at that age too**.

### MUSLIM LAW ON AGE OF MARRIAGE AND THE CHALLENGES

**Context:** *The Supreme Court agreed to examine a decision of the Punjab and Haryana High Court holding that a Muslim girl can marry a person of her choice after attaining puberty.*

#### What is the Punjab and Haryana HC ruling?

- The Punjab and Haryana High Court while hearing a **Habeas Corpus petition** ruled that a Muslim girl is free to marry a person of her choice after attaining puberty, unless she is under the age of 18.
  - Habeas Corpus is a **protection against illegal and arbitrary detention** of a person.
  - The petitions for this writ determine **whether the individual has been arrested according to the procedure established by law**.

- A **26-year-old Muslim man** who had married a **16-and-a-half-year-old girl** had moved the High Court seeking **custody of his spouse**.
- The **Punjab police** had taken **custody of the girl** since she was a **minor**.
- Under these circumstances, the **HC allowed the marriage** of the girl as per her **free will**, especially since **under Muslim law**, a girl can be married **after attaining puberty**.

### The Muslim law on the age of marriage for a woman

- The HC ruling quoted the **Principles of Mohammedan Law** by Sir Dinshah Fardunji Mulla, on the capacity for marriage. It states:
- **Capacity for marriage:**
  - Every Mahomedan of **sound mind**, who has **attained puberty**, may enter into a contract of marriage.
  - **Lunatics and minors** who have **not attained puberty** may be validly contracted in marriage **by their respective guardians**.
  - A marriage of a Mahomedan who is of **sound mind and has attained puberty**, is **void**, if it is brought about **without his consent**.
- Puberty is presumed, in the absence of evidence, on **completion of the age of fifteen years**.

### What is the challenge?

- The **National Commission for Protection of Child Rights** had moved the **Supreme Court** against the HC ruling.
- It argued that the High Court's ruling essentially **allowed a child marriage**, and this was in **violation of the Prohibition of Child Marriage Act, 2006**.
- The plea argued that the Child Marriage Act is a **secular legislation** and would **apply to all religions, overriding their personal law**.

### What is the law on child marriage?

- Under the **Prohibition of Child Marriage Act, 2006**, any marriage **below the prescribed age of 18 years for women and 21 for men** is illegal.
- The perpetrators of a forced child marriage can be **punished**.
- However, child marriages are **illegal but not void**.
- It is **voidable at the option of the minor party**.
  - This means, the marriage can be declared void by a court **only if the minor party petitions the court**.

- The NCPCR also argued that since the Protection of Children from Sexual Offences Act, 2012 **does not recognise consent for sexual activity by minors, marriages on attaining puberty cannot be allowed**.

### A proposed law

- Union Minister for Women and Child Development had introduced a **Bill** in the Lok Sabha to **amend the Prohibition of Child Marriage Act, 2006** to increase the **age of marriage** for women, and **ensure harmony** in the age limit across religions.
- The Bill was subsequently referred to a **Parliamentary Standing Committee**.

### AMENDMENTS PROPOSED TO NATIONAL MEDICAL COMMISSION ACT

*Context: The Union health ministry has finally proposed amendments to the National Medical Commission (NMC) Act, 2019.*

#### Key details:

- The amendments are in line with a **November 2003 Supreme Court judgement** directing the Medical Council of India to incorporate provisions in the **Ethics Regulations** such that **patients can seek action against doctors** on the grounds of **professional misconduct or medical negligence**.
- **Aim:**
  - The bill aims to provide provision for patients/their relatives/complainant to **prefer an appeal in the Ethics and Medical Registration Board (EMRB)/National Medical Commission against the decision/action of the State Medical Council** in complaints related to **medical negligence/professional misconduct**.
- **Current framework:**
  - Under the current framework, as per Section 30(3) of the NMC Act 2019, **only medical practitioners and professionals are allowed to file appeals** before the Ethics and Medical Registration Board.
  - The current framework is in **violation of an over two-decade-old Supreme Court order**, after which the Indian Medical Council issued a gazette notification **updating the (Professional Conduct, Etiquette and Ethics) Regulations, 2002**.
- **Another key amendment** being proposed to the NMC Act 2019 is the **introduction of a fifth autonomous body — Board of Examinations in Medical Sciences** — to conduct a two-part exam for the **registration of doctors**.



*National Medical*  
**COMMISSION**

- National Medical Commission (NMC) is a **regulatory body** which **regulates medical education and medical professionals**.
- It **replaced the Medical Council of India in 2020**.
- The Commission is **mandated to:**
  - ▶ grant recognition of medical qualifications,
  - ▶ give accreditation to medical schools,
  - ▶ grant registration to medical practitioners, and
  - ▶ monitor medical practice and assesses the medical infrastructure in India.
- The commission consists of **four autonomous boards:**
  - ▶ Under-Graduate Medical Education Board (UGMEB)
  - ▶ Post-Graduate Medical Education Board (PGMEB)
  - ▶ Medical Assessment and Rating Board
  - ▶ Ethics and Medical Registration Board

## DRAFT GUIDELINES BY NCPCR

**Context:** The National Commission for Protection of Child Rights has prepared the draft guidelines laying out a broad uniform framework for preliminary assessment to determine whether a child in the 16-18 years age group alleged to have committed a "heinous crime" may be tried as an adult under the children's court.

### Key details:

- Under the **Juvenile Justice Act, 2015** a specific section of the law states that:
  - In case of a **heinous offence** alleged to have been committed by a **child**, who has completed or is **above the age of 16 years**, the **Juvenile Justice Board** shall conduct a **preliminary assessment** and may pass an order that there is a **need for trial of the said child as an adult**.
- The **draft preliminary assessment guidelines** list the **essential elements** of the **final report** by the Juvenile Justice Board to be submitted to the children's court.
- The report **must include:**
  - the **socio-demographic details** of the child;
  - **details of the procedure** followed by the JJB, psychologists and other experts, including the **psychological tests** administered.
- The **aim** of the preliminary assessment is **not to seek confession from the child nor to reach a conclusion** of any sort.

- The final report **should not include:**
  - either **written or verbal statements** of the child or other persons interviewed;
  - details of observations made during the assessment; or
  - any kind of **statement or document** that could be **incriminating in nature**.
- The **JJ Act** lays down that **preliminary assessment** in case of **heinous offences** is to be **disposed of** by the Juvenile Justice Board **within a period of three months** from the date of first production of the child before Board.
- The Board will then **pass an order** that there is a **need for trial** of the child as an adult, and **order transfer** of trial of the case to the **children's court** having jurisdiction to try such offences.
- Thereafter the children's court may **decide** whether there is **need for trial of the child as an adult or as a child** and pass appropriate orders.

### What is preliminary assessment as per the JJ Act?

- Earlier, all children under the age of 18 were considered minors by the law, but through an **amendment in 2015**, a provision was added to the JJ Act for **trying a child in conflict with the law as an adult**.
- Under this, a child in the **age group of 16-18 years** could be tried as an adult in case of **heinous offences**.
- The Act states that the **Juvenile Justice Board** shall conduct a **preliminary assessment** to determine whether to try such a child as an adult or a minor.
- The Act directs that the Board shall **consider:**
  - the **mental and physical capacity** of the child for committing the alleged offence,
  - the **ability to understand** the consequences of the offence, and
  - the **circumstances** in which the offence was committed.
- It states that the **Board** can take the **assistance of experienced psychologists or psychosocial workers** or other experts.
- The Act also gives a **disclaimer** that the **assessment is not a trial**, but is only to assess the capacity of the child to commit and understand the consequences of the alleged offence.



- After the assessment, the **Board can pass an order** saying there is a need to try the said child as an adult and **transfer the case to a children's court** with the relevant jurisdiction.
- If tried as a minor, the **child could be sent to a special home** for a maximum of **three years**.
- If tried as an adult, the child can be **sentenced to a jail term, except** being sentenced to **death or life imprisonment** without the possibility of release.

### What do the draft guidelines say?

- The draft relying on already existing provisions in the Act says that the preliminary assessment has to determine **four aspects**:
  - **Physical capacity of the child**
  - **Mental capacity**
  - **Circumstances in which the offence was allegedly committed**
  - **Ability to understand the consequences of the alleged offence**
- It also states that the experts must be given an optimal **opportunity to interact with the child** to build a rapport.
- It also states they **must undergo regular training**.
- Additionally, a **copy of the assessment** must be **given to the child** and a **legal aid counsel must be present** during the assessment.
- It must be **within three months** of the child being produced before the Board.

### About NCPCR

- The National Commission for Protection of Child Rights is a **statutory body** established by the **Commission for Protection of Child Rights (CPCR) Act, 2005**.
- **Concerned ministry**:
  - The Commission works under the aegis of **Ministry of Women and Child Development**.
- **Role**:
  - The Commission is mandated to **ensure** that all **Laws, Policies, Programmes, and Administrative Mechanisms** are in **consonance with the Child Rights perspective** as enshrined in the **Constitution of India** and the **UN Convention on the Rights of the Child**.

### • Definition of child:

- As defined by the commission, child includes **person up to the age of 18 years**.

### • Members

- A **chairperson** and
- **Six members**, out of which **at least two are woman** are **appointed by the Central Government**

### • GHAR Portal:

- The Commission has developed and launched the portal **GHAR - Go Home and Reunite**, with the sole purpose of **restoration and repatriation of children**.
- The GHAR portal has been developed to **digitally monitor and track** the restoration and repatriation of children.

### What is the Juvenile Justice (Care and Protection of Children Act) 2015?

- The Juvenile Justice (Care and Protection of Children) Act was introduced and passed in Parliament in 2015 to **replace the Juvenile Delinquency Law and the Juvenile Justice (Care and Protection of Children Act) 2000**.
- **Main Provisions**:

- Allowing the **trial of juveniles in conflict with law** in the age group of **16-18 years as adults**, in cases where the crimes were to be determined.
- The nature of the crime, and whether the juvenile should be tried as a minor or a child, was to be determined by a **Juvenile Justice Board**.
- **Another major provision** was with regards to **adoption**, bringing a more universally acceptable adoption law instead of the **Hindu Adoptions and Maintenance Act (1956)** and **Guardians of the ward Act (1890)** which was for Muslims, although the Act did not replace these laws.
- The **Act streamlined adoption procedures for orphans, abandoned and surrendered children** and the existing **Central Adoption Resource Authority (CARA)** has been given the **status of a statutory body** to enable it to perform its function more effectively.

## WOMEN GET COMMAND ROLES IN THE INDIAN ARMY

**Context:** *As many as 108 women officers in the Army are set to be cleared for the rank of Colonel (selection grade) by a special selection board, which will make them eligible to command units and troops in their respective arms and services for the first time.*

### Key details:

- Earlier, with a **limited period career** in the force, there were **no promotion avenues** for women officers to become a **Colonel and command a unit** like male Army officers.
- It is not that women officers did not reach the rank of Colonel or beyond in the past, but they were only in two branches where they were granted permanent commission in 2008:
  - the Judge Advocate General (JAG) branch and
  - the Army Education Corps .
- However, these were **staff appointments** — which are **more administrative in nature** — and not purely command appointments in which an officer commands troops on ground.
- The **Supreme Court's order to grant permanent commission** to women Army officers in February 2020 opened the doors for promotion to women officers across all streams of the Army, except pure combat arms.
- With a **longer career in the Army**, women officers will be **considered for promotions**, including to the rank of Colonel and beyond.

**Women were inducted in the Army as early as 1992. Why did their Colonel promotions come so late?**

- An officer in the Army is promoted to the rank of Colonel **only after serving between 16 and 18 years**, based on certain criteria such as annual confidential reports and various courses.
- Women officers who were inducted into the Army were **inducted as Short Service Commission (SSC) officers** in 1992 and in the years after **did not have the choice to opt for permanent commission**.
- **JAG (Judge Advocate General) and Army Education Corps** were exceptions, where a **permanent commission** was opened for them in 2008.
- For **other arms and services**, women **could not become permanent cadre**, and had to retire much before they completed the service period that is mandatory to become a Colonel.

### The Supreme Court order in 2020

- In 2019, the Army **changed its rules** allowing SSC women officers to opt for permanent commission who would have otherwise retired after 14 years of service.
- However, this was not retrospective, and **applied only to the batches of women officers starting their career in the Army in 2020**.
- With the landmark Supreme Court judgment of February 2020, **permanent commission was granted to women officers with retrospective effect**.

### What does commanding a unit mean?

- Once promoted to a Colonel, an officer is **eligible to command troops** directly in the Army, which is an **acknowledgment of the leadership qualities** of the officer.
- It is considered a coveted appointment because in **no other rank** (including higher ranks like Brigadier or Major General) **does an officer interact directly with troops on the ground**.

### In which arms and services will women officers command units?

- **Women officers in many streams of the Army will be commanding units, including:**
  - the Army Air Defence,
  - Signals,
  - Engineers,

### Women in command

For the women in uniform, career progression is now becoming a reality with the Supreme Court directing the Centre to grant permanent commission (PC) within three months. Here is a snapshot of the long years of the fight women officers have conducted against discrimination.

**1992:** Centre notifies women eligible for appointment as officers for five years in the Army Postal Service, Judge Advocate General Department, Army Education Corps, Signal Corps, Intelligence Corps, Corps of Engineers, Corps of Electrical and Mechanical Engineering and Regiment of Artillery, among other Corps.

**Dec. 1996:** Ministry of Defence deletes the five-year clause for enrolment.

**Nov. 2005:** The initial process of induction of women officers under the WSES was replaced by SSCs with an

outer period of 14 years.

The first batch of women officers under the new scheme entered the Army in 2008.

**2003 and 2006:** Writ petitions filed in the Delhi High Court by advocate Babita Puniya and several SSC women Army officers for permanent commission and equality of opportunity in the Army.

**March 2010:** Delhi HC holds that women SSC officers of the Air Force and Army who had opted for PC, but not granted that status would be entitled to PC at par with male SSC officers with all consequential benefits. Contempt proceedings were then initiated by the women officers against the Union of India for non-compliance with the HC judgment. Contempt was later stayed.

**September 2, 2011:** The case reaches the Supreme Court in appeal.



**It's an order**

Here are some of the salient features of the order:

- Accepts government policy to grant PC to short service commission (SSC) women officers in 10 streams of the Combat Support Arms and Services wings
- SSC women officers are eligible for command assignments and not just staff appointments
- SSC women officers granted PC will be entitled to all consequential benefits, including promotion and financial gains

- Army Aviation,
- Electronics and Mechanical Engineers,
- Army Service Corps,
- Army Ordnance Corps, and
- Intelligence Corps.
- They are **still not eligible in core combat arms** such as **Infantry, Mechanised Infantry and Armoured Corps**, as the Army is not open to women fighting wars at the borders as foot soldiers.
- Much of this resistance stems from past instances of **male soldiers being taken as prisoners** of war and tortured by the enemy.
- However, the Army has recently decided to **open the Corps of Artillery**, a combat support arm, to women.

### Indian Navy and the Indian Air Force

- Women officers have been inducted into **all branches** of the Navy, and they will be **eligible for permanent commission** in the future.

- Women officers can command **shore-based units** and, as they join the service and become **eligible for permanent commission**, they would be able to **command ships and air squadrons**.
- The IAF has **opened all branches** for women officers, including the **fighter stream** and the **new weapon systems branch**.
  - As they are **granted permanent commission** based on eligibility and vacancies, they will be **eligible to command units** in the future.

### How many women serve in the Indian armed forces?

- The Army, being the largest of the three services, has the **largest number of women officers** at **1,705**, followed by **1,640** women officers in the IAF, and **559** in the Navy.

### Which other armies allow women to serve or command units?

- All major countries including the **United States, United Kingdom, Russia, and Israel**, allow women in command positions of their national armed forces.

NOTES

CHAHAL  
A C A D E M Y



# MISCELLANEOUS

## HAKKU PATRA AND BANJARAS

### HAKKU PATRA AND BANJARAS

**Context:** Prime Minister of India symbolically distributed Hakku Patra (land title deeds) to five families of the Banjara (Lambani) community, a nomadic Scheduled Caste group in Karnataka.



#### What are Hakku patras or title deeds?

- A title deed is a **property ownership document**, and the bearer of the document owns the land.
- The title deeds enable owners to **avail of bank loans** with the said document.
- They will also be **eligible to buy or sell land** to which the title deed is granted by the government.

#### The Banjara community

- The Banjaras are a key **scheduled caste sub-group in Karnataka**, although they are considered to be a tribal group in terms of the lives they lead.
- The **Scheduled Castes and Scheduled Tribes** together make up nearly **24 per cent** of the state population.
- The Banjara are a historically nomadic trading caste who may have origins in the Mewar region of what is now Rajasthan.
- All of the Banjara people profess faith in Hinduism and follow Hindu culture.
- Fire dance, '**Ghumar**' dance and **Chari dance** are the traditional dance forms of the Banjaras.
- Banjaras have a sister community of singers known as Dadhis or Gajugonia.
- They are traditionally travelled from village to village singing songs to the accompaniment of sarangi.

## SAGAR PARIKRAMA



# SAGAR PARIKRAMA



### Context

Recently, the Ministry of Fisheries, Animal Husbandry and Dairying (MoFAH&D) organised the planning meeting for 'Sagar Parikrama' Phase III in New Delhi.

### Objectives

- ▶ Sustainable use of marine fisheries
- ▶ Livelihoods of coastal fisher communities
- ▶ Protection of marine ecosystems
- ▶ Facilitate interaction with fishermen, coastal communities and stakeholders
- ▶ demonstrating solidarity with all concerned stakeholders as a spirit of Aatmanirbhar Bharat
- ▶ promote responsible fisheries
- ▶ protection of marine ecosystems.

### About

It is a navigation journey that will take place in all coastal states/UTs along a pre-decided sea route to show unity with all fishermen, fish farmers, and other stakeholders.

### Stakeholders of Program

- ▶ Department of Fisheries, Government Of Gujarat.
- ▶ Indian Coast Guard.
- ▶ Fishery Survey of India.
- ▶ Gujarat Maritime Board and
- ▶ Fishermen representatives.

### Fisheries Sector in India

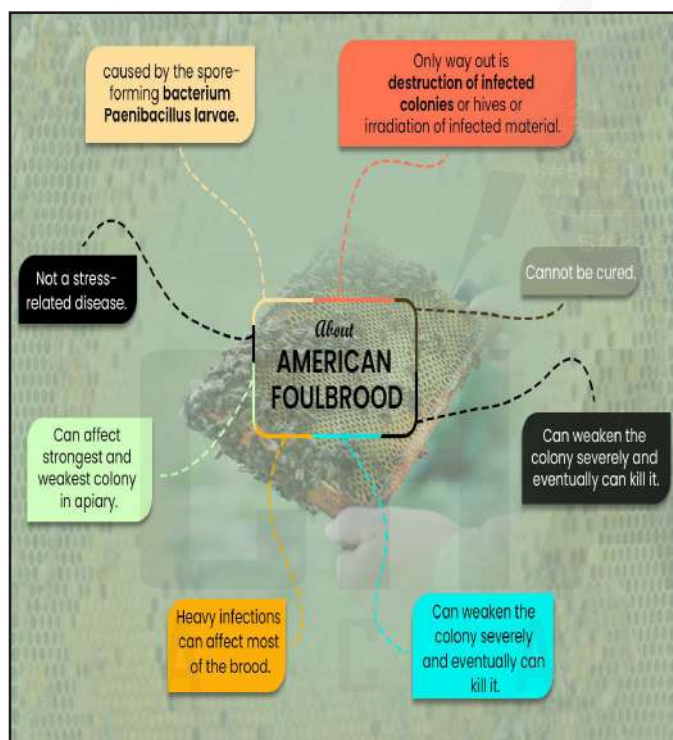
- ▶ India is the **third major producer** of fish through aquaculture in the world
- ▶ India is the **4th largest exporter** of fish in the world.



## WORLD'S FIRST VACCINE FOR HONEYBEES

**Context:** The United States Department of Agriculture (USDA) has granted a conditional license for a vaccine for honeybees to curb American foulbrood (AFB), a fatal bacterial disease for the insect.

- **The vaccine:**
  - The first such vaccine gives hope of a new weapon against diseases that routinely ravage colonies relied upon for food pollination.
  - The vaccine technology exposes queen bees to inactive (i.e., "dead") bacteria, which enables the larvae hatched in the hive to resist infection.
  - The vaccine is mixed in queen candy — the primary food source for both the queen bees and the attendant bees living in cages.



## FITUR

**Context:** Ministry of Tourism is participating in FITUR in Madrid, Spain.

**Key details:**

- It is one of the world's largest international travel exhibitions.
- India's participation at FITUR is significant to step up the recovery of inbound tourism to pre-pandemic levels.

## MANOSPHERE

- It is an **online network** of blogs, websites, forums and content creators, where **men** not only talk about fitness, health and dating but also **propagate anti-feminist and anti-women ideologies**.
- Consisting mostly of those who believe that men, **predominantly white men**, are under attack, manosphere as a term is believed to have **appeared in 2009** when a blog of the same name began.

## UNEXPLODED ORDNANCE

**Context:** An unexploded artillery shell was found near the official residence of Punjab Chief Minister in Chandigarh.

### What is an Unexploded Ordnance (UXO)?

- A military ammunition or explosive device that remains **unexploded even after it has been primed and fired** is known as **Unexploded Ordnance (UXO)** in military parlance.
- Such UXO can be **left-overs from a war**, a **military battle inoculation exercise, field firing exercises** or even be part of **military scrap** that is often exported from one country to another to extract metal.

## WORLD'S LONGEST RIVER CRUISE 'GANGA VILAS'

**Context:** World's longest river cruise MV Ganga Vilas will be launched by the Prime Minister of India.

### Key details:

- The luxury cruise will cover a distance of more than 3,200 kms across 27 river systems in 5 states in **India and Bangladesh**.
- The itinerary of MV Ganga Vilas has been curated to **showcase the rich heritage of India** with stop overs in spots of historical, cultural and religious importance
- It is planned around **50 tourist spots** that include **national parks, world heritage sites** and the cities of **Patna, Guwahati, Kolkata** and even Bangladesh capital **Dhaka**.
- The MV Ganga Vilas cruise is a **first-of-its-kind cruise service**.
- In India, **8 river cruise vessels** are operational between **Kolkata and Varanasi** while cruise movement is also operation on **National Waterways 2 (Brahmaputra)**.
- MV Ganga Vilas is a product of **Kolkata-based Antara Luxury River Cruises**.



## NATIONAL WATERWAYS-I

- Ganga-Bhagirathi-Hooghly River system from Allahabad to Haldia was declared as National Waterway No.1 vide National Waterway Act 1982.
- It became operative from 27th Oct 1986 after the formation of the IWAI.
- The waterway extends from Haldia to Allahabad for a distance of 1620 kms.
- The Hooghly River portion of the waterway from Haldia to Nabadwip is tidal.
- Sea going vessels navigate up to Calcutta (140 kms) and the fairway up to Calcutta is maintained by the Calcutta Port Trust.
- From Calcutta up to Tribeni there is no restrictions for navigation by inland vessels of a loaded draft up to 4m.
- From Nabadwip to Jangipur the waterway is formed by Bhagirathi River.
- Bhagirathi river is a regulated river because of the Barrages at Farakka and Jangipur.
- With the controlled discharge from the Farakka Barrage and limited river conservancy work a navigable depth of 2m is maintained in this route throughout the year.



## A BLINDNESS CONTROL POLICY

- Rajasthan has become the **first State** to implement a **policy to control blindness**.
- The objective is of **ensuring the "right to sight"**.
- Under the policy, a **drive** will be undertaken in the State to **reduce the rate of blindness**.
- The policy **aims** to bring down the prevalence rate of blindness in the State, which was **1.1% in 2020, to 0.3%**.

## SATELLITE CITY

### What is a Satellite city?

- Satellite cities or satellite towns are **smaller municipalities** that are **adjacent to a principal city** which is the core of a metropolitan area.
- Satellite cities could be **self-sufficient communities** outside of their larger metropolitan areas.
- However, functioning as part of a metropolis, a satellite city **experiences cross-commuting** (that is, residents commuting out of and employees commuting into the city).

## ROOT BRIDGES OF MEGHALAYA

**Context:** A farmer takes forward the State's traditional practice of building root bridges and connects two areas across **Umkar river in Cherrapunjee**.

### What are root bridges?

- Meghalaya is known for its root bridges, locally known as **jingkieng jri**.

- The living root bridges are one of Meghalaya's most beautiful **tangible heritage sites**.
- These sites have recently been **added to the tentative UNESCO world heritage site list**.
- Some of the most **popular** of these living root bridges are in **Nongriat, Cherrapunji, Nongbareh** and other nearby locations.
- These are **naturally built bridges** mainly built by **firstly planting two rubber trees** of the **Ficus elastica** on either side of a river.
- These trees usually **take about a decade** to grow and **generate secondary aerial roots**.
- It is a type of simple **suspension bridge** formed by the method of tree shaping to form living plant roots across a stream or river.
- These are very common in the southern part of Meghalaya grown by the **Khasi and Jaintia tribes**
- These bridges **can also be found in the state of Nagaland**.
- The **earliest written record** of Cherrapunji's bridges can be found in the **1844 Journal of the Asiatic Society of Bengal**.





## INDIA'S FIRST FESTIVAL OF INCLUSION

**Context:** India's first-of-its-kind inclusivity, 'Purple Fest: Celebrating Diversity' began in Goa.

### Key details:

- The festival aims to showcase how we can come together to create a **welcoming and inclusive world for everyone**.
- The unique purple festival, which will go long way in **furthering the agenda of empowerment of Divyangjan**.
- **Importance:**
  - Such festivities that celebrate the **spirit of inclusivity** are essential for **boosting the confidence of persons with disabilities** as well as sensitizing society towards their needs and issues.

## HUMAN RIGHTS WATCH REPORT

**Context:** Recently, the World Report 2023 of Human Rights Watch (HRW) was released.

### Key details:

- It said that Indian authorities had **intensified and broadened** their crackdown on activist groups and the media through 2022.
- It added that the current Union government used **abusive and discriminatory policies** to repress Muslims and other minorities.

- On **Jammu and Kashmir**, the HRW said that even after three years of dilution of Article 370, the government continued to restrict free expression, peaceful assembly, and other basic rights there.

### About HRW:

- Human Rights Watch (HRW) is an **international non-governmental organization** headquartered in New York City.
  - It was founded in 1978 as 'Helsinki Watch'.
- It conducts **research and advocacy** on human rights.
- The group **pressures governments, policymakers, companies, and individual human rights abusers** to denounce abuse and respect human rights.
- It often works **on behalf of** refugees, children, migrants, and political prisoners.
- In **1997**, Human Rights Watch shared the **Nobel Peace Prize** as a founding member of the International Campaign to Ban Landmines.
- **Note:** Human Rights Watch and Amnesty International are the **only two Western-oriented non-governmental**, international human rights organizations whose reports on human rights violations aim for **comprehensive global coverage**.

## THE YO-YO TEST AND DEXA SCAN

**Context:** The BCCI announced the (re)introduction of the Yo-Yo Test and the **introduction of DEXA scans** for the purposes of selection to the team.

### What is the Yo-Yo test?

- The Yo-Yo test was **first introduced** to the Indian cricket team during **Virat Kohli's fitness-focused captaincy reign**.
- It is developed by **Danish football physiologist Jens Bangsbo**.
- It is a **maximal aerobic endurance fitness test**, involving running between markers placed 20 metres apart, at increasing speeds, until exhaustion.



- Players are given scores on the basis of how many levels they are able to clear.

**What are Dexa scans?**

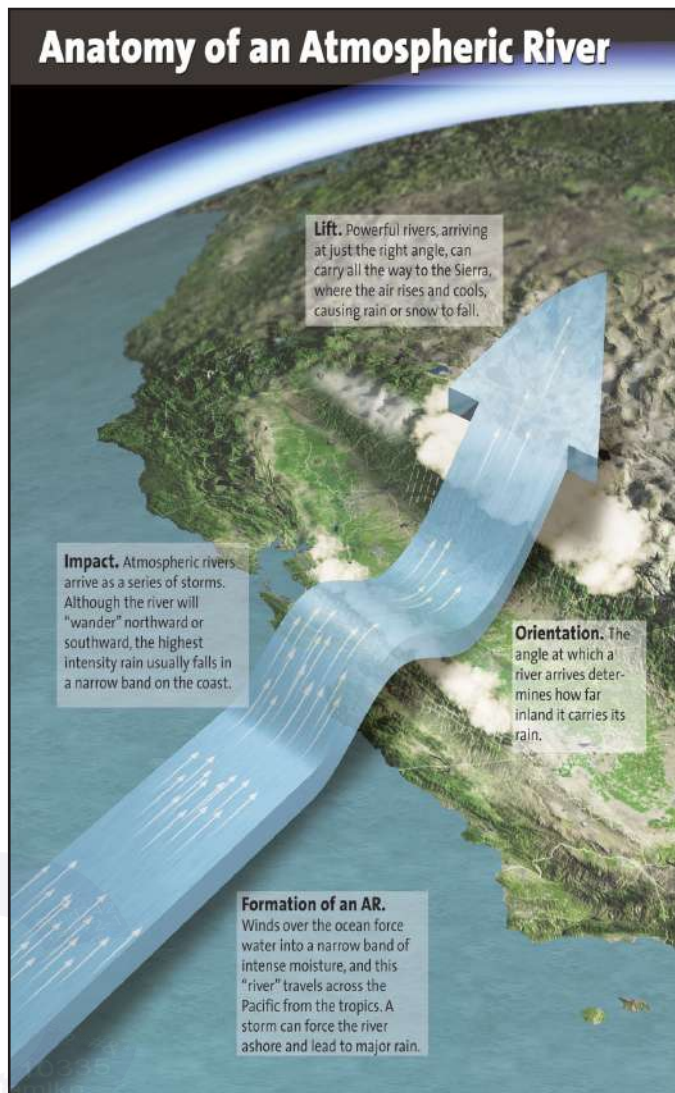
- Dexa scans were recommended as far back in 2011 because of a significant increase in players' workloads with the introduction of T20 cricket and professionalisation of the game.
- Through Dexa tests, the trainers will be able to measure body fat percentage, lean muscle mass, water content and bone density.
- It helps you understand where the fat is and whether the training methods are yielding the result.

**'PINEAPPLE EXPRESS' PHENOMENON**

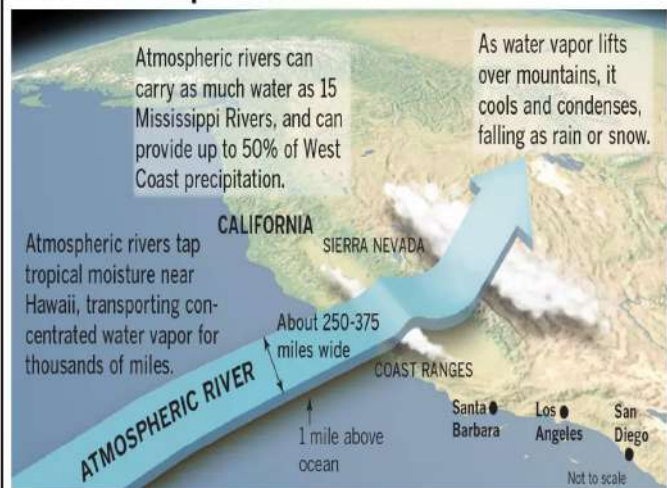
*Context: Forecasters said the rain arriving in California recently is being caused by a "true Pineapple Express" — a specific example of a common atmospheric phenomenon that resembles a conveyor belt for moisture.*

**About the phenomenon**

- Atmospheric rivers are narrow regions in the atmosphere that transport much of the moisture from the tropics to northern latitudes.
- Atmospheric rivers are part of the Earth's ocean water cycle, and are tied closely to both water supply and flood risks.
- A well-known example of a strong atmospheric river is called the "Pineapple Express" because moisture builds up in the tropical Pacific around Hawaii and can wallop the U.S. and Canada's West Coasts with heavy rainfall and snow.
- Prevailing winds cross over warm bands of tropical water vapor to form this "river," which travels across the Pacific as part of the global conveyor belt.
- These rivers in the sky occur often on the West Coast but can happen in other locations, including the eastern United States.



**How an atmospheric river works**



**WEF'S FIREAID INITIATIVE**

*Context: The FireAid initiative of using artificial intelligence to effectively manage wildfire had a successful pilot run since it was launched in January 2022 by the World Economic Forum (WEF).*





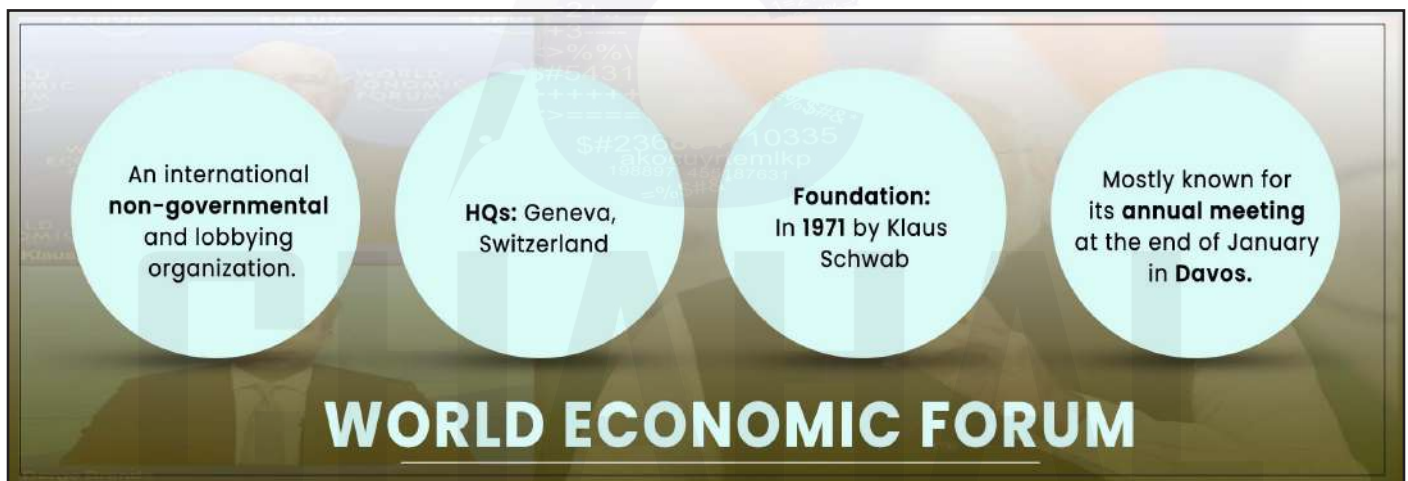
### About FireAid initiative

- It is a **joint initiative** of WEF to **mitigate wildfire risks** using AI systems, which includes:
  - a dynamic wildfire risk map
  - resource allocation
- By **linking data, technology and fire-fighting resources**, this effort attempts to create a **habitat for advanced analytics**.
- It is also **scalable** to a wide range of climates and environments.

### Need for the initiative

- Wildfires are a **natural phenomenon** that has always occurred and in a controlled manner, is even helpful for the ecosystems.
- But **climate change** has increased the **severity and frequency** of forest fires over the last few years, causing unprecedented **biodiversity loss, carbon dioxide emissions and financial losses** worldwide.

- Incidences of **extreme fires** across the globe are projected to **increase 30 per cent by 2050 and double by the end of the century**, according to the World Meteorological Organization.
- **Managing and preventing wildfires** is a vital element of efforts to control climate change and protect habitats, lives and livelihoods.
- There is a **need for greater collaboration** to improve the quality, scope and accessibility of relevant data and to enable this with minimum data requirement standards.
- The WEF report illustrated how AI-based data collection can **support firefighting and wildfire risk management**.
  - **Sensors with inbuilt AI**, for instance, can collect **acoustic information** or operate as **smoke detectors** in forests and alert authorities within the first hour of a wildfire starting.
  - **Unmanned aerial vehicles** can be flown over fires to provide live images and help firefighters plan their response.



### QUOTES & THEIR MEANING

#### 1. 'THE PROLETARIANS HAVE NOTHING TO LOSE BUT THEIR CHAINS'

- In his famous work *The Communist Manifesto*, Marx and his collaborator, Friedrich Engels, wrote this quote. A simple quote, it has a **profound message** – describing the state of workers under capitalism and making an appeal to them to fight for change.

#### The proletarians

- Proletarians or members of the proletariat, refer to the **working classes**.
- In more simple terms, proletarians are people who **earn wages in return for their labour**, which they sell to the capitalist.

#### Examples of proletarians:

- factory workers,
- construction workers
- farm workers (not land-owning farmers but people who actually work in the fields).

#### The problem:

- In **Marxist theory**, “the proletariat is that class in society which **lives entirely from the sale of its labour power and does not draw profit** from any kind of capital.”
- Under capitalism, while the **labour is paid in wages** (more on that later), it is the **capitalist who earns the “profit”**.



- According to Marx, this is the **inherent injustice of capitalism**.
- The defining feature of proletarians is that **they own no capital** – machines, tools, equipment, land, raw materials, etc.
- Thus, they are **reliant on capitalists**, the owners of capital, to be able to produce anything, even though they themselves are the ones who do the production.
- This is a **system that chains the proletarians, that ties them and their existence to the mercy of the capitalist**.
- **Examples:**
  - When there are **mass layoffs** because a **novel technology** makes the skills of a worker obsolete.
  - When **workers are paid under the minimum wage** (which is anyway paltry) simply because they have **no leverage in their relationship with the capitalist**.
  - How **Amazon** has wrecked the business of small booksellers and publishers.
  - How advancement in technology has **killed many “cottage industries.”**
  - **Capital constantly expands, consolidating itself and creating more and more inequalities in society.**
- Thus, Marx and Engels say, **“Proletarians have nothing to lose but their chains.”**

#### The idea for change:

- Now that Marx and Engels have stated the problem (that workers under capitalism are exploited), the **second part of the quote** offers an **idea for change**, highlighting arguably the most important tenet of Marxist politics – **solidarity among workers**.
- One of the fundamental reasons **why capitalism continues to prevail** to date, despite ample evidence of its unjustness, is because of the **individualist philosophy** that accompanies it.
- **Example:**
  - The **“American Dream”** or the myth that tells people to work hard to climb up the social ladder, essentially individualising what is a systemic issue – work hard, do well or conversely, if you are not doing well, you do not work hard enough.
  - As humans struggle in their pursuit of happiness, **they do not even realise the deep-rooted injustice** in the world and their role in perpetuating it.

- Thus, Marx and Engels **call for unity** – among workers across the world.
- They call for a **rejection of petty national identities** or the many ways in which the poor are pitted against the poor.
  - Rather, they call for **solidarity** based on the **common proletarian class**.
  - It is this unity born out of **class consciousness** that is fundamental to **overthrowing capitalism**.

#### Relevance today

- The **Covid-19 pandemic** exposed the **exploitation of workers** and the working class.
- While for some, the pandemic brought the luxuries of **“work-from-home”** and online ordering, others struggled to survive as **jobs were lost and wages fell**, even as profits among the richest soared.
- Therefore, as capitalism continues to exert its influence on workers across the world, Marx and Engels’ manifesto **stays relevant**.

#### 2. ***‘ARISE, AWAKE, AND STOP NOT TILL THE GOAL IS REACHED’ BY SWAMI VIVEKANANDA***

- The famous quote, **“Arise, awake, and stop not till the goal is reached,”** which Swami Vivekananda took from the **Katha Upanishad**.
- It soon became a clarion call for **galvanizing youth** to be **cognizant of the supreme power within**, thus **‘Arise,’** and once **conscious of the God** within, to hold on to the belief and see the world through this divine self-consciousness, to become **‘Awake.’**
- The quote reflects the **basis of Swami Vivekananda’s philosophy**, which says **human beings have infinite power and strength** within themselves.
- Vivekananda, in his speeches and work, reiterated and exhorted the youth to **“take one idea”** and **make that one idea their life**.
- **Strength** and **fearlessness** were the two keywords he used to urge the youth to imbibe in their lives to achieve their true potential.

#### The phrase can be expressed through the following markers of his philosophy:

- **Fearlessness**
  - Swami Vivekananda appealed to the youth to **follow the religion of fearlessness**, for that is the **only way to achieve any goal**.
  - He decried **inactivity** and **‘hypnotism’ of weakness**, which he believed are the **biggest deterrent** to achieving anything.
  - **“Arise, awake! Awake from this hypnotism of weakness,”** he urged.

- **Balance of mind**

- To remain focused on any goal, Swami Vivekananda claimed that **patience, perseverance, and purity** are required.
- He categorically articulated that it is the **calm, forgiving, equable and well-balanced mind** that does the greatest amount of work.
- Swami Vivekananda also stressed the **importance of concentration** to achieve one's goals.
- The more focused a human mind is, the **more power is brought** to bear on one point; that is the **secret to achieving** what one has set out for.

- **Divinity**

- To highlight the importance of work, he even said that **through work even God can be attained**.

- He called on the youth to **wake up from their slumber** and be awake to the **divinity within themselves**, which can lead to their success in every sphere of their lives.
- He said that when the **sleeping soul is roused** to self-conscious activity, power, glory as well as goodness and purity will naturally follow.

#### Other prominent quotes by Swami Vivekananda

- "Freedom can never be reached by the weak. Throw away all weakness. Tell your body that it is strong, tell your mind that it is strong, and have unbounded faith and hope in yourself."
- "I stand for truth. Truth will never ally itself with falsehood. Even if all the world should be against me, Truth must prevail in the end."
- "Ours not to reason why, ours but to do and die. Be of good cheer and believe that we are selected by the Lord to do great things, and we will do them."

### NOTES

CHAHAL  
ACADEMY

# GOVERNMENT SCHEMES

## FREE FOODGRAIN SCHEME 'PM GARIB KALYAN ANNA YOJANA'

**Context:** Recently, the Centre has named its new free foodgrain scheme under the *National Food Security Act, 2013*, as PMGKAY.

- It will benefit **more than 80 crore** poor and poorest of poor people.
- Its name is **similar** to that of the free foodgrain scheme implemented as part of the Centre's Covid-19 package announced in 2020.

### Difference between old and new PMGKAY

- **Old PMGKAY:** about 81 crore NFSA beneficiaries were entitled to get free of cost **5 kg foodgrain** per person in a month over and above their monthly entitlements.
  - However, they were required to pay the **subsidised rate** of foodgrains to purchase the quantity for which they were entitled:
  - 35 kg per Antyoday Anna Yojana Household and
  - 5 kg per person to a Priority Household in a month.
- **New PMGKAY:** Under it, the government has **done away with the subsidised prices** and is providing foodgrains free of cost for a year.
  - But now the **additional quantity**, which was available during the Covid pandemic, **will not be provided** to these beneficiaries.
  - They will receive as much quantity of foodgrains, for which they are entitled under the NFSA.
- The integrated scheme will **strengthen the provisions of the NFSA, 2013** in terms of accessibility, affordability and availability of foodgrains for the poor.

### About NFSA

- It entitles **67 per cent of households** — 50 per cent urban and 75 per cent rural — in India to **subsidised grains** under the Targeted Public Distribution System (TPDS).
- About **81.35 crore people** around the country are covered under the NFSA.
- The **subsidised prices** are specified in Schedule-1 of the Act which the government can change by **executive order**.

- The **quantity of grains** to which a beneficiary is entitled is **also laid down**, and **cannot be changed without Parliament's approval**.
- As of now, NFSA beneficiaries pay Rs 3, Rs 2, and Re 1 per kilogram of **rice, wheat, and nutri-cereals (millets)** respectively.
- These prices were **initially fixed for three years**.
- Thereafter, the grains were to be supplied at such price, as may be **fixed by the Central Government**, from time to time, not exceeding:
  - the **minimum support price** for wheat and coarse grains; and
  - the **derived minimum support price** for rice
- While the three years ended on July 5, 2016, **prices have remained constant** despite the **steady rise in the Economic Cost of the foodgrains**, and the government's growing food subsidy bill.

## NATIONAL FOOD SECURITY ACT, 2013

### PROS

- '**Right to food**' became a legal right.
- It helps to **eliminate hunger and malnutrition** in the country.
- Inflation is on the rise; this is the time poor people need food security.
- It helps in **empowerment of women**, as the eldest woman will be the head of the family.
- Nutritious food will be given to pregnant and lactating mothers. This will lead to **healthier families**.

### CONS

- Uses existing PDS system, which has many leakages.
- **Exclusion and inclusion error**, while calculating the beneficiaries.
- Food subsidy become **huge fiscal deficit burden**.
- Government becomes largest procurer of grain, distorting market.
- Beneficiaries get **sub-standard grain**.
- The grain handling and distribution cost would be saved, if beneficiaries are paid direct cash to their accounts rather than subsidized grain under NFSA.

### Various suggestions to revise National Food Security Act

- NITI Aayog, through a discussion paper, has recommended reducing the rural and urban coverage under the National Food Security Act (NFSA), 2013, to 60% and 40%, respectively.
- It has also proposed a revision of beneficiaries as per the latest population which is currently being done through Census- 2011.
- HLC (High Level Committee) under Shanta Kumar had recommended reducing the coverage ratio from 67% of the population to 40%.
- According to it, 67% coverage of the population is on the much higher side, and should be brought down to around 40%, which will comfortably cover BPL families and some even above that.
- The Economic Survey- 2020-21 had recommended a revision of the Central Issue Prices (CIP) of foodgrains released from the central pool, which have remained unchanged for the past several years.





# LOCATIONS IN NEWS

## INDIRA POINT

### INDIRA POINT

**Context:** Recently, Raksha Mantri visited Indira Point, the southernmost tip of the country.

#### About Indira Point

- Indira Point, the **southernmost point** of India's territory, is a **village** in the Nicobar district at Great Nicobar Island of Andaman and Nicobar Islands in India.
- This village was named Indira Point after **former Prime Minister Indira Gandhi**.
- The point was formerly known as **Pygmalion Point and Parsons Point**.
- **Galathea National Park and Lighthouse** are the major attractions here.
- According to the **2011 census** of India, Indira Point has **only 4 households left**.
- The **effective literacy rate** (i.e., the literacy rate of population excluding children aged 6 and below) is **85.19%**.



## ISFAHAN

- Bomb-carrying drones targeted an **Iranian defence factory** in the central city of **Isfahan**.
- The city is located on the plain of the **Zayandeh Rud** (Fertile River) and the foothills of the **Zagros mountain range** in Iran.
- **Naqsh-e Jahan Square** in Isfahan is one of the largest city squares in the world, and **UNESCO** has designated it a **World Heritage Site**.



## HORN OF AFRICA

**Context:** In the Horn of Africa, nearly 70 per cent of the Intergovernmental Authority on Development (IGAD) region comprise arid and semi-arid lands prone to recurrent droughts, according to a UNICEF press release published in December, 2022.

### HORN OF AFRICA

- It is the peninsula situated in **Northeast Africa**.
- It lies **opposite** of the **southern Arabian Peninsula**.
- It is also known as the **Somali Peninsula** (because within it lies the countries of **SOMALIA** and eastern **ETHIOPIA**.)
- It is the **easternmost extension** of the African continent
- It **separates the Gulf of Aden** from the **Indian Ocean**.
- It includes region of **Eritrea, Djibouti, Ethiopia, and Somalia** and sometimes even includes parts of **Sudan and Kenya**.
- It looks like the shape of horn of a rhinoceros.
- It is one of the most **inhospitable places** on Earth because the landscape is **sand and volcanic rock**.
- Much of the area is still **active volcanically** and tends to have intermittent earthquakes.
- It is also the **hottest place on earth**.

#### Significance of Horn of Africa

- Geopolitical importance due to proximity with Red Sea and Indian Ocean.
- It can influence the international sea trade route through Suez Canal.
- It can exert pressure on choke point of Bab El Mandeb.
- Any instability in the region can create energy security challenge for oil importing nations.



## LAKE CHAD

**Context:** A report by a humanitarian organisation has highlighted the dangerous link between climate change and conflict in countries like Cameroon, Chad, Niger and Nigeria in the Lake Chad Basin.

#### Key details:

- Lake Chad is a historically large, **shallow, endorheic lake** in **Central Africa**, which has varied in size over the centuries.
- It **shrank by as much as 95%** from about 1963 to 1998.
- Four countries surround it: **Chad, Cameroon, Niger, and Nigeria** on the central part of the Sahel.
- It is the **largest lake in the Chad Basin**.







# Highlights of UNION BUDGET 2023-24

## Vision for Amrit Kaal



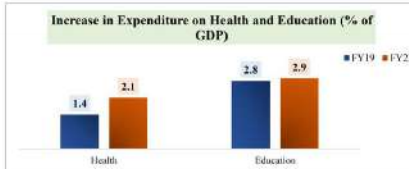
## Saptarishi-7 priorities



## Sabka Saath Sabka Vikas-Inclusive Development

### Health

- 157 New Nursing Colleges to be established
- Sickle Cell Anaemia elimination Mission to be launched
- New Programme to promote research in Pharmaceuticals to be launched
- Joint Public and Private Medical Research to be encouraged via select ICMR labs



### Education and Skilling

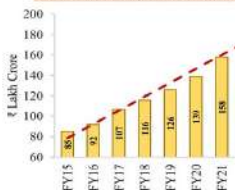
- ✓ Revamped Teachers' training via District Institutes of Education and Training
- ✓ National Digital Library to be set up for children and adolescents
- ✓ States will be encouraged to set up physical libraries at Panchayat and ward levels

## Sabka Saath Sabka Vikas-Inclusive Development

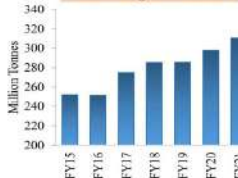
### Agriculture and Cooperatives

- Building Digital Public Infrastructure**  
Building an accessible, inclusive and informative solution for Farmers
- Setting up Agriculture Accelerator Fund**  
For encouraging innovative start-ups in rural areas
- ANB\* Horticulture Clean Plant Program to be launched**  
To boost production of high value horticultural crops
- Targeted Funding**  
₹20 lakh crore agricultural credit targeted at Animal Husbandry, Dairy and Fisheries sector
- Making India Global Hub For Millets: 'Sree Anna'**  
Support to be given to IIMR^, Hyderabad for promoting research
- Setting-up of widely available storage capacity**  
Will enhance Farmers' remuneration by enabling sale at appropriate times

More Credit to Agriculture Sector



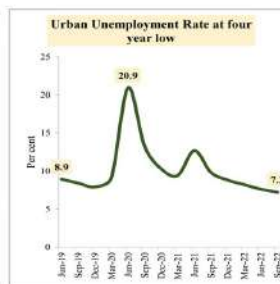
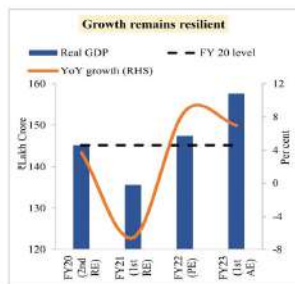
Record Foodgrain Production



\*ANB -Atmanirbhar Bharat  
^IIMR-Indian Institute of Millet Research

## The Big Tent that accommodates all

- 9 crore drinking water connections to rural houses
- Cash transfer of ₹2.2 lakh crore to over 11.4 crore Farmers under PM-KISAN
- Insurance cover for 44.6 crore persons under PMSBY\* and PMJJY^
- 11.7 crore household toilets constructed under SBM
- 47.8 crore PM Jan Dhan bank accounts
- 9.6 crore LPG connections under Ujjawala
- 220 crore Covid vaccinations of 102 crore persons



\*PMSBY: Pradhan Mantri Suraksha Bima Yojana  
^PMJJY: Pradhan Mantri Jeevan Jyoti Yojana



### Reaching the Last Mile



Pradhan Mantri PVTG\* Development Mission to be launched

Financial assistance to be given for sustainable micro irrigation in drought prone regions of Karnataka



More teachers to be recruited for 740 Eklavya Model Residential Schools

Bharat (SHRI)^ to be set up for digitization of ancient inscriptions



### Infrastructure and Investment

Incentives to boost Investment in Infrastructure and productive capacity



Rise in growth and employment

- Increased capital investment outlay by 33.4% to ₹10 lakh crore
- Continuation of 50 year interest free loan to State Governments to incentivize infrastructure investment
- Highest ever Capital outlay of ₹2.4 lakh crore for Railways
- 100 transport infrastructure projects identified for end-to-end connectivity for ports, coal, steel, fertilizer sectors
- Creating Urban Infrastructure in Tier 2 and 3 cities via establishment of UIDF\*\*

\*PVTG: Particularly Vulnerable Tribal Groups; ^SHRI: Shared Repository of Inscriptions, \*\*UIDF: Urban Infrastructure Development Fund

### Green Growth

PM-PRANAM\* to be launched

Will incentivize States/UTs to promote usage of alternative fertilizers

500 new 'Waste to Wealth' plants To be established under GOBARdhan# scheme for promoting circular economy

Green Credit Programme To be notified under EPA to incentivize sustainable actions

Sustainable Ecosystem development

MISHTI^ to be taken up for Mangrove plantation along the coastline  
Amriti Dharohar to be implemented for optimal usage of wetlands

Other Initiatives

- Setting up 10,000 bio-inputs resource centres-to facilitate farmers to adopt natural farming
- Promotion of Battery energy storage systems
- Promotion of coastal shipping for energy efficient transportation
- Funds to be allocated for replacing old polluting vehicles



### Amrit Peedhi - Youth Power



PMKVY 4.0 will be launched Covering new courses like coding, AI, Robotics, 3D printing etc.



Measures to boost Tourism sector At least 50 destinations to be selected, through challenge mode, to be developed as a complete package for domestic and foreign tourists



States will be encouraged to set-up Unity Malls For promotion and sale of ODOP (One District-One Product), GI and handicraft products

\* PRANAM: PM Programme for Restoration, Awareness, Nourishment and Amelioration of Mother Earth  
^ MISHTI: Mangrove Initiative for Shoreline Habitats and Tangible Incomes  
# GOBARdhan: Galvanizing Organic Bio-Agro resources, Dhan

### Unleashing the Potential-Trust Based Governance



Measures

Expected Outcomes

**Make AI in India:** Three specialized AI centres to be set up in educational Institutes

AI based solutions in agriculture, health and sustainable cities

**National Data Governance Policy** to be introduced

Enable access to anonymized data for research by Start-ups and academia

**Vivad se Vishwas I:** Less stringent contract execution for MSMEs

Relief to MSMEs affected during the Covid period

**Vivad se Vishwas II:** Easier and standardized settlement scheme

Faster settlement of contractual disputes of Govt. and Govt. undertakings

Phase 3 of **E-Courts** to be launched

Effective administration of Justice

**Entity Digi Locker** to be set-up for use by business enterprises and charitable trusts

Facilitating secure online storing and sharing of documents with the business ecosystem

Setting up of 100 **labs for 5G services** based application development

To tap employment potential and business opportunities

R&D grant for **Lab Grown Diamonds (LGD)** sector

To reduce import dependency by encouraging domestic production

### Financial Sector

**Setting up of National Financial Information registry** To enable efficient lending, promote financial inclusion and enhance financial stability

**Setting up of a Central Data processing Centre** For faster handling of administrative work under the Companies Act

Credit Guarantee scheme for MSMEs Expanded corpus under a revamped scheme to enable additional collateral free guaranteed credit of ₹2 lakh crore

**Mahila Samman Bachat Patra** One-time new small savings scheme for a 2-year period with a deposit facility of up to ₹2 lakh for women

**Benefits for Senior Citizens** Enhanced maximum deposit limit for senior citizens savings scheme from ₹15 lakh to ₹30 lakh

Other Initiatives

- Initiatives to promote business activities in GIFT IFSC
- Create more trained professionals in Securities Markets via award of educational certificates

### Fiscal Management



**50 year Interest Free Loans to States**

- To be spent on Capital Expenditure within 2023-24
- Part of the loan is conditional on States increasing actual Capital expenditure and parts of outlay will be linked to States undertaking several reforms

**Fiscal Deficit** of 3.5% of GSDP allowed for States (0.5% tied to Power sector reforms)

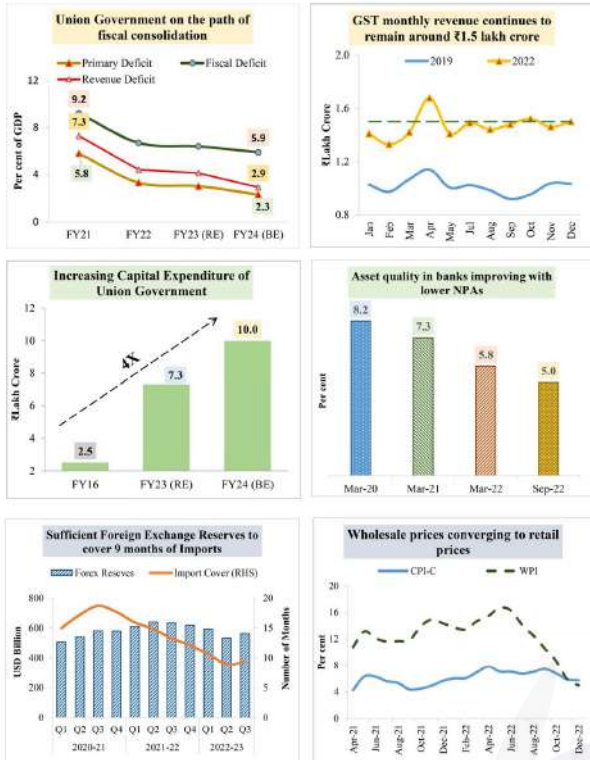


**Fiscal Consolidation**

Targeted Fiscal Deficit to be below 4.5% by 2025-26



### Indian Economy backed by strong macroeconomic fundamentals



### Direct Tax Proposals

To reduce the compliance burden, promote entrepreneurial spirit and provide tax relief to citizens



45% of the returns on tax payers' were processed within 24 hours



Average processing period reduced from 93 to 16 days in 8 years

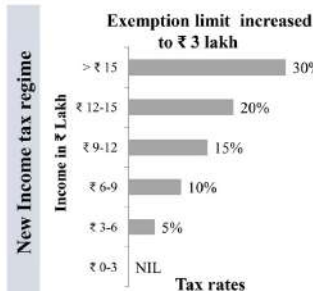


Processed more than 6.5 crore returns this year

### Further Simplifying Personal Income Tax



Income limit for rebate of income tax increased from ₹5 lakh to ₹7 lakh in the new regime



- Highest surcharge rate on income above ₹5 crore to be reduced from 37% to 25% under new regime
- Extending benefits of standard deduction to new tax regime for salaried class and pensioners
- Increasing tax exemption limit to ₹25 lakh on leave encashment on retirement for non-government salaried employees

### Tax Proposals

#### Simplification in Indirect Taxes to deliver



Higher Exports



Higher domestic manufacturing



More value addition in the economy



Green energy and mobility

#### Changes to custom duty on

#### Benefits

Import of capital goods for Li-ion battery manufacturing

For Greener mobility

Import of mobile camera lens

Deepening Value Addition

Denatured ethyl alcohol

For chemical industry

Key inputs for producing shrimp feed

More marine exports

Seeds for manufacturing lab grown diamonds

Export Promotion

Continuing concessional basic custom duty on copper scrap

Augmenting raw material availability for MSMEs

Compounded rubber, to bring it at par with natural rubber

To curb duty circumvention

### Simplifying Tax Benefits for Industry

MSME



- Enhanced limits for micro enterprises and professionals to avail benefits of presumptive taxation; 95% of receipts to be non cash
- Deduction on payments made to MSMEs to be allowed only when payment is actually made

COOPERATIVES

- Extending 15% corporate tax benefits to new co-operatives, commencing manufacturing till 31<sup>st</sup> March, 2024
- Higher limit of ₹2 lakh per member for deposits & loans in cash by PACS and PCARDBs
- Higher limit of ₹3 crore for TDS on cash withdrawal for co-operative societies



STARTUPS



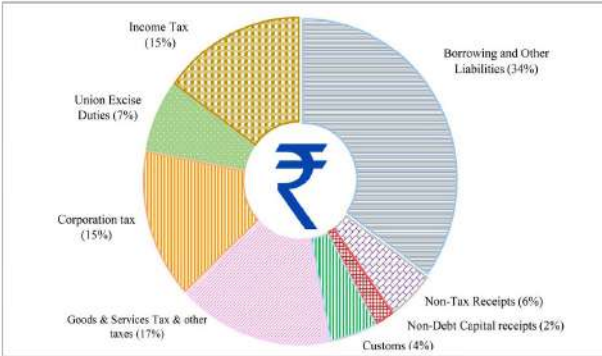
- Extension of the date of incorporation by one year for income tax benefits to start-ups
- Benefit of carry forward of losses on change of shareholding of start-ups from seven years of incorporation to ten years.

RATIONALISATION

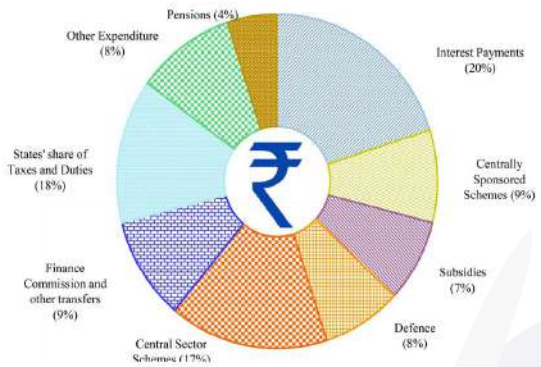
- Income of authorities, boards and commissions set up by statutes of the Union or State to be exempted from income tax in certain sectors
- Extension of period of tax benefits to funds relocating to IFSC, GIFT City till 31<sup>st</sup> March, 2025



### Rupee Comes From

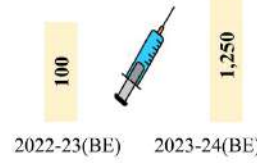


### Rupee Goes To

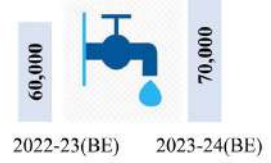


### Allocation to Major Schemes (in ₹ crore)

#### Development of Pharmaceutical Industry



#### Jal Jeevan Mission



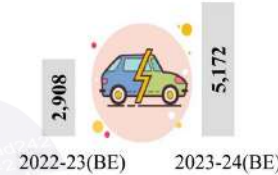
#### Eklavya Model Residential Schools



#### Pradhan Mantri Awas Yojana



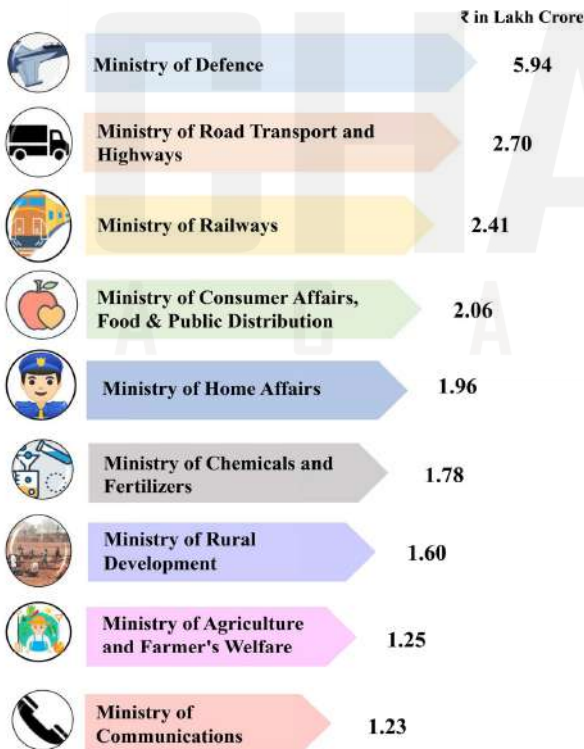
#### Scheme for Faster Adoption and Manufacturing of EV's (FAME)



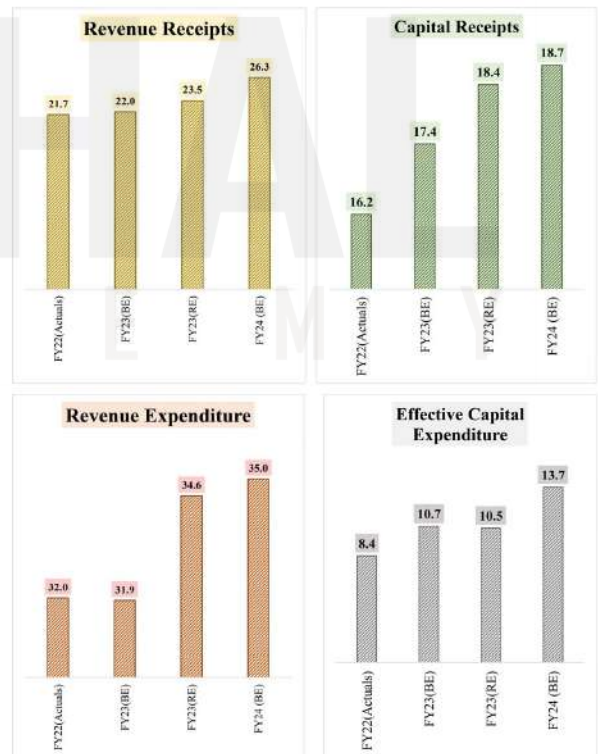
#### North East Special Infrastructure Development Scheme



### Allocation for Specific Ministries



### Receipts and Expenditure (₹Lakh Crore)







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**D** South Delhi (Satya Niketan) 96259-21997  
 299, 3rd Floor, Satya Niketan, Opposite  
 Sri Venkateswara College, Near Durgabai  
 Deshmukh South Campus Metro Station,  
 New Delhi - 110021.

**C** Chandigarh: 72659-11227  
 Chahal Academy S.C.O 223,  
 Above Chandigarh University Office,  
 Sector 36-D, Chandigarh - 160036.

**K** Kanpur: 72840-11227  
 2nd Floor, Clyde House, Opposite Heer Palace  
 Cinema, The Mall Road, Kanpur Cantonment,  
 Kanpur - 208004, Uttar Pradesh.

**R** Raipur: 72848-11227  
 D-117, First Floor, Near Shri Hanuman Mandir,  
 Sector-1, Devendra Nagar, Raipur,  
 Chattisgarh- 492009

**A** Ahmedabad-72659-91227  
 104, First Floor, Ratna Business Square,  
 Opposite H.K.College, Ashram Road,  
 Ahmedabad - 380009, Gujarat.

**D** Dehradun: 76228-11227  
 Ojaswi Complex, 2nd Floor,  
 Ballapur Chowk, Dehradun,  
 Uttarakhand 248001

**K** Kolkata : 72850-11227  
 First Floor, Sunidhi Building,  
 Above PNB, 120 Lenin Sarani  
 Road, Kolkata 700013, West  
 Bengal.

**R** Ranchi: 72849-11227  
 Chahal Academy Ranchi, Office No. 212,  
 2nd floor, Hariom Tower, Circular Road,  
 Ranchi., Jharkhand-834001

**A** Anand: 72038-21227  
 T-9 3rd Floor Diwaliba Chambers,  
 Vallabh Vidyannagar, Near ICICI Bank,  
 BhaiKaka Statue, Anand - 388120

**G** Gandhinagar: 63560-61801  
 A-508, 5th Floor, Vrundavan Trade Centre  
 (VTC), Nr. Reliance Chokdi, Urjanagar 1,  
 Kudasan, Gandhinagar - 382421

**M** Mumbai : 99091-11227  
 Office No. 412, Pearl Plaza,  
 Next to McDonald's Near  
 Railway Station Andheri West,  
 Mumbai, Maharashtra 400058

**S** Surat: 72039-11227  
 Office NO. 601, 6th Floor, 21st Century  
 Business Centre, Beside World Trade Centre,  
 Near Udhna Darwaja, Ring Road Surat - 395002

**B** Bhilai: 72038-11227  
 Shop No.30/A/1/B, 1st floor Commercial  
 Complex, Nehru Nagar East, Bhilai,  
 Chhattisgarh 490020

**H** Hyderabad: 93132-18048  
 Office No.418/A, DOWNTOWN mall, beside Lotus  
 Hospitals For Women & Children, Lakdikapul,  
 Hyderabad, Telangana 500004

**P** Patna: 76210-11227  
 3rd Floor, Pramila mansion Opposite Chandan  
 Hero Showroom, Kankarbagh  
 Patna - 800020, Bihar

**V** Vadodara: 72039-01227  
 102-Aman Square, Beside Chamunda  
 Restaurant, Behind Fatehgunj Petrol Pump,  
 Vadodara, Gujarat-390002