



**VAJIRAM & RAVI**  
Institute for IAS Examination

# the recitals

**CURRENT AFFAIRS - OCTOBER 2023**



## Editor's Cut

- Surrogacy In India
- One Nation, One Student ID Initiative
- SC's Verdict On Same-Sex Marriage
- Digital India Act 2023
- Special Leave Petition
- Cash-For-Query Row
- Bihar Caste Survey
- PLFS 2022-23
- Israel At War After Hamas Surprise Attack
- Shutdown of Afghan Embassy
- India Sends Medical Supplies, Disaster Relief Aid To Gaza
- Online Betting: ED Summons Ranbir Kapoor
- Glacial Lake Outburst Floods (GLOFs)

# INDEX

## Editor's Cut \_\_\_\_\_ 3-30

- Legal Provisions Related To Surrogacy In India
- One Nation, One Student ID Initiative
- Supreme Court's Verdict On Same-Sex Marriage
- Digital India Act 2023
- Special Leave Petition
- Cash-For-Query Row
- Bihar Caste Survey
- Periodic Labour Force Survey 2022-23
- Israel At War After Hamas Surprise Attack
- Shutdown of Afghan Embassy
- India Sends Medical Supplies, Disaster Relief Aid To Gaza
- Online Betting: ED Summons Ranbir Kapoor
- Glacial Lake Outburst Floods (GLOFs)

## MAPS: PLACES IN NEWS \_\_\_\_\_ 31-34

## Social Issues \_\_\_\_\_ 35-43

- Agnipath scheme and Agniveers
- Food Labels to have QR Code to Help the Visually Disabled
- IIPS & NFHS
- India ranks 111th on Global Hunger Index (GHI) 2023
- Mera Yuva Bharat
- Protocol for Management of Malnutrition in Children
- Counting Deaths in India's Prisons

## Polity & Governance \_\_\_\_\_ 44-56

- Bhartiya Bhasha Summit
- Money Bill
- Mukhyamantri Sukh Aashray Yojana (MSAY)
- Freedom on the Net 2023 Report
- Guardian Minister
- National Human Rights Commission (NHRC)
- Intelligent Grievance Monitoring System (IGMS) 2.0
- Section 106 of Indian Evidence Act
- Setu Bandhan Scheme
- Writ Jurisdiction of HCs
- Cauvery Water Dispute

## Economy & Infrastructure \_\_\_\_\_ 57-74

- Ban on PUSA-44 cultivation
- National Turmeric Board
- RoDTEP scheme
- IndiaSkills 2023-24
- Technology MoUs with IBM
- IRCON and RITES granted Navratna Status
- Golden Peacock Award
- Passport to Earning initiative
- Vizhinjam International Seaport Project
- Regional Rapid Transit System
- Proxy Advisory Firms
- Super Power Retailer Program
- PLI Scheme for White Goods
- Pramod Mahajan Grameen Kaushalya Vikas Kendras
- Renewable energy project in Ladakh
- Impact of Disasters on Agriculture Report
- Global Maritime India Summit 2023
- Linguistic Inclusion in financial domain
- Ken-Betwa Link Project (KBLP)
- Global Innovation Index 2023
- Illicit trade in India
- Nobel in Economics
- Adopting the Digital Crop Survey System

## International Relations \_\_\_\_\_ 75-84

- First US Speaker ever to be ousted from the Office
- Presidential Election in Maldives
- China-Bhutan boundary talks
- South Korea, US, Japan hold first joint air drills
- USS Dwight D Eisenhower
- UN approved a Kenya-led security mission to troubled Haiti
- The Torres Strait Islands
- Qatar court sentenced 8 Indian Navy veterans to death
- Sri Lanka offers free visas to Indians to revive tourism
- Nature of the India - Israel Relationship
- Canada visa services now available only in Delhi
- India Sri Lanka Ferry Services Restarted
- India-Japan chip supply chain partnership
- Indian Diaspora in Trinidad

## Defense & Security \_\_\_\_\_ 85-87

- Project Udbhav
- Goa Maritime Conclave (GMC) 2023

# INDEX

- Contours of joint theatre commands ready
- IAF to induct Astra missiles by end of 2023
- MoD releases fifth positive indigenisation list

## Summits And Organisations \_\_\_\_\_ 88-94

- Russia Passes Law Pulling Ratification Of Nuclear Test Ban Treaty
- 23rd Council of Ministers' meeting of the Indian Ocean Rim Association
- G20 Parliamentary Speakers Summit
- 141st Session of International Olympic Committee (IOC)
- War crimes laws applicable to the Israel-Palestinian conflict
- UNGA adopts Gaza resolution

## Environment & Geography \_\_\_\_\_ 95-110

- GRAP for coming winter pollution
- Children Displaced in a Changing Climate Report
- Report on Targeted Methane Mitigation
- Pontus Tectonic Plate
- Mukundra Hills Tiger Reserve
- Coral Reef Breakthrough
- Invisible e-waste
- The High Cost of Cheap Water Report
- Green Credit Program
- Climate Change and its Effect on Amphibians
- State of Global Water Resources 2022 Report
- Melghat Tiger Reserve (MTR)
- Global Declaration of River Dolphins
- UNCCD Data Dashboard on Land Degradation
- Climate Polycrisis
- Operation "Kachchhap"
- Other Wildlife Sanctuary (WLS) & Tiger Reserve (TR) in the News
- Global Framework on Chemicals
- Climate Tipping Points
- Climate Investment Trap
- PBKnot Technology
- Species in News

## Science And Technology \_\_\_\_\_ 111-122

- R21/Matrix-M Malaria Vaccine
- Attosecond

- Quantum Dots
- Burevestnik Missile (Skyfall or Storm petrel)
- Atmospheric Perturbations around Eclipse Path(APEP)
- Messenger RNA (mRNA)
- Quantum Engine
- Orionid meteor shower
- Tilapia Parvovirus (TiPV)
- Siena Galaxy Atlas (SGA)
- RISC-V Technology
- Bright Transient Survey Bot (BTSbot)
- DANGER
- Hemoglobin isn't used by RBCs Alone
- Calixcoca
- Inverse vaccine
- Hemochromatosis
- Continuously Operating Reference Stations (CORS) Network
- Glucagon-like peptide-1 (GLP-1) hormone
- Hycean Planets
- Monoclonal antibodies (mAbs)
- Lysergic acid diethylamide (LSD)
- Germicidal UV lights (UV-C lights)
- Ejecta Halo
- Bortle scale

## Culture \_\_\_\_\_ 123-124

- Kati Bihu
- Mehrauli Archaeological Park
- Edakkal Caves
- Bathukamma festival
- Wagh Nakh

## Personalities In News, Sports & Awards \_\_\_ 125-126

- India's record performance at the 19th Asian Games
- National Games
- Nobel in Literature
- Saraswati Samman

The Supreme Court has protected the **right of parenthood of a woman**, suffering from a rare medical condition, by staying the operation of a law which threatened to wreck her hopes to become a mother through surrogacy.

## Salient Provisions of Surrogacy (Regulation) Act 2021

- **What is surrogacy?**
  - The Act defines surrogacy as a **practice where a woman gives birth to a child for an intending couple** with the intention to hand it over to them after the birth.
  - It is **permitted only for altruistic purposes** or for couples who suffer proven infertility.
  - **Surrogacy is prohibited for commercial purposes** including for sale, prostitution or any other forms of exploitation.
- **Status of child born:**
  - Once the child is born, it will be deemed to be the **biological child of the couple** for all intents and purposes.
  - **Abortion of such a foetus** is allowed only with the consent of the surrogate mother and the authorities and must adhere to the provisions of the Medical Termination of Pregnancy (MTP) Act
- **Who can avail of surrogacy?**
  - The couple is deemed '**eligible**' if they have been married for five years, the wife is aged between 25-50 years and the husband is between 26-55 years.
  - **The couple must not have any living child** (biological, adopted or surrogate.) **A child with mental or physical disabilities** or one suffering from a life-threatening disorder or illness has been **exempted from the above criterion**.
- **Who can issue an 'essential' certificate?**
  - The couple can get an 'essential' certificate if suffering from proven infertility of either partner certified by a **District Medical Board**, and an order of parentage and custody of the surrogate child, passed by a **Magistrate's court**.
  - They must also have insurance coverage for 16 months for the surrogate mother, covering any postpartum complications.
- **Who can be a surrogate?**
  - A surrogate mother **has to be a close relative of the couple**, a married woman with a child of her own, aged between 25-35 years, who has been a surrogate only once in her life.
  - **She must also possess a certificate of medical and psychological fitness for surrogacy.**
- **Who regulates surrogacy?**
  - The Centre and State governments are expected to constitute a **National**

## WHAT WAS THE RECENT CASE?

- The woman has the Mayer Rokitansky Kuster Hauser (MRKH) syndrome. Medical board records showed she has **absent ovaries and absent uterus**, hence she cannot produce her own eggs/oocytes.
- The couple had begun the process of gestational surrogacy, through a donor, last year.
- **However, a government notification** (on March 14 this year) **amended the law**, banning the use of donor gametes.
  - It said "intending couples" must use their own gametes for surrogacy.
  - Female gametes are called ova or egg cells, and male gametes are called sperm.
- The petition was filed in the SC challenging the amendment as a violation of a woman's right to parenthood.

**Surrogacy Board (NSB) and State Surrogacy Boards (SSB)** respectively, within 90 days of the passing of the Act.

- **This body is tasked with enforcing standards** for surrogacy clinics, investigating breaches and recommending modifications.
- Further, surrogacy clinics need to apply for registration within 60 days of the appointment of the appropriate authority.
- **Offences under the Act:** Include commercial surrogacy, selling of embryos, exploiting, abandoning a surrogate child, etc. These may invite up to 10 years of imprisonment and a fine of up to Rs. 10 lakhs.

Petitioner's Arguments	SC's Verdict
<ul style="list-style-type: none"> <li>● She had begun the surrogacy process months before the amendment, which <b>cannot be implemented retrospectively</b>.</li> <li>● <b>The amendment to the Surrogacy (Regulation) Rules 2022</b> ruled out the use of donor eggs and made it impossible for her and her husband to continue with the process of surrogacy in order to achieve parenthood.</li> <li>● <b>The amendment contradicts the Surrogacy Act 2021</b> which recognised the situation when a medical condition would require a couple to opt for <b>gestational surrogacy</b> in order to become parents.</li> </ul>	<ul style="list-style-type: none"> <li>● <b>The amendment is prima facie contrary</b> to what is intended under the main provisions of the Surrogacy Act both in form as well as in substance.</li> <li>● The law permitting gestational surrogacy was <b>“woman-centric”</b>. <ul style="list-style-type: none"> <li>○ The decision to have a surrogate child was <b>entirely based on the woman's inability to become a mother</b> owing to her medical or congenital condition.</li> <li>○ <b>Such a condition included</b> the absence of a uterus or repeatedly failed pregnancies, or an illness which makes it impossible for her to carry a pregnancy or would make the pregnancy life-threatening.</li> </ul> </li> <li>● <b>The amendment cannot contradict Rules</b> which specifically recognises the absence of a uterus or any allied condition as a medical indication necessitating gestational surrogacy.</li> <li>● Addressing the government's contention that the surrogate child should be <b>“genetically related”</b> to the couple, <b>the court pointed out that the child would be related to the husband</b>. <ul style="list-style-type: none"> <li>○ In this regard, it may be noted that the expression ‘genetically related to the intending couple has to be read as being related to the husband.</li> </ul> </li> </ul>



## One Nation, One Student ID Initiative

Several state governments requested schools to seek parental consent for the creation of a new student identity card. The new ID card, known as the **Automated Permanent Academic Account Registry- APAAR**, is part of the 'One nation, One Student ID' initiative of the Union government.


### Working of APAAR ID

- Every individual will have a unique APAAR ID, which will be linked to the **Academic Bank Credit (ABC)**.
  - ABC is a digital storehouse that contains

### What is APPAR ID?

- It is envisioned as a special ID system for all students in India, starting from childhood.
- Under the initiative, each student would get a lifelong APAAR ID, making it easy for the learners, schools, and governments to track academic progress from pre-primary education to higher education.
- APAAR would also serve as a gateway to **Digilocker**.

Digilocker, a digital system where students can store their important documents and achievements, such as exam results and report cards.



information of the credits earned by students throughout their learning journey.

- With the APAAR ID, students would be able to store all their certificates and credits, whether they come from formal education or informal learning.
- If the student changes schools, whether within the state or to another state, all related data in the ABC gets transferred to the new school just by sharing the APAAR ID.

#### What Do Students Have To Do To Get Their Single ID Created?

- To sign up for APAAR, students will have to provide basic information such as name, age, date of birth, gender, and a photograph.
- This information will be verified using their Aadhar number.
- Students will need to sign a **consent form**, and they can choose to either accept/decline sharing their Aadhar number and demographic information with the Ministry of Education for creating the APAAR ID.
- For minors, parents will have to sign the consent form, allowing the Ministry to use the student's Aadhar number for authentication with UIDAI.
- Registration for creating APAAR ID is voluntary, not mandatory.

#### Concerns Surrounding APAAR

- **Sharing of Aadhar details and issue around security**
  - The government, however, says that the information shared by students will be kept confidential and will not be shared with any third party except for entities engaged in educational activities.
  - These entities include the *Unified District Information System for Education Plus (UDISE+)* database, scholarships, maintenance academic records, educational institutions and recruitment agencies.
    - UDISE+ database is the government's catalogue that contains data related to schools, teachers and students.
- **Processing of information**
  - At any given time, students have the option to stop sharing their information with the mentioned parties, and their data processing will be halted. However, any personal data already processed will remain unaffected if consent is withdrawn.
- **Burden on teaching faculties**
  - School authorities have raised the issue of already pending Aadhaar verification of students, which is kept optional. The addition of the APAAR registry can increase the administrative burden on the teaching faculty.

#### Need

- The goal behind introducing APAAR is to make education hassle-free and reduce the need for students to carry physical documents.
- This initiative was launched as part of the National Education Policy 2020 by the Education Ministry.
- The vision is to create a positive change, allowing state governments to track literacy rates, dropout rates, and helping them make improvements.
- APAAR also aims to reduce fraud and duplicate educational certificates by providing a single, trusted reference for educational institutions.
- Only first party sources that issue certificates will be allowed to deposit credits into the system, ensuring authenticity.



# Supreme Court's Verdict On Same-Sex Marriage

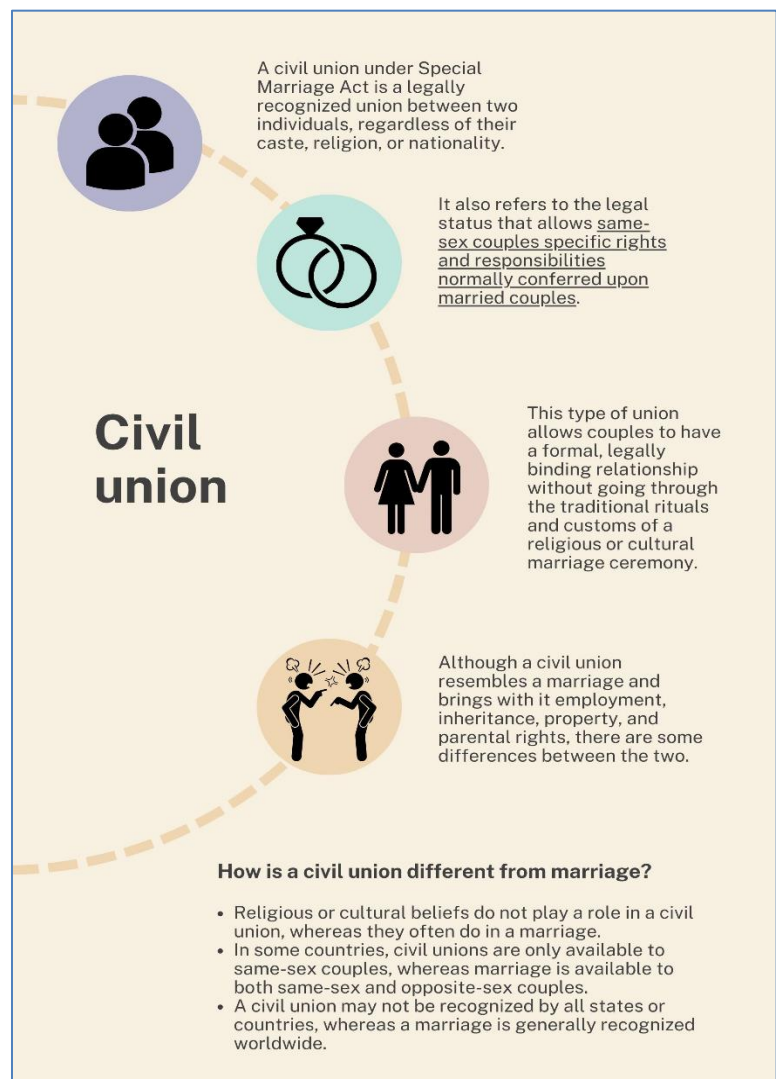
A five-judge Constitution Bench headed by Chief Justice of India (CJI) D Y Chandrachud unanimously declined to recognise same-sex marriages. Bench, in a 3-2 majority verdict, also declined to allow civil unions for non-heterosexual couples.

## Special Marriage Act (SMA), 1954

- All marriages in India can be registered under the respective personal law -Hindu Marriage Act 1955, Muslim Marriage Act 1954, or under the Special Marriage Act, 1954.
  - Special Marriage Act, 1954 has provision for civil marriage for people of India and all Indian nationals in foreign countries, irrespective of religion/ faith followed by either party.
- **Key Provisions**
  - **Prior notice to the marriage officer**
    - The couples have to serve a notice with the relevant documents to the Marriage Officer 30 days before the intended date of the marriage.
  - **Registration process**
    - Both parties are required to be present after the submission of documents for issuance of public notice inviting objections.
    - Registration is done 30 days after the date of notice after deciding any objection that may have been received during that period by the SDM.
    - Both parties along with three witnesses are required to be present on the date of registration.

## Key Takeaways From The Verdict

- **Right to marry not a fundamental right:** All five judges on the Bench agreed that there is no fundamental right to marry under the Constitution.
- **Not possible to tweak the Special Marriage Act (SMA), 1954:** All five judges also unanimously agreed that it is not possible to tweak the SMA 1954 by using gender neutral language to allow same-sex marriage.
  - The petitioners had asked the SC to interpret the word marriage as



between spouses instead of man and woman.

- Alternatively, the petitioners had asked for striking down provisions of the SMA that are gender-restrictive.
  - CJI said striking down the SMA provisions would jeopardise the legal framework for interfaith and inter-caste couples.
  - He added that interpreting the SMA in a gender-neutral way would amount to judicial lawmaking, which would violate the doctrine of separation of powers.
- **Declined to allow civil unions for non-heterosexual couples**
  - The bench ruled in a 3:2 verdict against civil unions for non-heterosexual couples.
  - The dissenting judges said that the right to form unions emanates from the fundamental right to freedom of speech and expression, and the right to life.
  - The minority views of the two judges held that the right to enter into a union cannot be restricted on the basis of sexual orientation.
    - ✓ Discrimination on the basis of sexual orientation is violative of Article 15 of the Constitution.
  - The majority views held that it was for the legislature, and not the Court, to formally recognise and grant legal status to non-heterosexual relationships.
- **On the bouquet of rights**
  - All five judges took note of the Centre's stand that a high-level Cabinet committee will look into rights that can be conferred on non-heterosexual couples.
  - This would range from opening joint bank accounts, same-sex spouses being a beneficiary for provident fund, pension or inheritance to such spouses, being able to take medical decisions for the other spouse, etc.
- **On rights to adopt children**
  - The SC agreed unanimously that one's sexual orientation cannot decide the capability or suitability of being adoptive parents.
  - However, the apex court, in a 3:2 split verdict, **held as valid the existing regulations that deny unmarried couples, including queer, the right to adopt a child as a couple.**
  - Since a same-sex couple cannot marry under Indian law, it follows that they cannot also adopt children as a couple.
  - However, *since the Juvenile Justice Act 2015 permits a single or divorced person can also adopt* (A single male is not eligible to adopt a girl child), same-sex couples were able to adopt children by designating one of the partners as the legal parent.
  - In 2022, however, the Central Adoption Resource Authority (CARA) paid attention to this arrangement by issuing the Adoption Regulations.
    - This regulation required a couple to be in a two-year stable marital relationship to be eligible for adoption.
  - Over and above this, a circular was also issued prohibiting a person from adopting a child if that person was in a live-in relationship.
  - Consequently, queer couples became ineligible to adopt.
  - The minority view said the CARA guidelines discriminate against atypical, unmarried couples to adopt children.

### Arguments Against Court Verdict

- **The Court's Decision to Rely on Judicial Restraint is Puzzling**



- Considering the Court's historical role in addressing injustices and promoting social change, the court's decision to adopt a philosophy of judicial restraint is puzzling.
- **The majority refused to recognise the right to a civil partnership and the right of queer couples to adopt**, despite acknowledging the discrimination faced by the LGBTQIA+ community.
- In the face of such discrimination and injustice, **the Court did not take a more proactive role in ensuring LGBTQ+ rights.**
- The judgment acknowledges the need to address the deprivation faced by the LGBTQIA+ community but **places the onus on the legislature to rectify these issues.**
- This stance is problematic, **especially given the history of parliamentary inaction in addressing LGBTQ+ rights.**
- The Court Has Overlooked Its Duty to Protect the Fundamental Right of Queer Community.
- Court's Decision to Place Onus on Legislature in Morally and Legally Incorrect.



## Digital India Act 2023

The Ministry of Electronics and Information Technology (MeiTY) recently announced the Digital India Act 2023 signaling a proactive approach of regulating and shaping India's digital future.

### About Digital India Act (DIA) 2023

#### What?

- Focusing on the Digital India Goals of 2026 as a \$1 trillion digital economy, the DIA seeks to give a global and synchronous legal framework to India's evolving digital ecosystem.
- The DIA will work in conjunction with other related laws and policies, including the Digital Personal Data Protection Act, Digital India Act Rules, National Data Governance Policy, and amendments to the Indian Penal Code for Cyber Crimes.

\*\* The DIA will replace the two-decade-old Information Technology Act of 2000 (IT Act)

#### Objective

1. **Evolvable and Consistent Law-** with changing market trends, technology disruptions, new developments in international jurisprudence and global standards for qualitative service/products delivery framework which includes:

Ensuring open, safe and accountable internet

Protecting citizen rights

Accelerated growth of innovation and technology ecosystem

Addressing emerging risks

Being future-proof and future-ready

2. **Adopting Rule-Based Approach-** for rapid creation, modification & enforcement of new & existing regulations.
3. **Adjudicatory Mechanism-** Create a specialized and dedicated **Adjudicatory Mechanism** for online civil and criminal offences which is easily accessible, delivers timely remedies, resolves cyber disputes, develops a unified cyber jurisprudence and enforces the rule of law online.
4. **Strengthening Democracy and Governance-** By creating a framework for accelerating digitalization of Government.

#### Need

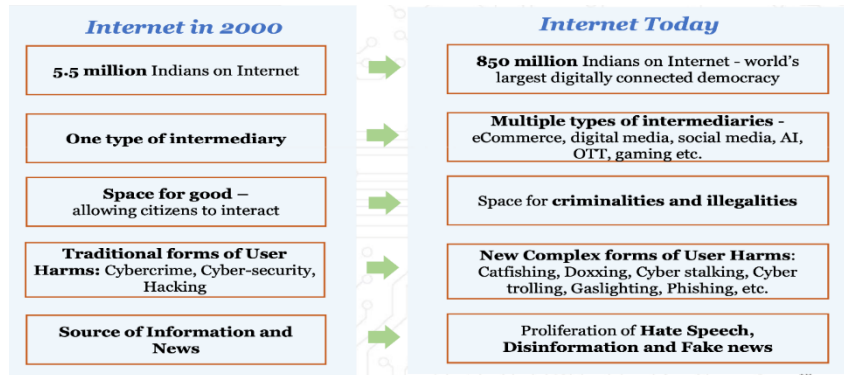
1. **Outdated Law-** The Information Technology Act 2000 created in the early days of internet and was

provisioned for nascent IT ecosystem of pre-Digital India when modern internet-based service such as e-Commerce, social media platforms had not come into existence. It has struggled to keep pace with technological advances and user behavior.

2. **Limited Mandate of** existing law about legal recognition of electronic records, transactions and signatures over the electronic medium.
3. **New Challenges-** Emerging technologies pose new challenges every now and then in the form of user harm; ambiguity in user rights; security; women & child safety; organized information wars, radicalization and circulation of hate speech; misinformation and fake news; unfair trade practices, etc.

4. **Responsible Usage-** There is need for responsible and ethical use of online technologies like AI, deepfakes, blockchain, chatbots etc.

5. **Need of Separate Rules for Intermediaries-** like e-commerce, digital media, search engines, gaming, AI, over the top (OTT) platforms etc.



## Key Components

1. **Open Internet-** It will-
  - ✓ Provide fair trade practices, prevention of concentration of market power and gatekeeping through regulation of dominant Ad-tech platforms, app stores etc.
  - ✓ Promote startup India via non-discriminatory access to digital services and interoperable platforms with the help of emerging technologies like AI, Web 3.0, IoT etc.
  - ✓ Promote Digital Governance by providing easy access to government & other public utility services, delivery of public services through online and mobile platforms in a simple, accessible, interoperable and citizen friendly manner.
2. **Online Safety and Trust-** It commits to safeguard citizen rights in the digital realm while remaining adaptable to shifting market dynamics and international legal principles by-
  - ✓ Adjudicating user harm against revenge porn, cyber-flashing, dark web, women and children harassment, defamation, cyber-bullying etc.
  - ✓ Age-gating by *regulating* addictive tech and protecting minor's data, safety and privacy of children on social media platforms, gaming and betting apps.
  - ✓ Mandating "do not track" feature for preventing children being targeted for ads.
  - ✓ Providing digital user rights which include the right to be forgotten, right to secured electronic means, right to redressal, right to digital inheritance, right against discrimination, Rights against automated decision making, etc.
  - ✓ Examining and regulating discretionary moderation of fake news by social media platforms.
  - ✓ Defining and regulating high risk AI-systems through legal and institutional quality testing framework.
  - ✓ Mandatory KYC requirements for retail sale of privacy invasive devices such as spy camera glasses, wearable tech and Strengthening penalty framework for non-compliance.
  - ✓ Securing cyber space by empowering agencies like CERT-In.
  - ✓ DIA will review the 'safe harbor' principle, which shields online platforms like Twitter and Facebook from accountability for user-generated content.

- ✓ Implementing content monetization rules for platform and user-generated content.

**3. Accountable Internet-** The act provides for:

- ✓ A dedicated enquiry agency and a specialized dispute resolution/ adjudicatory and appellate mechanism for accountable and responsive **data operators**.
- ✓ Algorithmic transparency and periodic risk assessments.
- ✓ Accountability for upholding constitutional rights under Article 14, 19 and 21.
- ✓ Ethical use of AI based tools to protect user rights.
- ✓ Disclosure norms for data being collected by data intermediaries above a certain threshold.
- ✓ Standards for ownership of anonymized personal data collected by data intermediaries.

Significance	Challenges
<p><b>1. Emphasizing Online Safety and Trust-</b> with a commitment to safeguarding citizen’s rights in the digital realm while remaining adaptable to shifting market dynamics and international legal principles.</p> <p><b>2. Recognizing New Technologies-</b> such as artificial intelligence and blockchain, the DIA provides guidelines for their responsible utilization</p> <p><b>3. Promoting Ethical Practices-</b> like ethical AI practices, data privacy in blockchain applications, will benefit not only the users but will also position India as a responsible player in the global technology landscape</p>	<p><b>1. Impacts Innovation and Ease of Doing Business:</b> Stricter regulations, particularly in emerging technologies, could inadvertently stifle entrepreneurial initiatives and deter foreign investments.</p> <p><b>2. The “Safe Harbour” Principle:</b> It could lead to a more cautious approach among these platforms, possibly impinging on freedom of expression.</p> <p><b>3. Resources-</b> Its effective implementation will require substantial resources, funds, expertise, and infrastructure.</p> <p><b>4. Balancing the interests of various stakeholders</b> including tech giants, while ensuring the protection of citizen rights, poses a significant challenge.</p> <p><b>5. Data Localization and Cross-Border Data Transfer:</b> The act's stance on data localization is a matter of debate. Although localization can strengthen data security and protection, it has the potential to disrupt the smooth cross-border transfer of data, which could affect international businesses that depend on efficient data exchange.</p> <p><b>6. Surveillance and Privacy Issues:</b> Specific provisions within the act might confer extensive surveillance authority upon the government, potentially jeopardizing privacy rights.</p>

**Conclusion**

Although the Act represents a forward- looking approach to regulate India’s digital future in an age of constant change and has the potential to shape the digital landscape for generations to come, its implementation and potential repercussions warrant vigilant monitoring and adaptability to avoid unintended consequences.



# Special Leave Petition

The Supreme Court (SC) recently expressed its concern regarding a Special Petition Leave (SPL) while highlighting that it lacked crucial information like the age of petitioner/accused in criminal cases.

**About the Special Petition Leave (SPL)**

<p><b>What?</b> Under Article 136 of the Constitution, the SC may in its discretion grant a special leave to an aggrieved party</p>
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to appeal against any judgment, decree, determination, sentence or order issued in a case (civil/criminal) by any court or tribunal (except a military court or a court martial order). This petition is known as Special Petition Leave.

✓ An interim or interlocutory order, decree or judgement can also be challenged, it need not be final.

**Conditions** - It can only be exercised in the case of a substantial question of law or gross injustice.

**Time Limit:** It must be filed within 90 days from the date of High Court (HC) judgment, or within 60 days against the order of the HC refusing to grant the certificate of fitness for appeal to the Supreme Court.

### SLP Details

#### **Contents of an SLP**

- A SLP must contain all the facts necessary for the SC to decide whether to grant SLP or not.
- The petition needs to be signed by an Advocate-on-Record (AoR).
  - ✓ "Advocate on record" is a title given to an advocate who can represent a cause or pleading before the SC. Only these advocates are entitled to file any matter or document before the SC.
- A statement by the petitioner must be included with the SLP testifying that no other petition has been filed in the High Court.
- The SLP must also contain with it the judgment against which the appeal is to be filed.

#### **Procedure for Filing an SLP:**

- Once the petition has been filed, the SC hears the aggrieved party and depending upon the merits of the case, it allows the opposite party to state their part in a counter affidavit.
- After the hearing, if the Court deems the case fit for further hearing, it allows the same; otherwise, it rejects the appeal.

#### **Conversion of SLP into an Appeal:**

- If SLP is granted, it gets converted into an appeal and the SC then exercises its appellate jurisdiction to decide the case, during which it may reverse, modify or affirm the judgment of the lower court.

#### **Most Effective use of Special Leave Petition**

- The Inter-State Water Disputes Act of 1956, coupled with Article 262 (2) of the Constitution, excludes the SC from hearing or deciding any appeals against the Inter-State Water Dispute (ISWD) Tribunal's decision.
- However, the reference to "any Court or tribunal in the territory of India," in Article 136 seems to bring the ISWD Tribunals within the purview of the Article 136.

Consequently, the restriction can be surpassed by exploring potential avenues within the purview of Articles 32, 131, and 136 of the Constitution.

#### **Landmark Judgements**

1. *Pritam Singh v. The State*, 1950- The judgement said that the SC should not interfere with the decisions of HC unless exceptional circumstances exist. Once the appeal has been admitted, the appellant can question every point of law considered wrong by the High court.
2. *Smt. Tej Kumari v. CIT*, 2000- It was held that when a special leave petition is dismissed, the court does not comment on the correctness or otherwise of the order from which leave to appeal is sought and the doctrine of merger does not apply in the case of the dismissal of a special leave petition under Article 136.
3. *N. Suriyakala v A. Mohandoss&Ors*, 2007- It was held that Article 136 does not confer a right to appeal on a party to the litigation; it only confers a discretionary power on the Supreme Court to be exercised for satisfying the demands of justice.
4. *Jamshed Hormusji Wadia v. Board of Trustees, Port of Mumbai*, 2005- It was held that the Supreme Court must exercise its powers under Article 136 only in exceptional circumstances, when a question of law of

public importance arises.

#### Is it a constitutional right of a citizen?

No, it's not a right conferred upon the citizen of the country but it is a privilege granted to SC.

#### Can SLP Be Filed for the Infringement of Fundamental Rights?

No, SLP cannot be filed in such a case. A writ petition must be filed under Article 32 of the Indian Constitution for infringement of fundamental rights.

#### Extra Mile

Petition	Purpose	In Constitution or Innovation?	Features
<b>Special Leave Petition</b>	To appeal against a decision of any lower court or tribunal	Under Article 136 of the Constitution	It is not an appeal by right but is granted at the discretion of the Supreme Court
<b>Review Petition</b>	For correcting errors and addressing new evidence	Under Article 137 of the Constitution, the Supreme Court has the power to review any of its judgments or orders.	A Review Petition has to be filed within 30 days of the date of judgment or order.
<b>Curative Petition (a last resort remedy)</b>	To seek relief when there is a perceived violation of the principles of natural justice	Evolved by the Supreme Court of India in Rupa Ashok Hurra vs. Ashok Hurra and another case (2002)	A curative petition may be filed after a review plea against the final conviction is dismissed and It must be rare rather than regular.



## Cash-For-Query Row

The Ethics Committee of Lok Sabha is investigating the "Cash for Query" accusation lodged against TMC MP Mahua Moitra.

#### What is the "Cash for Query" Case?

- The case is related to Trinamool Congress MP Mahua Moitra for providing her Parliament login ID and Password to a businessman in return of gifts and monetary favours so that he could himself post the questions directly in the House on her behalf when required.
- A formal complaint was filed in this case to the Lok Sabha Speaker against the TMC MP Mahua Moitra for alleged direct involvement in cash for query. The Speaker forwarded the issue to the Ethics committee.

#### About The Questions Asked In The Lok Sabha

##### What?

- The first hour of the Lok Sabha is called the question hour and is used by the MPs to ask questions from the Ministers.
  - ✓ There is no Question Hour on Saturday, even if a sitting is fixed for that day.
- The questions can be asked on every aspect of administration and governmental activity, government policies in the national as well as international spheres.

## Types of Questions

Starred	Unstarred	Short Notice	Private Member
<ul style="list-style-type: none"> <li>• They are answered <b>orally</b> and are distinguished by an asterisk mark.</li> <li>• Supplementary questions can follow.</li> <li>• Each MP can ask only one starred question per day.</li> <li>• They must be submitted at least 15 days in advance.</li> <li>• Only 20 questions can be listed in a day.</li> <li>• They are printed in green colour.</li> </ul>	<ul style="list-style-type: none"> <li>• They require a written answer and are printed in the official report of the sitting of the House.</li> <li>• No Supplementary questions are allowed.</li> <li>• They must be submitted at least 15 days in advance.</li> <li>• Unstarred Questions for a day cannot exceed 255 (230 for a day+25 for states under President's rule).</li> <li>• They are printed in white colour.</li> </ul>	<ul style="list-style-type: none"> <li>• They relate to a matter of urgent public importance.</li> <li>• They can be asked with less than 10 days' notice, along with reasons for the short notice.</li> <li>• Supplementary questions can follow.</li> <li>• They are printed in a light pink colour and are taken up after a question hour.</li> </ul>	<ul style="list-style-type: none"> <li>• A question may be addressed to a private member</li> <li>• They are asked when the subject matter pertains to any Bill, Resolution or any matter relating to the Business of the House for which that MP is responsible.</li> <li>• The process followed is the same as in the case of a minister.</li> <li>• They are printed in yellow colour.</li> </ul>

\*\* Number of supplementary questions permitted depends upon the relative importance of the question. The Speaker accordingly exercises discretion in permitting supplementary questions.

### Procedure

- **Initiating the Questioning Process:** To ask a question, an MP must first give a notice addressed to the lower house's Secretary-General, intimating their intention to ask a question.
- **Methods of Notice Submission:** An MP can submit the notice in two ways-
  1. Through an online 'Member's Portal', where they must enter their ID and password to get access.
  2. Through the printed forms available in the Parliamentary Notice Office.
- **Contents of the Notice:** The notice usually contains the text of the question, the official designation of the Minister to whom the question is addressed, the date on which the answer is desired, and the order of preference, in case the MP tables more than one notice of questions for the same day.
  - ✓ A Member cannot give more than five notices of questions (including both oral and written answers) for any day.
  - ✓ If the notices received exceed more than five questions, then they are considered for subsequent day(s) concerning that Minister during the period of that session only.
- **Scrutiny and Balloting of Notices:** Once a notice has been received it is then scrutinized to check if all the details are correctly mentioned. A computerized auto ballot is then held to determine their inter se priority with separate ballots for Starred and Unstarred Questions.
- **Speaker's Role in Admissibility:** At the next stage, the Lok Sabha Speaker examines the notices of the questions in the light of the laid-out rules. It is the Speaker, who decides if a question, or a part thereof, is or isn't admissible.
  - ✓ The procedure for raising questions is governed by Rules 32 to 54 of the "Rules of Procedure and Conduct of Business in Lok Sabha" and Directions 10 to 18 of the "Directions by the Speaker, Lok Sabha".
- **Preparation and Transmission of Admitted Questions:** Typed copies of the admitted and edited questions are then made out on a standard form and an advance copy of the admitted question is sent online to the Ministry/ Department concerned to prepare a reply.

**\*\* Special Consideration for Short Notice Questions:** A Short Notice Question is first referred to the Ministry concerned, if necessary, for furnishing information in the matter and for indicating whether the Minister concerned accepts the short notice. If the Minister accepts the short notice and the matter sought to be raised is considered urgent by the Speaker, the Short Notice Question is admitted and printed in a separate list in light pink paper in order to distinguish it from the lists of ordinary questions.

- For the allotment of days for the answering of questions, the Ministries are divided into five Groups and fixed days are allotted to groups of Ministries during the week.

Admissibility	Significance of Question Hour
<p>For question to be admitted it should not-</p> <ol style="list-style-type: none"> <li>1. Contain more than 150 words.</li> <li>2. Contain arguments, defamatory statements, refer to the character or conduct of any person except in their official or public capacity.</li> <li>3. Be related to queries raising larger issues of policy as it is not possible to enunciate policies within the limited compass of an answer to a question.</li> <li>4. Be related to a matter with pending judgment before any court of law or any other tribunal or body set up under law or is under consideration before a Parliamentary Committee.</li> <li>5. Seek information on matters which may weaken the unity and integrity of the country.</li> </ol>	<ol style="list-style-type: none"> <li>1. Asking questions is an inherent and unfettered parliamentary right of an MP.</li> <li>2. It acts as a parliamentary device to practice legislative control over executive actions.</li> <li>3. It can be used to get information on aspects of administration and government activity, criticize government policies and schemes, throw light on government lapses, and push ministers to take substantive steps for the common good.</li> <li>4. The process can be used by the government to gauge public reaction to their policies and administration.</li> </ol>

### Extra Mile: Lok Sabha Ethics Committee

**Composition-** The committee will consist of no more than 15 MPs nominated by the Speaker for a term of one year. The Ethics Committee should have adequate representation of age and gender.

**History-** The first ethics committee in Lok Sabha was constituted in 2000 on an ad-hoc basis under then Speaker G M C Balayogi. It became permanent only in 2015.

**\*\*** For Rajya Sabha, Then Vice President (and Rajya Sabha Chairman) K R Narayanan constituted the Ethics Committee of the Upper House in 1997.

#### Objectives-

- To oversee the moral and ethical conduct of the Members; and
- To examine the cases referred to it with respect to ethical & other misconduct of the Members.

#### Procedure for Complaint-

- A complaint can be filed against an MP by any person through another Lok Sabha MP. The complaint should have attached with it the evidence of the alleged misconduct, along with an **affidavit** stating that the complaint is not “false, frivolous, or vexatious”.
- The affidavit is not required if the complainant is an MP.
- Complaints based on media reports or on matters that are sub judice are not entertained by the committee.

#### Working-

- On receiving a complaint, the committee first conducts a preliminary inquiry.
- On completion of which if a prima facie case is found to exist, the committee investigates further and submits its findings as a report along with recommended actions to the Speaker.
- The potential punishment it can recommend typically involves Suspension of the MP for a specified period.

- The report may also be tabled before the House at the Speaker's discretion.
- Once the report is tabled and any member moves for it to be considered, the Speaker may permit a debate (not exceeding thirty minutes) and may put the question to the House.
- The House, which includes all MPs, will ultimately make the decision regarding whether to endorse the committee's proposal and ascertain the form and magnitude of any potential penalties.
- If the accused were to be expelled or face a potentially adverse decision, she could challenge it in a court of law.
- The legal grounds for challenging such a decision are generally confined to claims of unconstitutionality, significant illegality, or a violation of the principle of natural justice.

#### **Ethics Committee v/s Privileges Committee-**

- The work of the Ethics Committee and the Privileges Committee often overlap. An allegation of corruption against an MP can be sent to either body, but usually more serious accusations go to the Privileges Committee.
- The Ethics Committee can take up only cases of misconduct that involve MPs whereas the Privileges Committee can examine both an MP and a non-MP accused of breach of privilege for actions that attack the authority and dignity of the House.

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**\*\* Privileges Committee-** It examines every question involving breach of privilege of the House or of the members of any Committee referred to by the House or by the Speaker. It consists of 15 members nominated by the Speaker.

✓ Privilege here refers to certain rights, privileges and immunities without which members cannot perform their functions efficiently and effectively.

**\*\* Rajya Sabha** has a separate 10-member ethics committee.



## Bihar Caste Survey

“The Caste Survey Report 2022” released recently by the Bihar Government show that the Extremely Backward Classes (EBCs) and Other Backward Classes (OBCs) constitute more than 63% of the population and the “unreserved” category of so-called “forward” caste is just about 15.5%.

✓ The EBCs are a group of 130-odd castes occupying the lower rungs of the OBC spectrum dominated by the Yadavs and Kurmis. They include Mallah, Nai, Nonia, Dhanuk, Kahar, etc.

#### **History of Caste Based Survey in India**

- First introduced under the British colonial administration in 1881 and continued till the 1931 census.
- From 1951 to 2011, each Census conducted in post-independence India has included information on Scheduled Castes and Scheduled Tribes, but not on other caste groups.
- Prior to this period, caste data was available in every Census until 1931. In 1941, although caste-based data was collected, it was not made publicly available-

#### **Timeline of Caste Politics in Bihar**

1. **Dominating Forward Castes-** like Bhumihars, Brahmins, Rajputs and Lalas (Kayasthas) used to rule Bihar until 1970s. They were the major landowners, and their dominance was largely unopposed.
2. **Changing Dynamics & Karpoori formula-** Late 1970s brought with it a wind of change in the political



scenario of Bihar with its first backward caste (Nai) leader called Karpoori Thakur (1924-88) becoming its Chief Minister in 1977 and for the first time a model of layered reservation was implemented in the state in which a 26% quota was divided into 12% for backwards, 8% for the poor among the backwards, 3% for women, and 3% for the upper caste poor.

✓ This provision of reservation — quota within quota — is called the Karpoori formula.

3. **Role of Lalu Prasad Yadav-** He directly challenged the political power of the upper castes with his provocative slogan “*Bhura baal (Bhumihar-Rajput-Brahman-Lala) saaf karo*”.

4. **Era of Nitish Kumar-** He introduced policies to target the EBCs and Dalits and for this purpose he implemented reservation in local political positions, not just for women and Dalits, but also for the EBCs (first in the history of Bihar). Nitish also understood that within the Scheduled Caste groups, a few were better off than the rest. He carved out a separate Maha-dalit group from the Dalits, created a Maha-dalit Vikas Mission in 2007 and pushed a separate set of policies that discriminated in favour of these Dalit groups.

5. **Mandal Commission-** Its recommendations (based on 1931 census) not only strengthened the already strong caste consciousness among the OBCs but also managed to solidify the bonds between the upper castes as they came together to oppose the reservations.

✓ The Mandal Commission was established in India in 1979 (submitted report in 1980) under the chairmanship of B.P.Mandal to identify the socially or educationally backward classes of India.

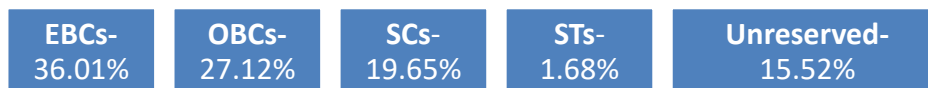
✓ It reported 52% of India’s population as OBC and classified 1,257 communities as backward.

✓ It recommended increasing the existing quotas, which were only for SC/ST, from 22.5% to 49.5% to include the OBCs within the meaning of Article 15(4).

→ *Article 15(4) allows the State to make special provisions for the advancement of socially and educationally backward classes of citizens.*

### About the Caste Survey: Key Findings

• Bihar’s total population, according to the survey, is 13.07 crore compared to the 10.41 crore from the 2011 census. Breakup is as follows:



### Background

• The survey was first announced in 2022 and Rs 500 crore were allocated to it from Bihar’s contingency fund for the exercise.

• More than 3 lakh people, mainly teachers, went from door to door and collected the caste, religion, and economic status using an app.

• The first phase of the survey was carried out in January 2023 in which the number of households was counted.

• The second phase began in April to collect data on castes, religions, and economic backgrounds, as well as on aspects such as the number of family members living in the state and outside but several PILs filed against the survey made the Patna High Court halt the exercise. The grounds for challenge were-

1. **Violation of Right to Privacy (Under Article 21)-** The petitioners argued that the right to privacy of those being surveyed will be infringed due to the queries concerning their religion, caste, and monthly income.

2. **Competence & Article 246-** The petitioners argued that it was actually a census not a survey and it impinges upon the legislative power of the Parliament as only the Centre is empowered to conduct a census under the Census Act, 1948.

**\*\*Article 246-** Parliament's power to exclusively legislate on any of the matters enumerated in List I in the Seventh Schedule.

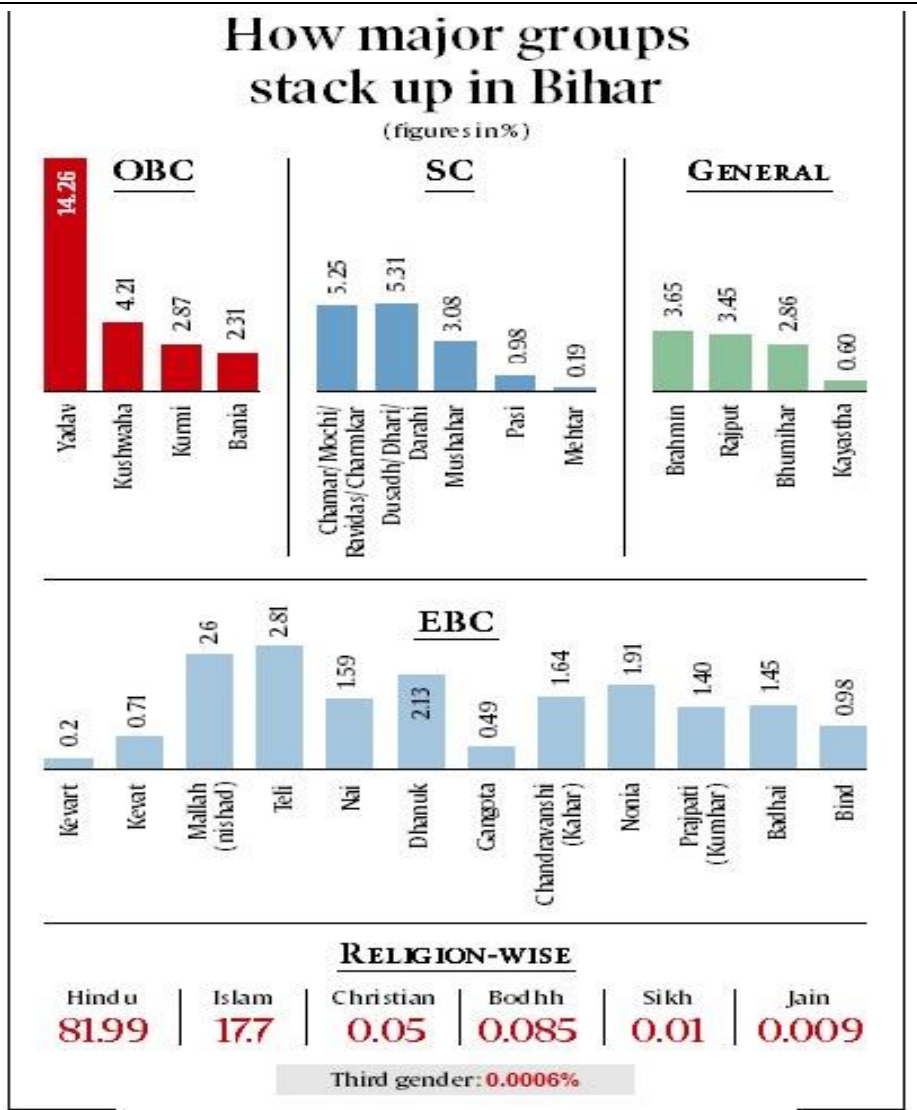
**\*\* AS Entry 69** in the Union List of the Seventh Schedule grants the central government exclusive jurisdiction for conducting a census.

**Bihar Governments Argument**

- In 2011, a caste-based census was carried out by the Central government, but the specifics of this census were not made public.
- Additionally, it was noted that Entry 45 in the Concurrent List shares similarities with Entry 94 in the Union List, as both empower the collection of statistics to verify information aimed at achieving the economic and social planning objectives outlined in Entry 20 of the Concurrent List.

**Verdict of Judiciary:**

The court, however, allowed the state government to go ahead in August after the state submitted it was a “survey” and assured that no one’s data would be divulged.



**Reasons for Survey**

1. Political Reasons- The survey was proposed by the ruling party for rejuvenating their political field and get support from more castes.
2. Better Representation to all castes based on their number.

**Impact**

- **Renewed Opportunity-** It could present the ruling party with an opportunity for renewed backward class mobilization. The ruling party in Bihar may use it as a masterstroke with rebooted party hopes by giving a rallying call for “social justice”
  - **Nationwide Caste Census-**The Opposition alliance could use it to pressure the Centre to hold a nationwide caste census.
  - **Demand for Increased Quota-** It could amplify the clamour for increasing the OBC quota beyond 27%, for a *quota within quota* for the EBCs. It will also reopen the longstanding debate over the 50% ceiling on reservation imposed by the Supreme Court (SC) in its landmark ruling in Indra Sawhney v Union of India (1992) to ensure “efficiency” in administration, and courts have since blocked several attempts by states to breach it.
- ✓ Justice Rohini Commission, which has been examining the question of **sub-categorisation of OBCs since**

2017, submitted its report and recommendations are not yet made public.

- ✓ The Indra Sawhney v Union of India (1992) case challenged the decision of V.P. Singh government to implement 27% OBC reservation for public services in 1990.
- ✓ It held that the Constitution recognized only social and educational and not economic backwardness. The highest court, nevertheless, deemed OBC reservations as legitimate and instructed that the creamy layer of OBCs (those with incomes exceeding a specified threshold) should not be entitled to reservation benefits.

### Conclusion

Although the release of the caste survey data was a much-needed and long-overdue step for the state's politics and policy as the data collected can help address historically embedded backwardness and inequality, but this data must not become a weapon for deepening fault lines and increasing polarization to win elections.

### Extra Mile: Caste Census for India

The Prime Minister recently criticized and rejected the demand for a nationwide caste census made by opposition parties after the publication of Bihar caste survey

#### About Census and Socio-Economic Caste Census (SECC)

Census	Socio-Economic Caste Census (SECC)
<ul style="list-style-type: none"> <li>• It is the official count of the population living in the country along with their basis details like age, gender, job, income etc. to help the government implement better policies, access resources, map social change, and conduct delimitation exercises.</li> <li>• It is conducted by the <u>Office of the Registrar General and Census Commissioner of India</u>, Ministry of Home Affairs.</li> <li>• Its data is confidential under the Census Act 1948.</li> </ul>	<ul style="list-style-type: none"> <li>• It is a study of the socio-economic status of rural and urban households and allows ranking of households based on predefined parameters.</li> <li>• In Rural Area, it is conducted by the Department of Rural Development (DoRD) and in Urban areas is under the administrative jurisdiction of the Ministry of Housing and Urban Affairs (MoHUA)</li> <li>• Its data is open to use by the government departments for extending benefits to the population.</li> </ul> <p>** The SECC data <u>excluding caste data</u> was finalised and published by the two ministries in 2016. However, due to inaccuracies, the raw data was never disclosed.</p>

#### What Does Socio-Economic Data Indicate

- ✓ **Evident Caste-Based Deprivation-** The average monthly per capita consumption expenditures (MPCE) of Scheduled Tribes (ST), Scheduled Castes (SC) and OBC households in rural areas as per National Sample Survey (NSS) data were 65%, 73% and 84% respectively of the MPCE of the general category whereas in urban areas, the average MPCE of ST, SC and OBC households were 68%, 63% and 70% of the general category.
- ✓ **Persistent Inequality Across Caste Categories-** can also be seen in the multidimensional poverty estimates based on the NFHS-4/2015-16 survey. As per research by NIT Rourkela, STs, SCs and OBCs (comprising 73% of population) accounted for 84% of the country's poor and over 50% of India's multidimensionally poor belonged to the OBC category.
- ✓ **Disproportionate Concentration of Poverty-** The multidimensional poverty headcount ratio among Muslims at 31% was higher than that of Hindus (28%), Christians (16%) and other religious communities (15.7%). The Sachar Committee report (2006) had estimated that 31% of Muslims were 'Below Poverty Line'. This clearly indicates that discrimination and exclusion based on caste via-a-vis STs, SCs and OBCs as well as religion (particularly Muslims), have a causal relationship with poverty and deprivation.

#### Caste Based Deprivation as per Education and Employment

- ✓ **Education Wise-**

- The general category has a much higher proportion of literates, secondary and high school pass outs, graduates, and post-graduates than OBCs, SCs and STs.
- As per NSS 75th round (2017-18), while only 3% of STs, 4% of SCs and 6% of OBCs are graduates, the proportion of graduates in the general category is over 12% and post-graduates within the general category is over 3%, among OBCs around 1% and among SCs and STs, below 1%.

#### ✓ Employment Status

- As per PLFS 2021-22, over 30% of the workforce from the general category had a regular job, while the proportion of regular or salaried workers among OBCs and SCs was around 20% and among STs just over 12%.
- Almost 29% of STs, 38% of SCs and 20% of OBCs were casual labourers, against only 11.2% of the general category. Therefore, the informal sector largely consists of STs, SCs and OBCs.
- As per union government data, 52.7% of government employees belonged to the general category with more than 64% general category employees in the most qualified and highest paid groups, i.e., Group A employees.
- This indicates that the persistence of caste-inequality in educational outcomes is reproducing a similar pattern of caste-inequality in skilled, formal employment, even 3 decades after the official implementation of the Mandal Commission recommendations.

#### Why is a Nation-wide caste Census Being Opposed?

- ✓ The revelation of the exact population shares of OBCs greater than or equal to 52%, can trigger demands for enhancing the 27% reservation quota for OBCs.
- ✓ Such demands were already set into motion with the Constitutional (103rd Amendment) Act, 2019, which provided 10% reservation to EWS within the general category in admission to public and private educational institutions as well as civil posts and services.
- ✓ Although it breached the 50% ceiling on reservation it was upheld by the SC.

#### Way Forward

Ascertaining proportions of individual castes within the OBC category is required for providing the reservation benefits to the ones in actual need. This could be done by sub categorizing the castes at the Central and State levels based on Justice Rohini Commission Report Findings.



## Periodic Labour Force Survey 2022-23

- The Ministry of Statistics and Programme Implementation has released the results of the Periodic Labour Force Survey for the period July 2022 to June 2023.
- This is the sixth PLFS report and each tracks a 12-month period between July and June. The first report tracked data for the period July 2017- June 2018.

#### Significance of PLFS

- The annual PLFS — as well as its predecessor, the quinquennial Employment-Unemployment Surveys — are conducted by the National Sample Survey Office (*now National Statistical Organisation*) in order to get an understanding about the state of employment in India.
- The PLFS provides data on different metrics so that the policymakers can understand the proportion of people demanding work, the proportion of people among them who failed to get a job, the gender differences in employment as well as wages etc.

- It also records the type of work people do — for instance, how many are engaged in casual labour, how many work for themselves, how many have regular salaried jobs etc.

### Recall Periods

- PLFS collects data in two ways — **Usual Status (US)** and **Current Weekly Status (CWS)**. Under Usual Status, the survey respondent has to recall their employment details from the last one year while in the CWS, the respondent has to recall the details over the past one week.
- The estimate of the labour force in the **Usual Status** includes:
  - ✓ The persons who either worked or were seeking/available for work for a relatively long part of the 365 days preceding the date of survey;
  - ✓ Those persons from among the remaining population who had worked at least for 30 days during the reference period of 365 days preceding the date of survey.
- The estimate of the labour force according to the CWS approach is derived by considering those who worked for at least 1 hour or was seeking/ available for work for at least 1 hour on any day during the 7 days preceding the date of survey.
- Increasingly, the global practice has been to focus more on CWS because the recall is better over the past week.

### Latest Findings

#### Decreasing Trend in Unemployment Rate (UR)

- The UR refers to the proportion of people who demand work over the past year and failed to get it.
- In rural areas, UR decreased from 5.3% in 2017-18 to 2.4% in 2022-23 while for urban areas it decreased from 7.7% to 5.4%.
- UR for male in India decreased from 6.1% in 2017-18 to 3.3% in 2022-23 and corresponding decrease in UR for female was from 5.6% to 2.9%.

#### Increasing Trend in Labour Force Participation Rate (LFPR)

- The LFPR is a measure of the total population demanding work, and it is presented as a proportion of the total population that is above 15 years of age.
- In rural areas, LFPR increased from 50.7% in 2017-18 to 60.8% in 2022-23 while for urban areas it increased from 47.6% to 50.4%.
- LFPR for male in India increased from 75.8% in 2017-18 to 78.5% in 2022-23 and corresponding increase in LFPR for female was from 23.3% to 37.0%.

#### Increasing Trend in Worker Population Rate (WPR)

- Since the proportion of people demanding work (the LFPR) goes up and down and the percentage of those failing to get a job (the UR) is expressed as proportion of LFPR, it can impact the analysis.
- The WPR is the percentage of persons employed among the persons in the population. Thus, instead of looking at how many demand a job and how many fail to get it, the WPR simply gives a measure of how many people have a job as a proportion of the total population.
- In rural areas, WPR increased from 48.1% in 2017-18 to 59.4% in 2022-23 while for urban areas it increased from 43.9% to 47.7%.
- WPR for male in India increased from 71.2% in 2017-18 to 76.0% in 2022-23 and corresponding increase in WPR for female was from 22.0% to 35.9%.

#### Significance Of The Findings

- At first glance, PLFS 2022-23 throws up some positive trends: Unemployment rate continues to fall, LFPR and WPR see significant spikes.

- It is encouraging to note that more and more women are joining the workforce. This would suggest that as the Indian economy recovers, more and more well-paying jobs are getting created.
- However, the only jobs that are getting created are of the “**self-employment**” type. When an economy grows, businesses employ people. When an economy struggles, people lose their regular jobs, and become “self-employed”.
- Similarly, the trend for women across all metrics suggests that weak household finances have pushed women, who were outside the workforce in the past, to join in, often as “unpaid helpers in household enterprises”.
- Similarly, sectorally, too, India seems to be moving backwards with the proportion of Indians employed in agriculture going up over the past year while those in manufacturing having fallen.
- Lastly, a booming economy sees monthly incomes improve. However, that is not the case in India.



## Israel At War After Hamas Attack

- Israel declared a state of war after Palestinian militants launched barrages of rockets into southern and central Israel. The attack also combined gunmen breaching security barriers with a barrage of rockets fired from Gaza
- The attack came 50 years and a day after Egyptian and Syrian forces launched an assault during the Jewish holiday of Yom Kippur.
  - This was done in an effort to retrieve territory, Israel had taken during a brief conflict in 1967.
- Attributing the attacks to the Palestinian militant group Hamas, the Israel Defence Forces began to carry out air strikes on Hamas targets in the Gaza Strip.

### Israel- Palestine: History of the Conflict

#### • Early Phase

- In the 19th century the land of **Palestine was inhabited by a multicultural population** (approx. 86% Muslim, 10% Christian, and 4% Jewish) – living in peace.
- **In the late 1800s**, a group in Europe decided to colonize this land. **Known as Zionists**, their goal was to create a Jewish homeland.
  - They considered locations in Africa and the Americas, before settling on Palestine.
- Hitler’s rise to power, led to increased Jewish immigration to Palestine. With the steady influx of Jews, the conflict in Palestine started to grow.

#### • UN Partition Plan

- In 1947 the **United Nations decided to intervene**. However, it **did not choose the principle of “self-determination of peoples”**.
- Under considerable Zionist pressure, the UN recommended giving away 55% of Palestine to a Jewish state.
- This was done despite the fact that this group represented only about 30% of the total population, and



owned under 7% of the land.

- **1947-1949 War**

- Fighting began almost as soon as the Resolution of November 1947 was approved.
- On May 14, 1948, one day before the British Mandate (Palestine was a British colony) expired, Britain declared "the establishment of a Jewish State in Eretz-Israel, to be known as the State of Israel".
- This sparked a **full-scale war (1948 Arab–Israeli War)**. By the end of the war, Israel had conquered 78% of Palestine; and a new map was drawn up.

- **1967 War**

- Also known as a 6-day war, Israeli forces launched a highly successful surprise attack on Egypt.
- Israel occupied the final 22% of Palestine that it had eluded in 1948 – the West Bank and Gaza Strip
- It also **occupied parts of Egypt** (since returned) and **Syria** (which remain under occupation).

- **Oslo (Norway) peace process**

- In the 1993 a breakthrough agreement was negotiated between Israeli and Palestinian.
- Israeli government and the Palestine Liberation Organization (PLO) agreed on a **plan to implement a two-state solution**.

### What is Hamas?

- **About**

- Hamas is the largest Palestinian **militant Islamist group** and one of the two major political parties in the region. Currently, it governs more than two million Palestinians in the Gaza Strip.
- The organisation, however, is also known for its armed resistance against Israel.
- Hamas as a whole, or in some cases its military wing, is designated a terrorist group by Israel, the United States, the European Union, the United Kingdom, and other countries.
- The group was founded in the late 1980s, after the beginning of the **first Palestinian intifada**, or uprising, against Israel's occupation of the West Bank and Gaza Strip.

- **Reasons for its Creation**

- Deep sense of failure that had been set within the Palestinian national movement by the late 1980s.
- This primarily happened after the Palestine Liberation Organization (PLO) — involved in the armed struggle against Israel from the mid-1960s to 'liberate Palestine' — made two massive concessions.
  - The PLO recognized Israel and its right to exist — thereby, relinquishing its goal of liberating Palestine.
  - Two, it also dropped the armed struggle as a strategy, for the

### YOM KIPPUR WAR

- The Yom Kippur war, or the October war, or the Ramadan war, was fought between Israel on one side and Egypt and Syria on the other, from October 6 to 25, 1973.
- Yom Kippur is the holiest day in Judaism and Samaritanism.
- It is also known as the Day of Atonement. It is observed on the 10th day of the Lunar month of Tishri, which falls in September or early October.
- **It is also called the Fourth Arab-Israeli war, coming after three wars in 1949, 1956, and 1967.**



### IRON DOME

- It is a short-range, ground-to-air, air defence system that includes a radar and Tamir interceptor missiles that track and neutralise any rockets or missiles aimed at Israeli targets.
- It is used for countering rockets, artillery & mortars (C-RAM) as well as aircraft, helicopters and unmanned aerial vehicles.
- The Iron Dome was deployed in 2011.
- While Rafael claims its success rate of over 90%, with more than 2,000 interceptions, experts agree the success rate is over 80%.

sake of a negotiated settlement.

- Hamas gained prominence after it opposed the Oslo Peace Accords signed in the early 1990s between Israel and the PLO.



## Shutdown of Afghan Embassy

Recently, a statement carrying the seal of the Ministry of Foreign Affairs of the **Islamic Republic of Afghanistan** announced the closure of the **Embassy** of Afghanistan in Delhi.

### Key Highlights

- In its official communication, the Afghan Embassy blamed multiple factors including lack of cooperation from the Government of India and a lack of resources to operate any further.
- Furthermore, the embassy has urged the Indian government to fly the flag of the Islamic Republic of Afghanistan over embassy premises.
- It has also asked New Delhi to hand over the mission to a legitimate govt of Afghanistan sometime in future.
  - The Taliban govt. in Afghanistan is not recognised by India as de facto rulers.
  - With the displacement of the Islamic Republic of Afghanistan, the embassy of Afghanistan in New Delhi had begun to work as a stateless mission.
- It should be noted that despite the closure of the embassy in Delhi, India and Afghanistan are continuing engagement with each other in a curious way.
- India has been maintaining a “technical team” in Kabul where the staff provides visas to Afghan traders and travelers to India.
- There are two weekly flights that carry Afghan citizens and items to India.
- India uses the flights while sending humanitarian assistance to the Afghan people. That apart, some Indian goods are also entering Afghanistan through other countries like Iran and the UAE.

### India-Afghanistan Bilateral Relationship

- India and Afghanistan have a strong relationship based on historical and cultural links.
- In recent past, India-Afghanistan relations have been further strengthened by the Strategic Partnership Agreement, which was signed between the two countries in October 2011.
- The Strategic Partnership Agreement (SPA) between the two sides, provides for:

Assistance to help rebuild Afghanistan's infrastructure and institutions

Education and technical assistance

Providing duty free access to the Indian market for Afghanistan's exports

- Bilateral trade between the two countries amounts to **\$1.5 billion** (0.19% of India's world trade).
  - India's exports include pharmaceuticals, medical equipment, computers and related materials, cement, sugar, etc.
  - Afghanistan's exports include mainly fresh and dried fruits.

### Challenges

- **National Security Concerns**
  - Terrorist groups such as **Lashkar-e-Taiba** and the **Jaish-e-Mohammad** have been keeping bases and training grounds along the southern provinces of Afghanistan that border Pakistan.



- With Taliban's control over Afghanistan, Pakistan's military and intelligence agencies will have a bigger role to influence outcomes for the country.
- This will leave a much smaller role for Indian development and infrastructure role in Afghanistan.
- **Trade Relations**
  - Trade through Afghanistan under a Taliban regime would be routed through Karachi and Gwadar (both in Pakistan), and the Indian investment in the Chabahar port, meant to circumvent Pakistan, may become unviable.
- **Threat of Drug Trafficking:**
  - Afghanistan accounted for 85% of the total global opium production in 2020.
  - Drugs have been a major source of revenue for the Taliban. With the collapse of Afghanistan's economy, the Taliban will rely heavily on drugs money to maintain control over their cadres.
  - There is a threat of a steep surge in cross-border trafficking of heroin and crystal methamphetamine.

### Conclusion

- With Iran, Pakistan, UAE, Russia, Qatar and China warming ties with the Taliban, there is obvious pressure on India to reconsider its position on the Taliban.
- The Taliban has been urging India to support it with its economic revitalisation through projects like electricity generation and road building works.
- India, however, has not yet indicated that it will review its position on the Taliban.



## India Sends Medical Supplies, Disaster Relief Aid To Gaza

India sent its first humanitarian aid for the beleaguered residents of Gaza via Egypt. This was days after PM Modi spoke to Palestinian President Mahmoud Abbas to convey condolences over the loss of civilian lives at the Al Ahli Hospital in Gaza City.

### India In A Balancing Act

- In his first phone conversation with Palestinian President Abbas since the Hamas attack on Israel, PM Modi had reiterated India's long-standing principled position on Israel-Palestine issue.
- On October 7, hours after the Hamas's unprecedented attack on Israel, PM Modi posted a statement on X. Through this post, he expressed his deep shock at the terrorist attacks and said that we stand in solidarity with Israel at this difficult hour.
- Five days later, **in its first official statement on the Israel-Hamas war**, New Delhi has sought to balance its position.
  - Ministry of External Affairs said that there is a **“universal obligation to observe international humanitarian law”.**
    - The phrase is seen as aimed at Israel which is conducting aerial strikes in Gaza.
  - The statement also said that there is also a global responsibility to fight the menace of terrorism in all its forms and manifestations.
    - This was seen as a strong signal of support to Israel.

## Background: India – Palestine Relation

### • Evolution of Relationship

- India's support for the Palestinian cause is an integral part of the nation's foreign policy.
- In 1974, India became the **first Non-Arab State** to recognize Palestine Liberation Organization (PLO) as the sole and legitimate representative of the Palestinian people.
- In 1988, India became one of the first countries to recognize the Palestinian State.
- In 1996, India opened its Representative Office in Gaza, which was later shifted to Ramallah in 2003.

### • Support at multilateral fora

- India has always played a proactive role in garnering support for the Palestinian cause in multilateral fora.
- In 2011, India also voted in favour of Palestine becoming a full member of UNESCO.

### • India's stand on Palestine

- India has always supported a negotiated **Two-State solution to Israel-Palestine issue**.
- India believes in establishment of a sovereign, independent and viable State of Palestine living within secure and recognized borders, side-by-side in peace with Israel.

## Important Bilateral Visits and Political Interactions

- There have been regular high-level bilateral visits between India and Palestine.
- PM Modi paid a historic visit to Palestine in February 2018, the **first for an Indian Prime Minister**.
- Late President Yasser Arafat visited India several times. President Mahmoud Abbas visited India in 2005, 2008, 2010, 2012 and in May 2017 on his third State Visit.

## Developmental Cooperation

- India has provided various forms of developmental cooperation assistance to Palestine over the years amounting to approximately US\$ 141 million.
- India has also provided a total of **US\$ 39 million of budgetary support** to the Palestinian Authority.
- In July 2021, India offered a Line of Credit worth USD 50 Million to Palestine for implementing developmental and sustainable projects.
- The major development assistance projects executed successfully by India include:
  - Palestine-India Techno-Park
  - Construction of Jawaharlal Nehru Library at the Al Azhar University in Gaza city
  - The Mahatma Gandhi Library-cum-Student Activity Centre at the Palestine Technical College at Deir Al Balah in the Gaza Strip, etc.
- Currently, 8 developmental projects are in progress, the details of some of which are as follows:
  - Palestinian Institute of Higher Diplomacy in Ramallah;
  - National Printing Press at Ramallah;
  - Construction of Super-specialty hospital in Ramallah;
  - Turathi - Women Empowerment Centres at Ramallah and Gaza; etc.

## Bilateral Trade Between India and Palestine

- Trade between India and Palestine is conducted through Israel and therefore, comprehensive trade statistics are not available.
- India-Palestine annual bilateral trade volume was USD 67.77 million for the year 2020.
  - Indian exports and imports were USD 67.17 million and USD 0.6 million, respectively.

- India has a share of 0.06% of Palestine’s exports, while India ranks 13th among the importing countries for Palestine with 1.1% share of total Palestine’s imports.

#### United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA)

- India supports Palestine and Palestinian refugees through its contributions to UNRWA.
- India is a member of its Advisory Commission since 2020. Since 2002, India has contributed a total of US\$ 36.5 million to UNRWA till 2022-23.

#### Culture Relations Between India and Palestine

- In 2014, a bust of Mahatma Gandhi was unveiled at the Garden of Nations in Ramallah.
- An Indian Cultural Week was also organized by the Mission, in association with ICCR and Palestinian Ministry of Culture in November 2021.

#### Operation Ajay

- India launched Operation Ajay to bring back Indians from Israel as the conflict escalated.
- Operation Ajay is not technically an evacuation operation. It is an operation to repatriate its citizens from Israel.
- Special chartered flights will bring back the Indians. Indian Navy ships will be deployed if the need arises.
  - There are about 18,000 Indians in Israel, and about 16 in Palestine — a dozen in the West Bank and 3-4 people in Gaza.



## Online Betting: ED Summons Ranbir Kapoor

- Enforcement Directorate (ED) summoned actor Ranbir Kapoor in connection with the Mahadev online betting case, for promoting illegal online betting and gaming platform.
- According to the ED, Mahadev Online Book provides **online platforms for illegal betting in different live games** such as poker and other card games, chance games, cricket, badminton, tennis, football and others. It even provides an avenue to bet on different elections in India.
- Its main promoters, originally from Chhattisgarh, are based out of Dubai, and may have amassed as much as Rs 5,000 crores through the platform.

#### Central Laws Related to Gambling/Betting In India

Under the **7<sup>th</sup> Schedule of the Constitution**, the **state governments have the exclusive power** to enact their own laws on Gambling/Betting for their own territory. However, the **Public Gambling Act, 1867**, a colonial-era statute still in force, has been adopted by several states including Uttar Pradesh, Madhya Pradesh and Delhi.

#### Should Gambling/Betting Be Legalised Across India?

##### Arguments in Favour of Legalisation

- Legalising gambling will not only help in breaking off sources of black money but it will also **generate a good amount of revenue for the state exchequer**.
- The unaccounted money earned from gambling activities is managed by the criminal syndicates which are spent on nefarious activities like **terror financing**. Legalising gambling will not only put a halt on it but also the money generated from betting and gambling **can be used by the authorities for various constructive**

*social schemes.*

- In a large country like India, a legal and effectively regulated gambling sector will **generate large-scale employment opportunities.**
- If betting gets a legal permit, then there will be more transparency in such activities and **it will also curb fixing of the matches** as it will create a sense of fear of getting caught among the players and bookies.

#### Arguments Against Legalisation

- Gambling is **morally wrong and is not ethically correct** in the Indian context.
- It is one of the reasons for bankruptcy, addiction, loss of livelihood, divorce, crime.
- Legalised gambling hurt and **destroys those who are poor and disadvantaged people of the society.**
- If gambling were illegal, then it would be difficult for the gambling industries to openly promote their casinos, lotteries, or any other gambling activities and exploit these people.
- Since gambling is portrayed as something clean and a way to earn money quickly, **it attracts young people, who eventually become gambling addicts.**

#### Way Ahead

The **276<sup>th</sup> report of the Law Commission of India** talked about the possibility of legalising gambling in the whole country with some rules and regulations. But the legalisation of gambling in a large country like India is not an easy task. Government has to take certain measures before legalising Gambling:

- **State list to Concurrent list–**
  - Gambling should firstly, be put under concurrent list so that the Parliament can legislate on the subject without facing any hindrances.
- **Restrict the Number of Transactions –**
  - To protect the interest of people and to prevent any harm, the government should restrict the number of transactions that can be made in a specified period.
  - Also, there should be a check upon the stakes involved by linking the accounts with either PAN/AADHAAR card.
- **FDI in Gambling–**
  - To prevent financial burdens on the states who wish to permit casinos and other gambling activities, the government should allow FDI in this sector.
  - So, that investments can be made in the respective states for the infrastructure etc.
  - Also, this will lead to growth in tourism and the states would be able to generate more employment and revenues.
- **Effective Implementation of Rules & Regulations –**
  - Necessary infrastructure like police machinery and prosecutors or grievance redressal mechanisms should be set up at both state and national levels by the government to ensure that the rules and regulations are perfectly implemented and also to ensure that the perpetrators are punished.

#### Extra Mile

(GST) Council, in its 50<sup>th</sup> meeting, decided to levy a **uniform 28% tax** on full face value for **all** online gaming, casinos and horse racing (**including games of skills and chance**)

- **Previously games of skills were taxed 18% and games of chance 28%**
- Also at present, most gaming companies were paying a tax of **18%** applicable on the **platform fees.**
  - Eg. platform fee is 10%. So, for every Rs 100 deposited in the game, the platform makes Rs 10 and 18% GST on Rs 10 means that GST is Rs 1.8.

- Under the new structure, a GST of 28% will be **applicable on the entire face value** of the bet or the consideration paid, and **not the platform fee**.
  - Meaning that for every Rs 100 deposited, the GST will be Rs 28 (increase of ~15.6 times)



## Glacial Lake Outburst Floods (GLOFs)

A devastating glacial lake outburst flood struck north Sikkim after the South Lhonak Lake burst due to incessant rains.

<b>About GLOFs</b>	It is a type of flood occurring when water dammed by a glacier, or a moraine is released suddenly.
<b>Trigger Points of GLOFs</b>	
<b>Natural Factors</b>	<b>Anthropogenic Factors</b>
Melting Glaciers, earthquakes, Volcanic Activity, extremely heavy rains and ice avalanches	Mass tourism; construction of roads and hydropower projects
<b>Impact of GLOFs</b>	<p><b>Destruction of Existing Structures</b> – It can cause sudden release of massive amounts of water, resulting in the destruction of infrastructure such as roads, bridges, and buildings.</p> <p><b>Threat to Human Life and Livelihoods</b> – It pose a significant threat to human life and livelihoods, especially for communities living in downstream areas.</p> <p><b>Environmental Impact</b> - Rapid influx of water can lead to the erosion of riverbanks, loss of vegetation, and disruption of aquatic ecosystems. Sediment carried by the floodwaters can also affect water quality and damage downstream habitats.</p> <p><b>Contribution to Landscape Evolution</b> - Erosive power of floodwaters can carve deep valleys and create new landforms, altering the geomorphology of the affected region.</p>
<b>Mitigation guidelines</b>	<p><b>Early Warning Systems</b> - Implement effective early warning systems that can monitor glacial lakes and detect any signs of potential outbursts.</p> <p><b>Risk Assessment and Mapping</b> - Conduct comprehensive risk assessments to identify areas at high risk of GLOFs. This involves mapping glacial lakes, assessing their volume and stability,</p> <p><b>Infrastructure Planning and Preparedness</b> - Develop infrastructure plans that consider the risks posed by GLOFs. This can involve constructing protective structures such as flood barriers or diversion channels.</p> <p><b>Community Awareness and Preparedness</b> - Raise awareness among communities living in GLOF-prone areas about the risks and necessary precautions.</p>
<b>Historical examples of GLOFs</b>	<p><b>1934 GLOF in Peru</b> - Lake Palcacocha in Cordillera Blanca Mountain range resulted in a devastating flood.</p> <p><b>1994 GLOF in Bhutan</b> - Lake Luggye Tsho in Bhutan caused widespread destruction in Punakha Valley.</p> <p><b>2002 GLOF in Nepal</b> - Tsho glacial lake in Everest region triggered a powerful flood that swept away bridges, homes, and trekking trails.</p> <p><b>2010 GLOF in Pakistan</b> - Attabad glacier in Karakoram Mountain range created a massive artificial lake, submerging several villages and displacing thousands of people.</p> <p><b>February 2021 GLOF in Uttarakhand</b> - Nanda Devi glacier broke, leading to a massive flood in</p>

### Extra Mile: Need to Relook the Dam Safety Act 2021

India has almost 6,000 large dams and about 80% of them are more than 25 years old and carry safety risks.

#### Provisions of the Act

- **Regulatory bodies**
  - A **National Committee on Dam Safety** would oversee dam safety policies and regulations;
  - A **National Dam Safety Authority** would be charged with implementation and resolving State-level disputes;
  - The Chairman of the Central Water Commission (CWC) would head dam safety protocols at the national level;
  - A State Committee on Dam Safety (SCDS) and State Dam Safety Organisation (SDSO) would be set up.
- **Obligations of States**
  - Provisions require States to:
    - classify dams based on hazard risk,
    - conduct regular inspections,
    - create emergency action plans,
    - institute emergency flood warning systems, and undertake safety reviews and period risk assessment studies.
  - States were asked to report and record incidents of dam failures.
    - Until now, no statutory provision required systemic reporting of failures and no single agency was tasked with tracking this data.
    - The CWC keeps a record but the list is not updated regularly.
- **Punishment**
  - Failure to comply with any provision of the Act is punishable with imprisonment and/or fines.
  - If such obstruction or refusal to comply with directions results in loss of lives or imminent danger, the entity shall be punishable with imprisonment for a term which may extend to two years.
    - In February 2023, the Sikkim High Court ordered the Gati Hydropower Project company to pay ₹70 lakh to two widowed mothers, for non-compliance with the Dam Safety Act.

#### What Are The Challenges

- **Blind spots in both legislation and implementation**
  - The DSA does not promote risk-based decision-making and fails to incentivise transparency. The frequency and scale of such disasters reveal a pattern of neglect.
- **Jurisdiction of Parliament to Frame a Law on Intra-State River Dams**
  - The Act applies to all specified dams in the country. As per the Constitution, states can make laws on water including water storage and water power (Entry 17 State list).
  - However, Parliament may regulate and develop inter-state river valleys in public interest (Entry 56 of Union list).
  - The question is whether Parliament has the jurisdiction to regulate dams on rivers flowing entirely within a state.

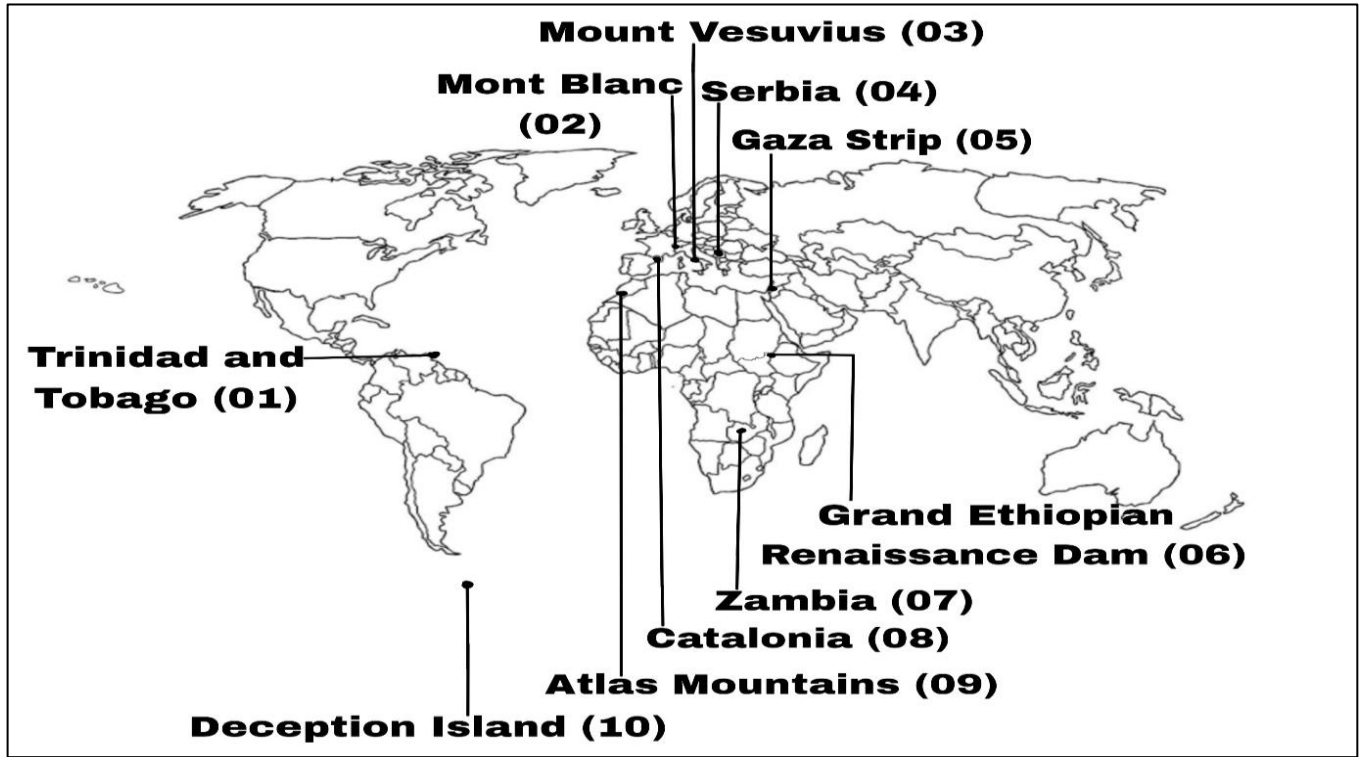
- **Access of information**
  - A robust DSA should allow different stakeholders to access information easily, but India's framework falls short.
    - Dam safety is a public purpose function.
    - Everything about dam safety, functions of all the institutions and committees and authorities, their reports, decisions minutes and agendas, everything should be promptly available to the public.
    - However, nothing is in the public domain.
- **Lack of periodic review**
  - Periodic reviews are often not conducted or if they are, their findings are not easily available in the public domain.
  - The Act requires dam builders to conduct comprehensive dam safety evaluations. However, there is no standardisation of how the failure is analysed and reported.

### **How Is Dam Safety Undertaken?**

- **Dam safety is a function of many parts**
  - designing and constructing dams that adhere to safety margins,
  - maintaining and operating them per guidelines,
  - recording data in real-time in an accessible format,
  - forecasting hazardous events and instituting emergency plans, etc.
- **Hazard profiling and regular assessment** mandated by the Act
  - Hazard risk fluctuates at the slightest touch, responding to climate change, urbanisation, and the way people/companies use water or where they are located.
  - Periodic reviews are expected to bring forth fresh inundation maps and new rule curves (which determine the capacity of dam reservoirs).
  - All of these contribute towards the safety of the downstream areas.

## MAPS: PLACES IN NEWS

### International Places in News

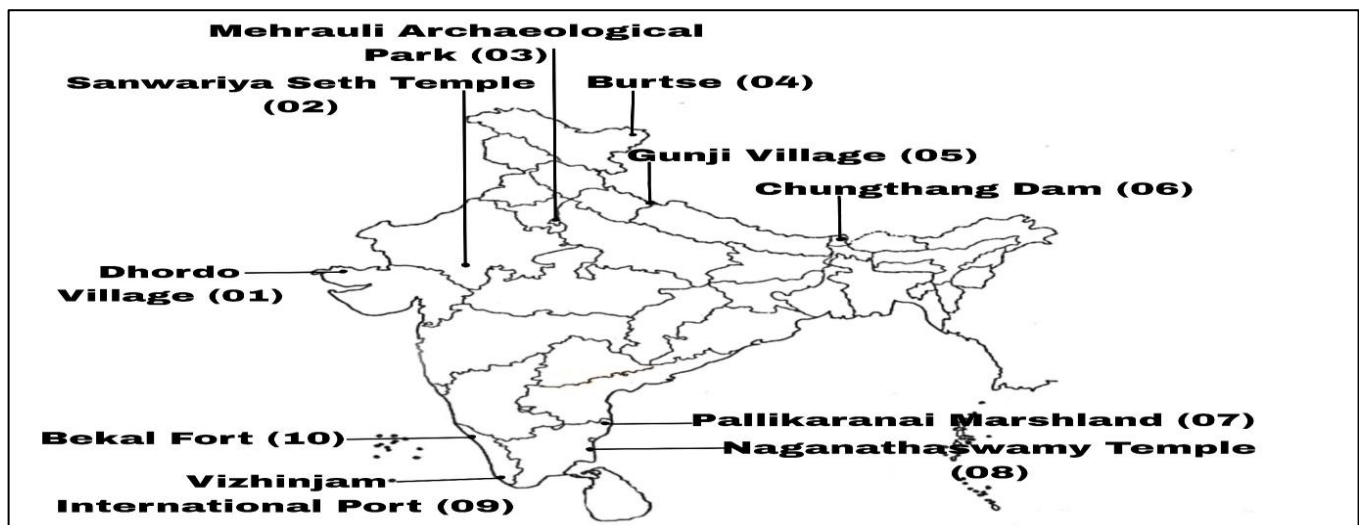


01	<b>Trinidad and Tobago</b>	It is the southernmost island country in the Caribbean. It shares maritime boundaries with Barbados, Grenada, Saint Vincent, Grenadines and Venezuela. It is generally considered to be part of the West Indies. The island country's capital is Port of Spain, while its largest and most populous city is San Fernando.
02	<b>Mont Blanc</b>	New research has revealed that Mont Blanc has witnessed a reduction in its height over the past two years. It is the highest peak (4,807 metres) in Europe. It is located in the Alps and lies along the French-Italian border and reaches into Switzerland. It is nicknamed as " <b>the roof of Europe</b> ".
03	<b>Mount Vesuvius</b>	Researchers used an AI program to read from an ancient scroll that was burned by eruption of Mount Vesuvius. It is an active volcano that rises above the Bay of Naples on the plain of Campania in southern Italy. It is a composite stratovolcano, made up of pyroclastic flows, lava flows, debris from lahars. It is most famous for the 79 AD eruption that destroyed the Roman cities of Pompeii and Herculaneum.
04	<b>Serbia</b>	Envoys of the EU and USA urged Kosovo and Serbia to resume dialogue to ease soaring tensions. It is a land-locked country in the west-central Balkans. It shares its border with Bosnia and Herzegovina, Croatia, Hungary, Romania, Bulgaria, North Macedonia, Montenegro and Albania. The main rivers passing through this country are Danube, Tisa, Morava.
05	<b>Gaza Strip</b>	It is a Palestinian exclave on the eastern coast of the Mediterranean Sea, bordered by Egypt and Israel. Israeli territory separates the territories of Gaza and the West Bank from each other.
06	<b>Grand Ethiopian Renaissance Dam</b>	Ethiopia recently announced that it has filled its Grand Ethiopian Renaissance Dam (GERD) on the Nile River. It is formerly known as the <b>Millennium Dam</b> and sometimes referred to as Hidase Dam. It is situated in the Benishangul-Gumuz region of



		Ethiopia, near the border with Sudan. It is located on the Blue Nile, one of the main tributaries of the Nile River.
07	Zambia	It is a landlocked country in south-central Africa. It shares its borders with Angola, Democratic Republic of the Congo, Malawi, Mozambique, Namibia, Tanzania, Zimbabwe and Botswana. Kafue River which is a tributary of Zambezi river is a longest river in Zambia.
08	Catalonia	Mass protests were organised in Barcelona against possible amnesty for Catalan separatists. Catalonia is an autonomous region in the northeastern Spain. Most of its territory lies in the northeast of Iberian Peninsula. It is administratively divided into 4 provinces: Barcelona, Girona, Lleida, Tarragona. Its capital city is Barcelona.
09	Atlas Mountains	The epicentre of the recent devastating earthquake in Morocco was in the High Atlas Mountains. These are a prominent mountain range in North Africa, primarily located in Morocco. These are part of the Atlas Mountain Range, which stretches across Morocco, Algeria, and Tunisia. It extends north-eastward for 1000 km from the Atlantic Coast to the Moroccan-Algerian border.
10	Deception Island	NASA recently posted a birds-eye-view picture of Deception island. It is part of a line of islands called the South Shetland Islands, lying northwest of the Antarctic Peninsula. It is an active volcano.

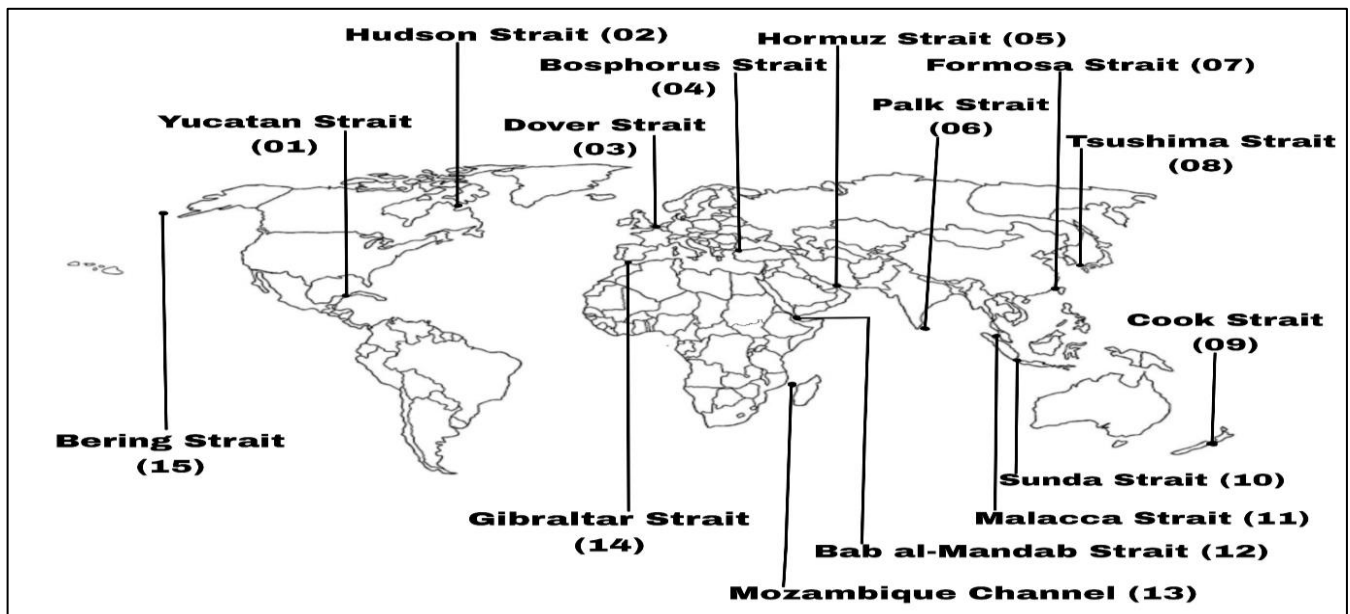
### National Places in news



01	Dhordo village	Dhordo has been conferred the prestigious title of the Best Tourism Village by the United Nations World Tourism Organisation (UNWTO). It is located in the Kutch district of Gujarat, is well-known for being the gateway to the Great Rann of Kutch. This is also the same village where Rann Utsav was launched back in 2005.
02	Sanwariya Seth Temple	The Prime Minister offered prayers at the Sanwariya Seth Temple in Chittorgarh, Rajasthan. It is a Hindu temple dedicated to Lord Krishna. It was built in 1840 A.D. The temple follows the traditional architecture of Rajasthan, known for its intricate carvings, domes, and vibrant colors.
03	Mehrauli Archaeological Park	A revamped Mehrauli Archaeological Park was unveiled to the public recently. It is located in Delhi, spread over 200 acres and is adjacent to Qutub Minar. It is home to 55 historic structures built by various empires, including the Khaljis, Tughlaqs, Lodhis, Mughals.

04	<b>Burtse</b>	Coral reef fossils have been unearthed at 18,000 feet above sea level at Burtse, Ladakh. It is located in eastern Ladakh Himalayas, east of Daulat Beg Oldie sector. A strategic road to Daulat Beg Oldie (DBO) passes through it.
05	<b>Gunji Village</b>	The Prime Minister 's recent visit to Gunji has triggered an uproar in Nepal. It is located in Pithoragarh, Uttarakhand. It is situated near the borders of Tibet and Nepal and the confluence of the Kuthi Yankti and Kalapani Rivers. The village is on the traditional Indian/Nepalese route to Kailas–Manasarovar. To visit Gunji, one has to obtain an Inner Line permit.
06	<b>Chungthang Dam</b>	Chungthang Hydro-Dam was washed away by flooding of the Teesta River. It is a dam and hydroelectric power station located in Chungthang, a town in Sikkim. It is a major source of electricity for Sikkim and West Bengal.
07	<b>Pallikaranai marshland</b>	Despite threats of new infrastructure and encroachments, winged visitors continue to arrive at the Pallikaranai marshland. It is a freshwater marsh and partly saline wetland situated in Chennai, Tamil Nadu. It is one of the Ramsar sites from India. On its eastern periphery, the Marsh is flanked by the Buckingham Canal.
08	<b>Naganathaswamy Temple</b>	The Tamil Nadu Department of Archaeology is set to take up restoration of the 1,000-year-old Naganathaswamy Temple at Manambadi in Thanjavur. It was built by Rajendra Chola I. It is referred as Kailasamudaiyar temple in inscriptions. It consists of an ekatala vimana and a mukhamandapa. It is known for its exquisite stone sculptures and important inscriptions.
09	<b>Vizhinjam International Seaport</b>	It is located at Vizhinjam, Kerala. It will be country's first Deepwater container transshipment terminal. It is being built on a public-private-partnership (PPP) mode set to be completed in 2024.
10	<b>Bekal Fort</b>	The first public sector caravan park in Kerala to come up at Bekal fort. It is exquisitely designed and built with dark maroon laterite stones. It was built in the 17th century. Originally constructed by the rulers of the ancient Kadampa Dynasty, the Fort changed hands over the years to the Kolathiri Rajas, the Vijayanagara Empire, Tipu Sultan and finally, the British East India Company. The most prominent structure inside the fort is the observation tower built by Tipu Sultan.

### Major Straits of the World



01	<b>Yucatan Strait</b>	It separates Cuba from the Yucatan Peninsula of Mexico. It connects the Yucatan Basin of the Caribbean Sea with the Gulf of Mexico.
02	<b>Hudson strait</b>	It links the Atlantic Ocean and the Labrador Sea to Hudson Bay in Canada. This strait lies between Baffin Island and Nunavik.
03	<b>Dover strait</b>	It is located at the narrowest part of the English Channel, marking the boundary between the Channel and the North Sea, and separating Great Britain from continental Europe.
04	<b>Bosphorus Strait</b>	It is located in northwestern Turkey. It connects the Black Sea with the Sea of Marmara. It is the world's narrowest strait used for international navigation.
05	<b>Hormuz Strait</b>	It links the Persian Gulf with the Gulf of Oman and the Arabian Sea. It separates Iran from the Arabian Peninsula. It is the world's most important oil chokepoint because of the large volumes of oil that flow through the strait.
06	<b>Palk Strait</b>	It lies between the Tamil Nadu state of India and the island nation of Sri Lanka. It connects the Bay of Bengal in the northeast with the Gulf of Mannar in the southwest. Several rivers flow into it, including the Vaigai River of Tamil Nadu.
07	<b>Formosa Strait</b>	It is also known as Taiwan Strait. It is a 180 km wide strait separating Taiwan and mainland China. The strait is part of the South China Sea and connects to the East China Sea to the north.
08	<b>Tsushima Strait</b>	It is a channel of the Korea Strait, which lies between Korea and Japan, connecting the Sea of Japan, the Yellow Sea, and the East China Sea.
09	<b>Cook Strait</b>	It separates the North and South Islands of New Zealand. It connects the Tasman Sea on the northwest with the South Pacific Ocean on the southeast.
10	<b>Sunda Strait</b>	It links the Java Sea (Pacific Ocean) with the Indian Ocean. It lies between the islands of Java and Sumatra. It is an important passage connecting the Indian Ocean with eastern Asia.
11	<b>Malacca Strait</b>	It connects the Andaman Sea and the South China Sea. It runs between the Indonesian island of Sumatra to the west and peninsular (West) Malaysia and extreme southern Thailand to the east.
12	<b>Bab al-Mandab strait</b>	It is the narrow waterway that separates the Arabian Peninsula from the Horn of Africa. It links the Red Sea to the Gulf of Aden and the Indian Ocean.
13	<b>Mozambique Channel</b>	It is situated between the eastern island country of Madagascar and Mozambique on the continent of Africa. It is located in the Indian Ocean.
14	<b>Gibraltar Strait</b>	It connects the Atlantic Ocean to the Mediterranean Sea and separates Gibraltar and Peninsular Spain in Europe from Morocco and Ceuta (Spain) in Africa. After the English Channel, the Strait is the world's busiest shipping lane.
15	<b>Bering Strait</b>	It separates the continents of Asia and North America, and the countries of Russia and the United States. It also connects the Arctic Ocean and the Bering Sea. It also connects the Bering Sea to the Chukchi Sea of the Arctic Ocean.

## Agnipath Scheme and Agniveers

The death of a 22-year-old Agniveer who was deployed on the Siachen glacier has brought back focus on Agnipath, the contractual scheme for recruitment into the armed forces, and the benefits under it.

### Why Was The Agnipath Scheme Brought?

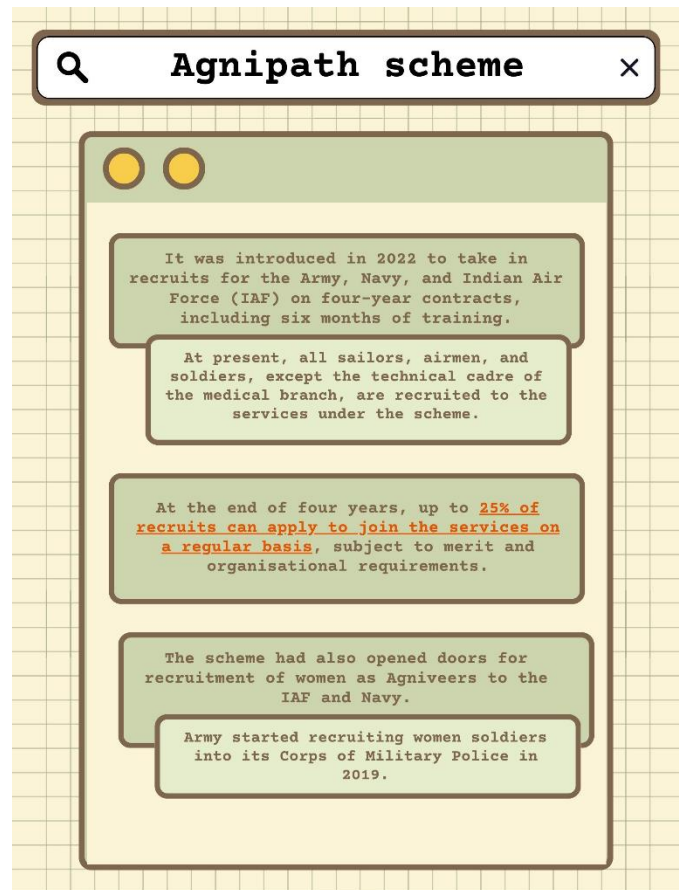
- **To ensure a youthful profile for the armed forces:** By bringing down the average age of serving soldiers, it would help transform the armed forces into a “tech-savvy and modern fighting force.
- **Empowered civil society:** It would ensure the availability of disciplined and skilled youth from a range of backgrounds in civil society after their retirement at the end of four years.
- **To reduce the burgeoning defence pension bills**

### Benefits to Agniveers

- The remuneration of an Agniveer is **Rs 30,000-Rs 40,000 per month**, and they are entitled to risk and hardship allowances.
- The scheme also has a **Seva Nidhi contributory package**, under which the Agniveers contribute 30% of their monthly emoluments, and the government contributes the same amount.
- On completion of four years, they will receive around Rs 11.71 lakh (with interest) from the package, and this will be exempt from income tax.
- **In case of death on duty**, they will receive more than Rs 1 crore, including the Seva Nidhi package and full pay for the period they could not serve.

### How Do These Benefits Compare With Those Due To A Regular Soldier?

- **Starting salary** of a regular soldier, combined with military service pay and dearness allowance, comes to around Rs 40,000, whereas the starting salary of an Agniveer is Rs 30,000.
- **Eligibility for pension:** A soldier employed on regular service will draw a pension post-retirement, while an Agniveer will not.
  - The 25% of Agniveers who would eventually be absorbed into the forces after four years will, however, be eligible for pension after retirement.
- **In case of a battle casualty** the family of a regular soldier gets a liberalised family pension which is equal to the last pay drawn, for life. There is no income tax on this amount.
  - The family of an Agniveer is eligible only for a non-contributory insurance sum.
- **Gratuity and insurance:** A regular soldier gets gratuity for 15 days per year for every year of service, and has an insurance cover of Rs 50 lakh. Soldiers on regular service also get a children’s education allowance up to graduation.
  - None of these are available to Agniveers.



- **Disability during service:** Agniveer gets:
  - an ex-gratia amount that depends on the percentage of disability suffered,
  - pay for the remaining part of the four-year service tenure (if they go out of service), and
  - monetary benefits under the Seva Nidhi scheme.
- A regular soldier who suffers a disability gets pension, ex gratia, as well as impairment relief as per entitlement.

### Food Labels To Have QR Code to Help the Visually Disabled

The Food Safety and Standards Authority of India (FSSAI) has recommended the inclusion of QR code on food products for accessibility by visually impaired individuals.

- FSSAI under its **Food Safety and Standards (Labelling and Display) Regulations 2020** has comprehensively outlined the information to be included on the labels of food products.
- FSSAI is a **statutory body** established under the Ministry of Health & Family Welfare.
- FSSAI was established in 2008 under the **Food Safety and Standards Act 2006**.

#### QR Code on Food Labels

- In its recent advisory, the FSSAI notes that **ensuring inclusive access to information** is a fundamental right of citizens.
- **The Rights of Persons with Disabilities Act 2016** recognises the rights and needs of individuals with disabilities, which emphasises accessibility and the promotion of health for persons with disabilities.
- One effective means to achieve this is **by incorporating Quick Response [QR] codes** on product labels. **These QR codes should encompass** comprehensive details about the product, including, but not limited to:



- It is pertinent to note that the inclusion of a QR code for the accessibility of information **does not replace or negate the requirement to provide mandatory information** on the product label, as prescribed by relevant regulations.

**FOOD SAFETY AND STANDARDS (LABELLING AND DISPLAY) REGULATIONS 2020**

- 1** The FSSAI under these new Regulations has addressed many gaps in the erstwhile Food Safety and Standards (Packaging and Labelling) Regulations 2011.
- 2** **The new Regulations come with a host of new requirements :**
  - Mandatory declaration of allergen information,
  - Per-serve contribution of nutrients to recommended dietary allowances (RDA),
  - Expiry date,
  - New logo, symbols for non-veg and food items not meant for human consumption, etc.
- 3** Under the new Regulations, even **e-commerce platforms** are required to provide for mandatory labelling of food products offered for sale through their platform with certain exceptions.
- 4** Further the new regime has also brought **restaurant operators** with a large chain of networks within its scope.

A set of complaints against the functioning of the International Institute of Population Sciences (IIPS) set off an inquiry by the Union government. This inquiry led to the resignation of the director of the IIPS, Prof K S James.

**About International Institute of Population Sciences (IIPS):**

- It serves as a regional Institute for Training & Research in Population Studies for **ESCAP region**
- It was established in Mumbai in July 1956 as a joint sponsorship of Sir Dorabji Tata Trust, the Government of India and the United Nations.
- In 1985, it was declared as a 'Deemed to be University' under Section 3 of the UGC Act, 1956.
- The Institute is under the administrative control of the Ministry of Health and Family Welfare

**Objectives of IIPS**

- To train persons from India and other countries in demography and related fields, including demographic aspects of family planning.
- To undertake scientific research on population problems which are of special importance to India and other countries in the ESCAP region.
- To collect, organize and disseminate demographic information about the population of India and other countries of the world.
- The Ministry of Health and Family Welfare designated IIPS as the nodal agency, responsible for providing coordination and technical guidance for the National Family Health Survey (NFHS).

**About National Family Health Survey (NFHS):**

- It is a large-scale, multi-round survey conducted in a representative sample of households throughout India.
- The NFHS-1 was conducted in 1992-93. Subsequent NFHS' were conducted as below –
  - NFHS-2 was conducted in 1998-99
  - NFHS-3 was conducted in 2005-06
  - NFHS-4 was conducted in 2015-16
  - NFHS-5 was conducted in 2019-21
- The main objective of successive rounds of the NFHS has been **to provide reliable and comparable data relating to health and family welfare and other emerging areas in India.**
- **Nodal Ministry:** Ministry of Health & Family Welfare

**Major Highlights of NFHS-5**

- Report of the NFHS-5 was released in 2022.
- The report comprises of detailed information on key domains of population, health and family welfare; fertility; family planning; infant and child mortality; maternal and child health; nutrition and anaemia; morbidity and healthcare; women's empowerment etc.
- **Key results from NFHS-5 –**
  - The **Total Fertility Rates (TFR)**, an average number of children per women, has further declined from 2.2 to 2.0 at the national level
  - Overall **Contraceptive Prevalence Rate (CPR)** has increased substantially from 54% to 67% in the country.
  - **Institutional Births** have increased substantially from 79% to 89% in India.
  - **Stunting** has reduced from 38.4% to 35.5%, **wasting** from 21.0% to 19.3% and **underweight prevalence** is down from 35.8% to 32.1%.

- Stunting is defined as low height-for-age.
- Wasting is defined as low weight-for-height.
- Women (15-49 years) whose **BMI** is below normal has reduced from 22.9% in NFHS-4 to 18.7% in NFHS-5.
  - Body mass index (BMI) is a measure of body fat based on height and weight.

#### About ESCAP Region

- The United Nations **Economic and Social Commission for Asia and the Pacific (ESCAP)** is one of the five regional commissions under the jurisdiction of the United Nations Economic and Social Council. It was established in **1947**.
- **Objective:** To overcome some of the region's greatest challenges by providing results-oriented projects, technical assistance and capacity building to member States.
- The commission is composed of **53 Member States** and 9 Associate members, mostly from the Asia and Pacific regions.
- The region covered by the commission is home to 4.1 billion people (2/3 of world's population).
- **Headquarters:** Bangkok, Thailand

#### India Ranks 111<sup>th</sup> on Global Hunger Index (GHI) 2023

India ranked 111<sup>th</sup> out of 125 countries in GHI 2023. India ranked 107<sup>th</sup> out of 121 countries in 2022.

#### About Global Hunger Index (GHI):

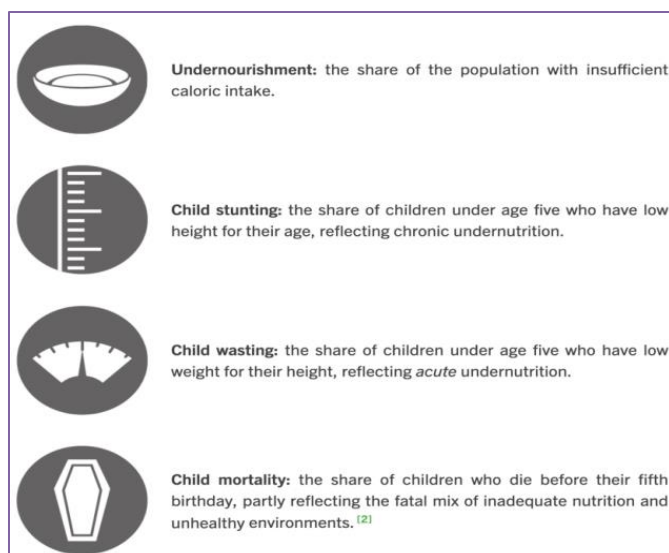
- Created in 2006, the GHI was initially published by the US-based **International Food Policy Research Institute (IFPRI)** and Germany-based **Welthungerhilfe**.
- In 2007, the Irish NGO **Concern Worldwide** also became a co-publisher.
- In 2018, IFPRI stepped aside from its involvement in the project and the GHI became a joint project of Welthungerhilfe and Concern Worldwide.

#### What Does GHI Indicate?

- The global hunger index is a means of monitoring **whether countries are achieving hunger-related SDGs**. It can be used for international ranking.
  - **Goal 2** of the SDGs aims to end hunger and all forms of malnutrition by 2030.
  - It also commits to universal access to safe, nutritious & sufficient food at all times.

#### How is GHI Defined?

- The GHI captures **three dimensions** of hunger –
  - Insufficient availability of food,
  - Shortfalls in the nutritional status of children
  - Child mortality
- Accordingly, the **Index includes the following four equally weighted indicators (given in fig.)**
- Countries are ranked on a **100-point scale**, with 0 and 100 being the best and worst possible scores, respectively.



## Factors That Contribute To A High GHI Have Been Identified As:

Low income and poverty

War and violent conflict

General lack of freedom

Low women's status

Poorly targeted and delivered health and nutrition programmes

### Report Stats

- Country reported the highest child wasting rate at 18.7 per cent.
- With a **score of 28.7 in the Global Hunger Index-2023**, India has a level of hunger that is **serious**
  - The 2023 **GHI score for the world is 18.3**, considered moderate.
- India's neighbouring countries **Pakistan (102th)**, **Bangladesh (81st)**, **Nepal (69th)** and **Sri Lanka (60th)** have fared better than it in the index.
- South Asia and Africa South of the Sahara are the world regions with the highest hunger levels, with a GHI score of 27 each, indicating serious hunger.

### Criticism of Report By Union Government

- The Ministry of Women and Child Development (MoWCD) yet again questioned the GHI and called it a **“flawed measure of hunger that doesn’t reflect India’s true position”**.
- It said that data recorded on its **Poshan Tracker portal** showed child wasting prevalence of **7.2%** among a total of 7.24 crore under-five-year-olds whose data was captured, whereas the GHI used a value of **18.7%** for child wasting.
- The ministry further said two other indicators, namely *stunting and wasting*, are outcomes of complex interactions of various other factors like sanitation, genetics, environment and utilisation of food intake apart from hunger.
- The second objection the MoWCD reiterated was the **alleged use of a telephone-based opinion poll to calculate undernourishment, one of the indicators used in GHI**.
  - The GHI has maintained that it doesn’t use the poll, but relies on data from India’s Food Balance Sheet to calculate undernourishment.
- The Ministry argued that three out of the four indicators used for calculation of the index are related to the health of children and cannot be representative of the entire population.

## Mera Yuva Bharat

Union Cabinet has approved the establishment of an **autonomous body** called **Mera Yuva Bharat (MY Bharat)** to provide equitable access to the youth. This will serve as an overarching enabling mechanism *powered by technology* for youth development and youth led development.

### National Youth Policy, 2014

The National Youth Policy, 2014 (NYP-2014) reiterates the commitment of the entire nation to all-round development of the youth of India, so that they can realize their full potential and contribute productively to the nation-building process.

### Mera Yuva Bharat (MY Bharat)

- **About**
  - The platform is meant to offer suitable





opportunities for youngsters to engage in **voluntary work** in the field of their choice and look for such opportunities across the country.

- It will act as a **one-stop shop** for young people and various central government ministries, and will also create a centralised youth database.
- However, there will be **no financial remuneration** involved.
- MY Bharat to be launched on 31st October, 2023 on National Unity Day.
- **Primary objective:** To make it a whole of Government platform for youth development.
- **Features**
  - The autonomous body will benefit the youth in the age group of **15-29 years**, in line with the definition of youth in the National Youth Policy.
  - In the case of programme components meant for adolescents, the beneficiaries will be in the age group of **10-19 years.**
  - Under the new arrangement, with access to resources & connection to opportunities, youth would become community change agents and nation builders.
  - This will allow them to act as the **Yuva Setu between the Government and the citizens.**
  - It seeks to harness the immense youth energy for nation building.
- **The establishment of Mera Yuva Bharat (MY Bharat) would lead to:**
  - Leadership Development in the Youth:
    - Improve the leadership skills through experiential learning by shifting from isolated physical interaction to programmatic skills.
    - Investing more in youth to make them social innovators.
    - Setting the focus of the Government on Youth Led development and to make the Youth “active drivers” of development and not merely “passive recipients”.
  - Better alignment between youth aspirations and community needs.
  - Enhanced efficiency through Convergence of existing programmes.
  - Improved two-way communication to connect youth government initiatives and activities of other stakeholder that engage with youth.
  - Ensuring accessibility by creating a physical ecosystem.

#### **Need for MY Bharat**

- **Vision 2047** requires a framework that can bring rural youth, urban youth and Rurban youth under a single platform.
  - The existing schemes of Department were designed and launched at different points in time over the last 50 years with the then prevailing understanding of needs of rural youth in our society.
  - The dynamic shifts in the urban-rural landscape have necessitated a re-evaluation of these approaches. It is imperative to create a framework that unites rural, urban, and rurban youth on a common platform.
- There is a need to establish a **new contemporary technology led platform** for the Government to engage with the present-day youth.
  - In today's fast-paced world, characterized by rapid communication, prevalence of social media, a technology driven platform can connect youth to programs.
  - It can help them improve their capabilities and also connect them with community activities. It would help to increase the Youth outreach efforts of the Department of Youth Affairs.

- **Ensuring accessibility by creating a phygital ecosystem**
  - The Mera Yuva Bharat platform will create and sustain such a **phygital eco-system** and empower young individuals to become catalysts for community transformation.
    - Phygital - (physical plus digital).
  - Recently, a web portal of the Department of Youth Affairs, yuva.gov.in, hosted a nation-wide program called “**Meri Maati Mera Desh**” in which 50 million young people participated.
    - It helped to plant 23 million saplings to create Amrit Vatikas pan-India.

### Protocol for Management of Malnutrition in Children

The Union Minister of Women and Child Development (WCD) recently launched the “Protocol for Identification and Management of Malnutrition in Children”.

- This is the first such protocol by the government, which has been put into place by the WCD Ministry in collaboration with the Ministry of Health and Family Welfare and the Ministry of Ayush.

### Highlights of the “Protocol for Identification and Management of Malnutrition in Children”

- The protocol **provides detailed 10-step guidelines** for -
  - **The identification and management** of children suffering from **severe acute malnutrition (SAM)** at the **Anganwadi level**, including decision-making for referral, nutritional management and follow-up care.
  - The processes needed to for a healthy weight, and
  - The comprehensive norms on dietary requirements for various levels of malnutrition among children.
- **After the identification of children** through growth monitoring data, **appetite tests** will be done on all SAM children for medical complications.
- **SAM children who fail the appetite test** will be referred to Nutritional Rehabilitation Centres, which will also be linked to medical centres.
- The protocol also includes unique initiatives like the “**Buddy mother**” concept which was first used in the state of **Assam**.
  - Under this scheme, the mother of a healthy baby guides the mother of a malnourished child at an Angandwadi centre every week.

### Significance of the Protocol

- **The new guidelines will check malnutrition among children**, which the government is tackling through the implementation of ‘**Poshan Abhiyan**’.
  - The identification of malnourished children and their treatment is an integral aspect of **Mission Poshan 2.0** and more than 17 crore activities have taken place during the ‘poshanmaah’ (nutrition month).
- **The standardised protocol is significant** since treatment of children with SAM was previously thought to be limited to facility-based approaches.
  - This is the first time this issue would be addressed at the **Anganwadi level**.
- Hence, the Centre was now “strengthening the foundation” of the nutrition ecosystem with the development of protocols.

### What Is Severe Acute Malnutrition (SAM)?

- It is defined by a **very low weight for height**, by visible severe wasting, or by the presence of nutritional oedema.
- **In children aged 6–59 months**, an arm circumference less than 110 mm is also indicative of severe acute malnutrition. At present, **there are ~7.7% SAM children** in India.

## Counting Deaths In India's Prisons

Recently, the **Supreme Court Committee on Prison Reforms** found **suicide** to be the leading cause of 'unnatural' deaths (other than ageing or illnesses) among Indian prisoners.

- The suicide rate among inmates was found to be more than twice in comparison to what is recorded in the general population.

### How Are Deaths Investigated

- Since 1993, the NCRB is required to intimate a custodial death within 24 hours, followed by post-mortem reports, magisterial inquest reports or videography reports of the post-mortem.
- In cases of custodial rape and death, the Code of Criminal Procedure also requires compulsory judicial magisterial inquiry in place of an executive magistrate inquiry.

### Important Supreme Court Judgment

SC in **R.D. Upadhyay v State of Andhra Pradesh (1996)** articulated the social obligation towards prisoners' health, noting that they suffer from a "double handicap".

- First, the prisoners do not enjoy the access to medical expertise that free citizens have. Their incarceration places limitations on such access; no physician of choice, no second opinions, and few if any specialists.
- Secondly, because of the conditions of their incarceration, inmates are exposed to more health hazards than free citizens.

### Steps/Reforms Taken By the Government

- The **Model Prison Manual of 2016** and the **Mental Healthcare Act of 2017**, outline inmates' right to healthcare.
  - This includes adequate investment in healthcare facilities, setting up mental health units, training officers to provide basic and emergency care, and formulating suicide prevention programmes to thwart such instances.
- In light of rising suicide cases, the **NHRC in June issued an exhaustive 21-page advisory to States**, highlighting that suicides arise out of both medical and mental health issues.

**CLASSIFICATION OF PRISON DEATHS IN INDIA**

Prison deaths are labelled as 'natural' or 'unnatural' by the Prison Statistics India report published by the National Crime Records Bureau every year.

In 2021, a total of 2,116 prisoners died in judicial custody, with almost 90% of cases recorded as natural deaths.

U.P. recorded the highest number of overall deaths, with 481 inmates dying in 2021.

**Natural Deaths**

- 'Natural' deaths account for ageing and illness. Illness has been further subcategorised into diseases such as heart conditions, HIV, tuberculosis, and cancer, among others.
- As the prison population swells, recorded natural deaths have increased from 1,424 in 2016 to 1,879 in 2021.

**Unnatural Deaths**

are more diverse in classification, profiled as:

- Suicide (due to hanging, poisoning, self-inflicted injury, drug overdose, electrocution, etc)
- Death due to inmates
- Death due to assault by outside elements
- Death due to firing
- Death due to negligence or excesses
- Accidental deaths (natural calamities like earthquakes, snakebites, drowning, accidental fall, burn injury, etc.

- NHRC recommended filling positions of “Prison Welfare Officers, Probation Officers, Psychologists, and Medical Staff”.
- To prevent suicides specifically, guidelines recommend a strict check on tools such as ropes, glasses, wooden ladders, pipes; initial mental health screening at the time of entry into jail; and installing CCTV cameras to monitor high-risk inmates.

### **Recommendations Made By Justice Amitava Roy Committee**

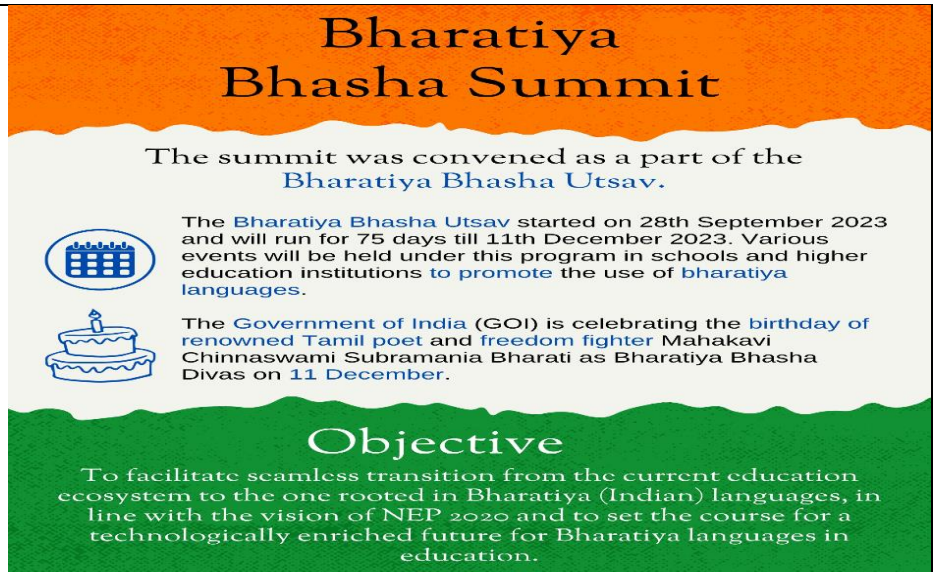
- In September 2018, the Supreme Court had formed a **Committee on Prison Reforms** chaired by former judge, Justice Amitava Roy. It submitted the final report in December, 2022.
- Major recommendations include:
  - **Reduce Violence amongst Prisoners –**
    - **Mandatory segregation of undertrials, convicts and first-time offenders** inside jails, while producing them in courts, during their hospital visits, etc.
    - Prison administration should strive to comprehensively implement national and state health insurance schemes such as Ayushman Bharat scheme, Chiranjeevi Health Insurance Scheme and similar state health insurance schemes.
    - Need for a **robust grievance redressal mechanism** for the prisoners.
  - **Speedy Trials –**
    - The issue of overcrowding lies majorly with the undertrial population in prisons.
    - Special fast track courts to be set up to extensively deal with petty offences and for cases pending for five years or more.
    - Tasking district and sessions judge with the responsibility of regularly monitoring the progress of cases pending in courts where the accused is in custody for more than one year in a session triable case and for more than six months in magistrate triable cases.
  - **Use of Video Conferencing as a Medium –**
    - As far as possible, production of senior citizens and sick prisoners in courts should be done through video-conferencing medium.
  - **Prevention of Suicide –**
    - Suicide-proof barracks with collapsible material.
    - Jail staff should be regularly provided the requisite training to recognise "signs of depression and aberrant behaviour".

## Bhartiya Bhasha Summit

A two-day Technology & Bharatiya Bhasha Summit concluded in New Delhi recently.

### About the Bharatiya Bhasha Summit

**Conveners-** Ministry of Education (MOE), Ministry of Skill Development and Entrepreneurship (MSDE), Central Institute of Indian Languages (CIIL), University Grants Commission (UGC), National Educational Technology Forum (NETF), All India Council for Technical Education (AICTE), National Centre for Vocational & Technical Education (NCVTE), National Council for Teachers Education (NCTE) and Bharatiya Bhasha Samiti (BBS)



**Bharatiya Bhasha Summit**

The summit was convened as a part of the **Bharatiya Bhasha Utsav**.

The **Bharatiya Bhasha Utsav** started on 28th September 2023 and will run for 75 days till 11th December 2023. Various events will be held under this program in schools and higher education institutions to promote the use of **bharatiya languages**.

The **Government of India (GOI)** is celebrating the **birthday of renowned Tamil poet and freedom fighter Mahakavi Chinnaswami Subramania Bharati** as **Bharatiya Bhasha Divas** on **11 December**.

**Objective**

To facilitate seamless transition from the current education ecosystem to the one rooted in Bharatiya (Indian) languages, in line with the vision of NEP 2020 and to set the course for a technologically enriched future for Bharatiya languages in education.

**Theme:** Using 'Technology *FOR, IN AND THROUGH* Bharatiya Languages' which emphasized the integration of technology in promoting Bharatiya Bhasha and its role in teaching, training, examination, and translating educational materials.

### Key Highlights

- Leveraging technology (such as augmented reality, virtual reality/MVR) for bharatiya languages;
- Operating systems and software localization;
- Search engine localization;
- Use of machine learning and language modelling for speech recognition;
- Unicode standardization for bharatiya language scripts;
- Skilling through bharatiya languages;

## Money Bill

Soon, a seven-judge bench of Supreme Court (SC) will take-up a batch of pleas challenging the Centre's use of the Money Bill route to pass certain key legislations and will examine if laws were validly categorized as Money Bills or only to circumvent scrutiny of the Rajya Sabha.

### Background

The bench will examine three key-legislations namely- **Prevention of Money Laundering Act (PMLA)**, **Aadhaar Act** and **Tribunal Reforms Act**. The SC upheld the validity of the PMLA, Aadhaar Act earlier but struck down the tribunal amendments as unconstitutional.

### PMLA

- The Finance Acts passed in 2015, 2016, 2018 and 2019 brought in crucial amendments to the PMLA.
  - ✓ Finance Bills passed during the budget are introduced as money bills under Article 110 of the Constitution

- In July 2022, a three-judge bench upheld the amendments to this act and the vast powers of the Enforcement Directorate (ED).
- However, the bench left the validity of these amendments through the Money Bill route open for a larger Constitution bench to hear.

### **Aadhaar Act**

- The Aadhaar bill was introduced in the Lok Sabha as a money bill, thus was challenged in the court.
- But the SC ruled in favour of the government and cleared the Aadhaar Act as a valid money bill under Article 110 of the Constitution.

### **Tribunal Reform**

- The Tribunal Reforms bill was also introduced as a money bill in the Finance Act, 2017 and was challenged in the Roger Matthew vs Union of India case.
- The government had argued that since salaries of members of Tribunals flow from the Consolidated Fund of India, the amendments were introduced as a Money Bill.
- A five-judge bench of the court struck down the law as unconstitutional for interfering with judicial independence however, it referred the money bill aspect to a larger constitution bench and expressed doubts over the correctness of a five-judge Constitution Bench's 2018 verdict upholding the Aadhaar Act.

## **About the Money Bill**

**Definition- Article 110 of the Constitution deals with the money bill. It states that a bill shall be deemed to be a money bill, if it deals with**

- The imposition, abolition, remission, alteration, or regulation of any Tax Taxation;
- Custody of the Consolidated Fund of India /Contingency Fund of India, the payment of moneys into or the withdrawal of moneys from any such Fund;
- Appropriation of funds from Consolidated Fund of India;
- Declaring of any expenditure to be expenditure charged on the Consolidated Fund of India or the increasing of the amount of any such expenditure
- Receipt of money on account of the Consolidated Fund of India/Public account of India, or issue of such money or the audit of the accounts of the Union or of a State;
- Regulation of money borrowed by the Government.
- Or any matter related to the above situations.

**They can only be introduced in the House with the prior recommendation of the President.**

**Deciding Authority- It is the Speaker who decides whether a bill is a money bill or not and his decision is final. His certificate should be endorsed on every money bill sent to the Rajya Sabha (under Article 109) and to the President (under Article 111)**

**Procedure for Passage- Article 109 provides a special procedure for the passage of the money bill and states that-**

- Money Bill can only be introduced in the Lok Sabha and only with the recommendation of President.
- Once it has been passed in the Lok Sabha, it is then transmitted to the Rajya Sabha which needs to return the bill within 14 days with its recommendations or else the bill is deemed to have been passed by both the houses.
- It is up to the Lok Sabha to accept/reject the recommendations, in both situations the bill deems to have been passed by both the houses.
- When a money bill is presented to the President, he may give or withhold his assent to the bill but cannot return the bill for reconsideration. The President normally gives assent to a money bill as it is introduced in the Parliament with his prior permission.

## Extra Mile: Constitution Bench

### What is a Constitution Bench?

- A Constitutional Bench consisting of Supreme Court (SC) judges is constituted when there is a case which can have a larger national impact or is likely to decide the law for good.
- It gives an overarching view on a question of law and defines a future path for the law.
- These benches are temporary and are dissolved once a legal question or issue is settled.

### Size-

- It consists of five or more judges of the SC depending either on the importance of the issue or the need to review a smaller bench's judgement.
- The largest-ever Constitution Bench was that of 13 judges in the case *Kesavananda Bharati v. State of Kerala* which propounded the basic structure doctrine of the Constitution.

**Constituted By-** It is constituted by the Chief Justice of India (CJI) in the following cases-

1. If the case involves a "substantial question of law" related to the interpretation of the Constitution. **(Article 145(3))**
2. If the President seeks SC's opinion on a law or fact. **(Article 143)**
  - ✓ SC's decision in this situation is not binding on the President.
3. When a two-judge bench and later a three-judge bench deliver conflicting judgements on a similar issue.
4. If a three-judge bench delivers a judgement different from the one delivered by a previous three-judge bench on an issue.

## Mukhyamantri Sukh Aashray Yojana (MSAY)

A first-of-its-kind, "*Mukhyamantri Sukh Aashray Yojana*" was launched in Himachal Pradesh.

### About the Mukhyamantri Sukh Aashray Yojana (MSAY)

#### What?

Under the scheme, the state government will adopt orphans and specially abled children as the 'Children of the State' and work for their upliftment and well-being, giving them all parental care, besides taking care of the destitute women and elderly.

#### Objectives

- **For Children (Orphan/Divyang):** To Provide Foster Care/Protection/Higher Education
- **For Women (Destitute):** To impart Skill Development Training
- **For affected Victims:** To provide equal opportunities and social justice (psycho-social support)

#### Key Features

1. **Revamped Infrastructure-** Existing shelter homes, orphanages and old-age facilities will be revamped with quality infrastructure.
2. **Financial Assistance-**
  - The beneficiaries will receive ₹10 thousand as apparel allowances, ₹500 as festival grant and a marriage grant of ₹2 lakh or actual expenditure whichever is less.
  - Inmates of shelter homes or orphanages above 18 years of age will be provided Rs. 1 lakh each per year for higher education with a monthly pocket money of ₹4,000. Selected eminent citizens from the society will serve as mentors and provide counselling to the children from time to time.
  - Financial assistance of up to ₹1 lakh and grants of ₹2 lakh will be provided to support orphan children in

establishing small or micro-industries for self-employment.

- Approximately 2,700 newly identified orphans living with relatives will get monthly financial assistance of ₹4,000 until the age of 27 years.
- Three Biswas of land in rural areas, as well as the assistance of Rs. 3 lakhs will be provided to the landless orphans after they attain the age of 27 for house construction.

3. **Care-** A nurse will be provided for each child requiring motherly care and a matron for every three children to care for and nurture them.
4. **Educational Tours-** A 15-day educational tour will be arranged annually for the orphan children with their stay in three-star hotels. The air travel and all other expenses will be borne by the government. Such tours will also be arranged for the residents of old age homes and Nari Seva Sadan for 10 days every year.
5. **Mukhya Mantri Sukh Aashray Kosh-** It will be maintained and administered by the Social Justice & Empowerment Department of Himachal Pradesh through the Directorate of Women & Child Development. It may receive voluntary donations, contributions or subscriptions by any individual or organization or funds or funds under Corporate Social Responsibility. The funds will be directed towards MSAY.

### Existing Schemes of HP

For Children	For Women
<ol style="list-style-type: none"> <li>1. <b>Mission Vatsalya Scheme:</b> A centrally sponsored scheme, it is a roadmap to achieve development and child protection priorities. It lays emphasis on child rights, advocacy and awareness along with strengthening of the juvenile justice care and protection system with the motto to 'leave no child behind'.</li> <li>2. <b>PM Cares for Children Scheme:</b> The scheme is 100% funded by the Government of India for COVID orphans.</li> <li>3. <b>Mukhya Mantri Bal Udhar Yojna:</b> Implemented by the State Government to supplement erstwhile Child Protection Services scheme (now Mission Vatsalya).</li> </ol>	<ol style="list-style-type: none"> <li>1. <b>Mukhya Mantri Kanyadan Yojna:</b> Marriage grant of Rs. 51,000/- is provided for marriage of a girl whose father or both the parents are not alive, or whose father is alive, but he is incapacitated or bedridden and to the residents/ former residents of State Home-cum- Protective Homes (Nari Seva Sadan)/ Childcare Institutions having no regular source of income.</li> <li>2. <b>Mukhya Mantri Shagun Yojna:</b> Provides financial assistance of Rs. 31000 for marriage of girls belonging to BPL families and who are permanent residents of Himachal Pradesh.</li> <li>3. <b>State Home-cum-Protective Home (Nari Sewa Sadan):</b> setup to provide shelter, food, clothing, education, training etc. to young widows and deserted women without any support, orphan / unattached girls / women.</li> <li>4. <b>Shakti Sadan:</b> Temporary shelter, maintenance, legal and rehabilitative services are being provided to women and girls rendered homeless due to family discord, crime, violence and mental stress etc.</li> </ol>
<b>For Elder Citizens</b>	
<ol style="list-style-type: none"> <li>1. <b>Integrated Programme for Senior Citizens:</b> In this centrally sponsored scheme (90:10(NGO)), the destitute old people in old-age homes are provided free accommodation, food, medical, entertainment etc.</li> </ol>	

### Freedom on the Net 2023 Report

Recently, a report titled '*Freedom on the Net 2023: The Repressive Power of Artificial Intelligence*' red flagged the increasing use of AI by governments for censorship and spread of disinformation.

#### Key Findings

1. **Declining Global Internet Freedom-** Because of blocked information critical to their administration & Increased Surveillance, for the 13<sup>th</sup> consecutive year from several countries.



## 2. Growing Attacks on Free Expression-

- People from around 55 countries faced legal repercussions for expressing themselves online, while people were physically assaulted or killed for their online commentary in countries like Iran and Myanmar.

## 3. Misuse of Artificial Intelligence (AI)-

- In at least 16 countries, AI was used to sow doubt, smear opponents, or influence public debate.
- Legal frameworks in at least 21 countries mandate or incentivize digital platforms to deploy machine learning to remove disfavored political, social, and religious speech.


## 4. Findings with respect to India-


- India's internet freedom score improved by 2 points, placing it 51st in the global ranking.
- Indian government's Net Neutrality Rules, adopted in July 2018, are considered among the world's strongest. India engages in all types of censorship, including the use of automated systems except VPN blocking.


## 5. Environment for Human Rights on Online Platform-

- It deteriorated in 29 countries, with only 20 countries registering net gains.
- **Iceland** has best environment for internet freedom for 5<sup>th</sup> consecutive year, followed by Estonia.
- **Sri Lanka** earned this year's largest score improvement.
- **China** ranked as the world's worst environment for Internet freedom for the ninth straight year.
- **Iran** witnessed the sharpest rise in digital repression.
- **India** scored 50 on a range of 1 to 100 where '100' represented highest digital freedom and '1' the worst repression.

# Freedom on the NET 2023 REPORT

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It is published by Freedom House, a non-profit organization based in Washington, D.C. established in 1941 which is best known for political advocacy surrounding issues of democracy, political freedom, and human rights.
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It is the 13th edition of an annual study of human rights online and evaluates Internet freedom in 70 countries, accounting for 88% of the world's Internet users.
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It evaluates countries on five censorship methods- 1) Internet connectivity restrictions 2) Blocks on social media platforms 3) Blocks on websites 4) Blocks on VPNs, and 5) Forced removal of content.

## Guardian Minister

Deputy Chief Minister of Maharashtra Ajit Panwar was appointed the Guardian Minister of Pune.

### About Guardian Minister

- The Guardian Minister is a cabinet-level minister appointed by a state government to oversee the development of a specific district within the state.
- The position is typically held by a senior politician from the ruling party who acts as a liaison between the central government and the district administration, ensuring that the district receives the necessary resources and support to meet its development goals.
- A minister may serve as the guardian minister for multiple districts.
- The post of Guardian Ministers was introduced to bring to attention the implementation of government policies, reforms, and public welfare schemes in assigned districts.
- Roles and Responsibilities-
  - He oversees the execution of various state government schemes and programs in the district and ensures

smooth functioning of district administration.

- He is the ex-officio chairman of District Planning Development Committee (DPDC) responsible for the implementation of developmental and infrastructure schemes in each district.
- He is the final decision-making authority on matters related to the expenditure of DPDC funds. Therefore, the post becomes important for political parties as it gives them control of the development funds allocated for the district.

## National Human Rights Commission (NHRC)

NHRC celebrated its 30<sup>th</sup> foundation day this year on 12<sup>th</sup> October as a reminder of its commitment to the cause of protection and promotion of human rights.

### About the NHRC

#### What?

The NHRC (a statutory body) was established in 1993 for protecting and promoting human rights under the Protection of Human Rights Act (PHRA), 1993. It was amended by the Protection of Human Rights (Amendment) Act, 2006.

- ✓ As per Section 2(1)(d) of the PHRA, Human Rights are the rights related to life, liberty, equality and dignity of the individual guaranteed by the Constitution or embodied in the International Covenants and enforceable by courts in India.
- ✓ The Act provides for the establishment of State Human Rights Commissions.

#### Objectives

- To strengthen the institutional arrangements through which human rights issues could be addressed in their entirety in a more focused manner;
- To investigate allegations of excesses, independently of the government, in a manner that would underline the government's commitment to protect human rights.

#### Functions

- i) **Inquire**- *Suo motu* or on a petition presented to it by a victim or any person on his behalf or on a direction or order of any court into a complaint of-
  - human rights violation or
  - negligence in the prevention of such violation by a public servant;
- ii) **Intervention**- in any proceeding involving any allegation of human rights violation pending before a court with the approval of such court;
- iii) **Visit**- any jail or other institution under the control of the State Government for the study of the living conditions of the inmates and make recommendations on the same to the government.
- iv) **Review**-
  - the safeguards provided by or under the Constitution or any law for the protection of human rights and recommend measures for their effective implementation;
  - the factors (including terrorism activities), that inhibit the enjoyment of human rights and recommend appropriate remedial measures;
- v) **Study**- treaties and other international instruments on human rights and make recommendations for their effective implementation;
- vi) **Promote**- research in the field of human rights and awareness about the safeguards available for the protection of these rights through publications, the media, seminars and other available means;

- ii) **Spread**- human rights literacy among various sections of society
- iii) **Encourage**- efforts of NGOs and institutions working in the field of human rights;

**Composition**

<b>Chairperson</b>	Former Chief Justice of India or a Judge of the Supreme Court
<b>5 members = (1+1+3)</b>	
<ol style="list-style-type: none"> <li>1. One Member who is or has been a Judge of the Supreme Court.</li> <li>2. One Member who is or has been the Chief Justice of a High Court.</li> <li>3. Three Members (at least one should be a woman) to be appointed from amongst people having knowledge of, or practical experience in, matters relating to human rights.</li> </ol>	
<b>Deemed Members</b>	
Chairpersons/Chief Commissioner of the- National Commission (NC) for Backward Classes, NC for Minorities, NC for Scheduled Castes, NC for Scheduled Tribes, NC for Protection of Child Rights, NC for Women and Chief Commissioner for Persons with Disabilities	

**Appointment**

The President appoints the chairperson and all the members for a period of 3 years or 70 years of age (whichever is earlier) on the recommendations of a committee consisting of- the Prime Minister, Lok Sabha Speaker, Minister of Home Affairs, Leaders of the Opposition from the Lok Sabha and the Rajya Sabha and Deputy Chairman of Rajya Sabha. They are eligible for reappointment.

**Powers**

1. **Powers of a Civil Court** in the investigation & inquiry into complaints of human rights violations with the ability to-
  - A) Summon and enforce the attendance of witnesses and examine them on oath.
  - B) Discover and produce any document.
  - C) Receive evidence on affidavits.
  - D) Requisition of any public record or copy from any Court or office.
2. **To recommend compensation** to victims of human rights violations.
3. **To approach the Supreme Court or the High Court** for the enforcement of human rights.
4. **To take Suo moto cognizance** of human rights violations.

**Achievements**

1. **Resolved** more than 22 lakh cases.
2. **Recommended** the payment of monetary relief of more than Rs. 230 Crores to the victims of human rights violations and amendments in 97 laws discriminatory to the person with Hansen's disease
3. **Conducted** numerous spot investigations, open hearings, and camp sittings.
4. **Reviewed** innumerable bills and laws, conferences and research projects, more than 100 publications (including monthly newsletters, thousands of media reports, and engagements in international forums) and twenty-eight Advisories including the Right to Food, Right to Health and mental Health, Rights of the Informal Workers, Upholding

**Challenges Faced**

1. **Limited Resources and Staff:** makes it difficult for it to effectively carry out its mandate and results in a lack of capacity to address all human rights issues in a timely manner.
2. **Heavy Workload and a Backlog of Cases:** because of numerous complaints received on human rights violations.
3. **Limited Ability to Enforce its Recommendations:** can hinder its effectiveness in addressing human rights issues and ensuring their implementation.
  - ✓ NHRC does not have any mechanism of investigation. In majority cases, it asks the concerned Central & State

<p>the Dignity of the Dead, Rights of Truck Drivers etc.</p> <p>5. <b>Actively caring</b> for all 47 Government mental health hospitals across the country, rights of destitute widows, the criminal justice system, disability, seafarers, LGBTQI;</p> <p>6. <b>Plays an active role</b> at international human rights forums including the Asia Pacific Forum of National Human Rights Institutions, Global Alliance of National Human Rights Institutions (GANHRI), and UN Human Rights Council, among others with the participation of the Chairperson, Members, and senior officers.</p> <p>7. <b>Hosted</b> a two-day conference of the NHRIs of Asia Pacific.</p>	<p>Governments to investigate the cases</p> <p>4. <b>Limited Jurisdiction Over Certain Categories of Cases:</b> It cannot investigate cases that are older than one year, cases that are anonymous, vague, and frivolous.</p> <p>5. <b>Limited Powers to Investigate and Address Human Rights Violations by Non-State Actors:</b> such as private companies or individuals.</p> <p>6. NHRC powers related to violations of human rights by the armed forces have been largely restricted.</p>
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### Extra Mile: Universal Declaration of Human Rights 1948 (UDHR) & NHRC

The UDHR serves as a foundational document for the work of organizations like the NHRC in upholding human rights at the national level.

- Human Rights Day is celebrated on the 10th of December every year to commemorate the UDHR. 10 December 2023 marks the 75th anniversary of UDHR.
- In December 1966, two global treaties were embraced by the UN General Assembly, significantly contributing to the development of international human rights. These treaties are:
  - The International Covenant on Economic, Social, and Cultural Rights (ICESCR), overseen by the Committee on Economic, Social, and Cultural Rights.
  - The International Covenant on Civil and Political Rights (ICCPR), under the purview of the Human Rights Committee.

The UDHR and these two Covenants together are known as the **International Bill of Human Rights**. India is a signatory to the **Universal Declaration of Human Rights** and has ratified ICESCR and ICCPR.

### Intelligent Grievance Monitoring System (IGMS) 2.0

Recently, the IGMS 2.0 of the Department of Administrative Reforms and Public Grievances (DARPG) was launched.

#### Department of Administrative Reforms and Public Grievances (DARPG)

- DARPG comes under the Ministry of Personnel, Public Grievances and Pensions.
- It endeavors to document and disseminate successful good governance practices by way of audio-visual media and publications.
- It also undertakes activities in the field of international exchange and cooperation to promote public service reforms.
- DARPG has launched The CPGRAMS to provide the facility to lodge a grievance online from any geographical location. *(explained below)*

#### About IGMS 2.0 (Implemented by IIT Kanpur)

##### What?

It is a public grievance portal and a major upgradation of Centralized Public Grievance Redress and Monitoring System (CPGRAMS) portal using Artificial Intelligence/Machine Learning in terms of its capabilities.

##### Objective

- To Provide instant tabular analysis of Grievances Filed & Disposed, State-wise & District-wise Grievances Filed

& Ministry-wise data.

- To Help the officials identify the root cause of the grievance.

#### **Key Features**

- It will help the DARPG in creating the draft letter for selected scheme/ministry and expedite the grievance redressal process by the concerned ministry/department.
- It has been enabled with **Artificial intelligence (AI) capacity**.

#### **Extra Mile: Centralized Public Grievance Redress and Monitoring System (CPGRAMS)**

- **Online Grievance Submission:** It is an online platform available to the citizens 24x7 to lodge their grievances to the public authorities on any subject related to service delivery and a single portal connected to all the Ministries/Departments of Government of India and States.
- **Centralized Database:** CPGRAMS maintains a centralized database of grievances, making it easier for authorities to track and monitor the status of complaints. This ensures a systematic and transparent approach to grievance resolution.
- **Integration with Various Ministries:** Each Ministry & States have role-based access to this system.
- **Multilingual Support:** Making it accessible to a diverse range of citizens. DARPG has integrated the AI based language tool, Bhashini with the CPGRAMS portal. This integration would facilitate the Grievance Redressal Officers (GROs) to translate the regional language grievance texts into English.
- **Accessibility:** CPGRAMS is available via various channels, including a website, mobile application, and interactive voice response (IVR) system, making it easily accessible to a wide audience.
- **Tracking and Monitoring:** Registered users can track the progress of their complaints and receive updates on the actions taken by relevant government departments. This transparency helps build trust in the grievance redressal process.
- **Appellate System & Feedback Mechanism:** It also provides an appeal facility to the citizens if they are not satisfied with the resolution by the Grievance Officer.

\*\* It doesn't provide redressal in RTI matters, court related / Sub Judice matters, religious matters, suggestions and grievances of government employees concerning their service matters.

#### **Section 106 of Indian Evidence Act**

The Supreme Court recently held that Section 106 of the Evidence Act does not inherently impose a burden on the accused but comes into play when the accused fails to provide any explanation regarding facts that could support theories compatible with their innocence.

#### **The Indian Evidence Act 1872**

- It governs the rules and regulations related to the admissibility, relevancy, and credibility of evidence in Indian courts and outlines the procedures and guidelines for presenting evidence in both civil and criminal cases.
- It extends to the whole of India and applies to all judicial proceedings in or before any Court in India, including Courts-martial (except those convened under the Army Act, the Naval Discipline Act, or the Indian Navy Discipline Act, 1934, or the Air Force Act), but not to affidavits presented to any Court or officer, or proceedings before an arbitrator.

\*\* The Indian Evidence Act of 1872 is being replaced by the proposed Bharatiya Sakshya Bill. The changes in the evidence law aim to modernize the rules and principles for the admissibility of evidence in court proceedings.

\*\* Bharatiya Sakshya Bill introduces the presumption of innocence as a fundamental principle of criminal justice system, which means that every person accused of an offence is presumed to be innocent until proven guilty beyond reasonable doubt.

#### **About Section 106 of Indian Evidence Act, 1872**

- It deals with the burden of proof in cases where a fact is within the special knowledge of a person and states that when any fact is within the knowledge of any person, the burden of proving that fact is upon that person.

#### **Example Regarding Section 106 of Indian Evidence Act, 1872**

- Imagine a situation where an opposition political party alleges widespread election fraud during a recent election and claims to have evidence of such fraud.
- In this case, Section 106 can be applied. The burden of proving election fraud rests with the opposition party, as they are the ones making the claim. Since they allege having evidence of fraud, they have a responsibility to present that evidence to substantiate their allegations.

- It applies to **civil and criminal cases** alike and lays down an important principle of evidence.
- The burden of proof under Section 106 is not absolute, and the person who has special knowledge of the fact is only required to prove it to the extent that is reasonable in the circumstances.
- The person is not required to prove the fact beyond all doubt, but only to the extent that a reasonable person would believe it to be true.

#### **Setu Bandhan Scheme**

Recently, 7 bridge projects were approved in Arunachal Pradesh under the Setu Bandhan Scheme.

- ✓ The Setu Bandhan Scheme (under Central Road and Infrastructure Fund (CRIF)), introduced by the Ministry of Road Transport and Highways, aims to improve inter-state connectivity, especially in rural areas at the borders. It will replace railway line Level Crossings (LCs) with Road Over Bridges (ROBs)/Rail Under Bridges (RUBs) in states.

#### **About the Central Road and Infrastructure Fund (CRIF)**

- Previously known as the Central Road Fund, the CRIF was established in 2000 under the Central Road Fund Act, 2000 and it comes under the ambit of the Ministry of Finance.
- It consists of a cess imposed along with excise duty on petrol and diesel which is used to finance other infrastructure projects such as waterways, some portions of the railway infrastructure, and even social infrastructure, including education institutions and medical colleges.

#### **Writ Jurisdiction of HCs**

The Allahabad High Court recently refused to exercise its writ jurisdiction in a petition seeking compliance with a Supreme Court order.

#### **About Writ Jurisdiction of High Courts**

- Article 32 (Right to Constitutional Remedies) and Article 226 provide remedies for the protection of the fundamental rights of a citizen by empowering the Supreme Court (SC) and High Courts (HC) respectively to issue writs when a fundamental right of a citizen is violated.
  - ✓ In the Chandra Kumar case (1997), the SC ruled that the writ jurisdiction of both the high court and the Supreme Court constitute a part of the basic structure of the Constitution.

#### **Jurisdiction of High Courts**

1. **Territorial-** HCs have the right to issue writs within the territory of the concerned state and to any government, authority or person outside their territorial jurisdiction if the whole or part of the cause of

action arises in their state of concern.

2. **Subject Matter**- HCs can issue writs not only for the enforcement of Fundamental Rights but also for non-Fundamental Rights (Legal Rights) whereas the SC can issue writs only in the case of violation of a fundamental right.

\*\* The remedy provided under Article 226 of the Constitution is a discretionary remedy of the court and thereby cannot be claimed as a matter of right.

\*\* In case of the enforcement of Fundamental Rights, the jurisdiction of the SC is original but not exclusive. It is concurrent with the jurisdiction of the high court under Article 226.

Type of Writ	Purpose	Issued When	Final Effect
<b>Habeas Corpus (meaning- to have a body of)</b>	To protect an individual's personal liberty	a person is unlawfully detained	lead to the release of the detainee if detention is found to be illegal
<b>Mandamus (meaning- we command)</b>	To compel a public authority or official to perform a public duty.	a public official fails to perform a public duty	Ensures that governmental actions are in accordance with legal obligations
<b>Quo Warranto (Meaning- by what authority?)</b>	To inquire into the legality of a person holding a public office.	a person is holding office but is not entitled to hold that office	Determines if the person is qualified to hold that position
<b>Prohibition</b>	To prevent a lower court, tribunal, or authority from exceeding its jurisdiction.	a lower court acts outside the scope of its legal authority	Halts the proceedings of a lower court acting unlawfully
<b>Certiorari (Meaning- to be certified" or "to be informed)</b>	To <b>quash</b> the orders, decisions, or judgments of lower courts, tribunals, or quasi-judicial bodies.	a decision is tainted by illegality, bias, or lacks jurisdiction	Allows for a review of lower court decisions and their annulment if unlawful

### Cauvery Water Dispute

The Tamil Nadu (TN) legislative assembly passed a resolution urging the Centre to give instructions to Karnataka on the Cauvery Water sharing issue.

#### About Cauvery River (Ponni River)

- It is an inter-state basin that originates at Tala Kaveri in the Brahma Giri hills of the Western Ghats in Karnataka and passes through Tamil Nadu and Puducherry before draining into the Bay of Bengal.
- It is also known as the **Dakshina Ganga** (the Ganges of the South).
- Third largest river – after Godavari and Krishna – in southern India. The largest in the state of Tamil Nadu
- **Tributaries**
  - ✓ Left Bank- Harangi, Hemavathi (origin in western Ghats joins the river Kaveri near Krishnarajasagar), Shimsha and Akravati.
  - ✓ Right Bank- Lakshmanatirtha, Kabini (originates in Kerala and flows eastward and joins the Kaveri at Tirumakudal, Narasipur), Suvarnavathi or Honnuholé, Bhavani, Lokapavani, Noyyal, Amaravati.



Dams- Harangi and Hemavati Dams, Krishna Sagar Dam in Karnataka and Mettur Dam in Tamil Nadu

<p><b>History</b></p> <ul style="list-style-type: none"> <li>• The dispute first arose in 1892 between then Presidency of Madras and Princely state of Mysore. An agreement was signed between the two in 1924 which was valid for 50 years.</li> <li>** The agreement was that the upper riparian state needed the lower riparian state's consent for any construction, like a reservoir, on the Cauvery River.</li> <li>• In 1974, when the agreement ended Karnataka started diverting water into its four newly made reservoirs without the consent of TN resulting in a dispute between the two states.</li> </ul>	<p><b>About the Inter State Water Dispute Act, 1956</b></p> <p>It was enacted in 1956 (amended in 2002 to include Sarkaria commission's recommendations) in accordance with the provisions under Seventh Schedule &amp; Article 262 of the Constitution.</p>
<p><b>Cauvery Water Dispute Tribunal (CWDT)</b></p> <ul style="list-style-type: none"> <li>• It was formed in June 1990 under the Inter State Water Dispute Act, 1956 and issued its final award in February 2007</li> <li>• It specified the amount of water to be received by each state in a year and allocated the 740 TMC water available in the Cauvery basin in a normal year in the following manner- <ul style="list-style-type: none"> <li>➤ Tamil Nadu: 419 TMC (demanded 512 TMC);</li> <li>➤ Karnataka: 270 TMC (demanded 465 TMC);</li> <li>➤ Kerala: 30 TMC; and</li> <li>➤ Pondicherry: 7 TMC.</li> <li>➤ 10 TMC was reserved for environmental purposes and 4 TMC for inevitable outlets into the sea.</li> </ul> </li> <li>• It mandated the constitution of a monitoring authority to regulate the release of water.</li> <li>** No detailed formula was given if there was a water shortage due to insufficient rain. It only instructed to reduce the allocated shares proportionally in such scenario.</li> </ul>	<ul style="list-style-type: none"> <li>✓ <b>Seventh Schedule:</b> Defines the legislative authority over water resources in Entry 17 (State List) and Entry 56 (Union List).</li> <li>✓ <b>Article 262(1)</b>- It states that the parliament may by law provide for the adjudication of disputes or complaints with respect to the use, distribution and control of waters of any inter-state river and river valley.</li> <li>✓ <b>Article 262(2)</b>- Neither the Supreme Court nor any other court can exercise its jurisdiction in respect of any such dispute or complaint referred to in clause (1).</li> </ul>
<p><b>Supreme Court (SC) Verdict</b></p> <ul style="list-style-type: none"> <li>• The TN government approached the SC contending that Karnataka was not following the award of the tribunal.</li> <li>• The SC in its final judgement in 2018 declared Cauvery a national asset, largely upheld the water-sharing arrangements finalized by the CWDT and directed the Centre to notify the Cauvery Management Scheme.</li> <li>• No water sharing norms were spelt out by the SC for a distress year.</li> </ul>	<ul style="list-style-type: none"> <li>✓ The Sarkaria Commission mandated a one-year time frame to set up the water disputes tribunal and a 3-year time frame to give a decision.</li> </ul>
<p><b>Cauvery Water Management Authority (CWMA)</b></p> <ul style="list-style-type: none"> <li>• Following SC's order, the 'Cauvery Water Management Scheme' was notified by the Centre in June 2018 and the 'Cauvery Water Management Authority' (CWMA), and the 'Cauvery Water Regulation Committee' (CWRC) were constituted.</li> <li>• The CWMA is a largely apolitical authority created under the aegis of the Jal Shakti Ministry to regulate the dispute between TN and Karnataka.</li> </ul>	<ul style="list-style-type: none"> <li>• This Act empowers the Central government to set up an <b>ad hoc tribunal</b> for the adjudication of a dispute between two or more states with respect to an inter-state river or</li> </ul>
<p><b>Present Scenario</b></p> <ul style="list-style-type: none"> <li>• <b>Deteriorating Monsoon</b>- The monsoon situation this season was deficient with rainfall over 30 per cent below normal and lowest rainfall was received by</li> </ul>	



<p>Karnataka in the last 123 years.</p> <ul style="list-style-type: none"> <li>• <b>CWRC's Recommendation-</b> After a request from TN to ensure normal water supply the CWRC (a recommendatory mechanism under the CWMA) observed that due to deficient rainfall Karnataka had only released 30.252 TMC of water from June to August as opposed to the stipulated 80.451 TMC in a normal year. <ul style="list-style-type: none"> <li>✓ Only 40 TMC of water was released till September.</li> <li>✓ As per the court orders, 123.14 TMC of water should be released to Tamil Nadu between June and September.</li> </ul> </li> <li>• <b>CWMA's Order-</b> Based on CWRCs recommendations, CWMA initially ordered the release of about 13 TMC of water for 15 days at the rate of 12,000 cusecs per day even as Tamil Nadu sought 25,000 cusecs per day. But after reviewing the monsoon situation, it reduced the quantum of release to 5,000 cusecs per day against the 12,000 cusecs sought by TN.</li> <li>• <b>Appeal to SC-</b> Both TN and Karnataka approached the SC to challenge the CWMA orders, but the SC refused to intervene and upheld the release of 5,000 cusecs until September.</li> </ul> <p>** The water was released at 3000 cusecs till 31<sup>st</sup> October as per CWRCs orders.</p>	<p>river valley.</p> <ul style="list-style-type: none"> <li>• The decision of the tribunal is <b>final and binding</b> on the parties to the dispute.</li> <li>• Neither the Supreme Court nor any other court have any jurisdiction with respect to any water dispute referred to such a tribunal.</li> <li>• The Supreme Court has jurisdiction to decide any dispute between states in connection with water supplies, if legal rights or interests are concerned.</li> </ul>
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### **Karnataka's Contentions/Arguments**

- **Dependency on Southwest Monsoon-** Karnataka has argued that Tamil Nadu receives a large chunk of its rainfall in the retreating northeast monsoon between October and November, whereas Karnataka receives its main rainfall only by the southwest monsoon from June to September.
- **Low Storage Levels-** Water was being released to Tamil Nadu even as the southwest monsoon ended with very low storage levels in the Cauvery basin reservoirs in Karnataka.
  - ✓ The Krishna Raja Sagar, Kabini, Hemavathy, and Harangi reservoirs were at half their storage levels as of September 23.
- **Main Source of Drinking and Irrigation-** The Cauvery is the main source of drinking water for the city of Bengaluru and for the irrigation of farmland in the Mandya region of the state.
- **Mekedatu Check Dam Project:** The Karnataka government is seeking implementation of the Mekedatu check dam project on the Cauvery to facilitate drinking water storage for Bengaluru and releasing excess water to Tamil Nadu in crisis situations.

<b>Extra Mile (Major Inter-State River Disputes)</b>		
<b>River</b>	<b>Disputes among Concerned States</b>	<b>Formation Year of Tribunal</b>
<b>Godavari</b>	Maharashtra, Andhra Pradesh, Karnataka, Madhya Pradesh & Odisha	1969
<b>Krishna</b>	Maharashtra, Andhra Pradesh, Karnataka	Tribunal –I (1969) & Tribunal II (2004)
<b>Narmada</b>	Rajasthan, Madhya Pradesh, Gujarat and Maharashtra	1969
<b>Ravi &amp; Beas</b>	Punjab, Haryana and Rajasthan	1986
<b>Cauvery</b>	Kerala, Karnataka, Tamil Nadu & Puduchery	1990
<b>Vansadhara</b>	Andhra Pradesh & Odisha	2010
<b>Mahadayi</b>	Goa, Karnataka and Maharashtra	2010
<b>Mahanadi</b>	Chhattisgarh & Odisha	2018

### Ban on PUSA-44 cultivation

The Punjab government recently announced that the state will ban the cultivation of the PUSA-44 paddy variety from next year onwards.

### PUSA-44

- ▶ It was developed in 1993 by the **Delhi-based Indian Council of Agricultural Research (ICAR)**.
- ▶ By the end of 2010s, it had gained widespread popularity among farmers across Punjab, covering approximately 70 to 80% of the area under paddy cultivation.
- ▶ PUSA-44 yields nearly 34 to 40 quintals per acre, while other varieties' yield average is 28 to 30 quintals per acre.
- ▶ Currently, the **Minimum Support Price (MSP) offered for paddy is Rs 2,205 per quintal**, so if it yields farmers 7-10 quintals more than the other varieties, then it will add to their income by Rs 15,000 to 22,000 per acre.

### Reasons For The Ban

- PUSA-44 is a **long-duration variety**, taking around **160 days** to mature. This is around **35 to 40 days more** than other varieties, requiring **5-6 extra cycles of irrigation**.
- With Punjab facing severe groundwater depletion and the availability of short-duration paddy varieties, the government aims to conserve one month of irrigation water by banning the variety.
- Additionally, the area under paddy, a water-intensive crop to begin with, continues to grow in the state. As many as 102 of the state's 141 agricultural development blocks were declared '**dark zones**'.
- In these dark zones the rate of groundwater depletion exceeded the rate of recharge, and the water was available at depths of 200 to 300 feet or more – extractable only by using deep tube wells.
- Moreover, this variety is also known to **worsen** the long-running issue of **stubble burning** in the state.
- Due to its extended maturity period, PUSA-44 is harvested just before the sowing of wheat, typically at the end of October, while the ideal time for wheat sowing is November.
- Ideally, farmers need 20 to 25 days between paddy harvesting and wheat sowing to manage stubble disposal properly. This limited timeframe makes it challenging to manage stubble leading to increased incidents of stubble burning.
- Additionally, PUSA varieties **generate around 2% more stubble than short varieties**.

### National Turmeric Board

The Centre has notified the constitution of the National Turmeric Board (NTB). The National Turmeric Board will focus on the development and growth of turmeric and turmeric products in the country.

- It will provide leadership on turmeric related matters, facilitate greater coordination with Spices Board and other Government agencies.
- There is significant potential and interest world over on the health and wellness benefits of turmeric.
- The Board will utilise this to further increase awareness and consumption, develop new markets internationally to increase exports, promote R&D into new products, and develop on traditional knowledge for value-added turmeric products.
- It will especially focus on **capacity building and skill development** of turmeric growers for harnessing greater benefits out of **value addition**.
- It will also **promote quality and food safety standards** and commitment to such standards.

### Composition

- The **Ministry of Commerce** will be the **nodal department** providing funds and infrastructure for the NTB.
- The Board will have a Chairperson to be appointed by the Central Government.
- It will have members from the Ministry of AYUSH, Departments of Pharmaceuticals, Agriculture & Farmers Welfare, Ministry of Commerce & Industry, senior State Government representatives from three states (on rotation basis).
- Select national/state institutions involved in research, representatives of turmeric farmers and exporters.
- Further, a Secretary will be appointed by the Department of Commerce.

### Turmeric

- It is a perennial **flowering plant** in the **ginger family (Zingiberaceae)**. The plant is native to the Indian subcontinent and Southeast Asia and requires temperatures between **20-30 °C**.
- A friable **well-drained red loamy soil** in wet or garden lands under tropical conditions is ideal for cultivation. It can be grown in regions receiving an **annual rainfall of 1500 m**.

### Turmeric Production In India

- **India is the largest producer, consumer and exporter** of turmeric in the world. In the year 2022-23, an area of 3.24 lakh ha was under turmeric cultivation with a production of 11.61 lakhtonnes (**over 75% of global turmeric production**).
- More than 30 varieties of Turmeric are grown in over 20 states. The largest producing states are **Maharashtra, Telangana, Karnataka and Tamil Nadu**.
- **India has more than 62% share of world trade** in turmeric. During 2022-23, 1.53 lakhtonnes of turmeric & turmeric products valued at 207.45 million USD were exported from India.
- The leading export markets for Indian turmeric are Bangladesh, UAE, USA and Malaysia.
- With the focused activities of the Board, it is expected that turmeric exports will reach USD 1 Billion by 2030.

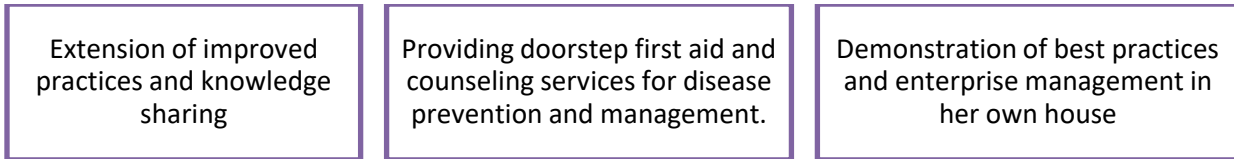
### A-HELP programme

- The Department of Animal Husbandry and Dairying (DAHD), launched the 'A-HELP' (Accredited Agent for Health and Extension of Livestock Production) programme in Jharkhand.
- The initiative has been launched through an MoU signed between DAHD and the **National Rural Livelihoods Mission (NRLM)** under the Ministry of Rural Development (MoRD).
- Till now, it has been initiated across different States/UTs including Bihar, Gujarat, Jammu and Kashmir, Karnataka, Madhya Pradesh, Uttarakhand, and Jharkhand.

- This initiative signifies a significant step forward in promoting livestock health, extension services, and women's empowerment in the region, potentially leading to improved livestock productivity and rural development.
- It aims to **empower women by engaging them as Accredited Agent** who contribute significantly to disease control, animal tagging, and livestock insurance.
- It would enhance access to veterinary services at the farmer's doorstep and empower **Pashu Sakhis**.

### **Pashu Sakhis (Friends Of Animals)**

They are women in rural areas trained to provide veterinary services, breeding services, and medicines to livestock in their community. They perform three types of complimentary functions:



### **National Rural Livelihoods Mission (NRLM)**

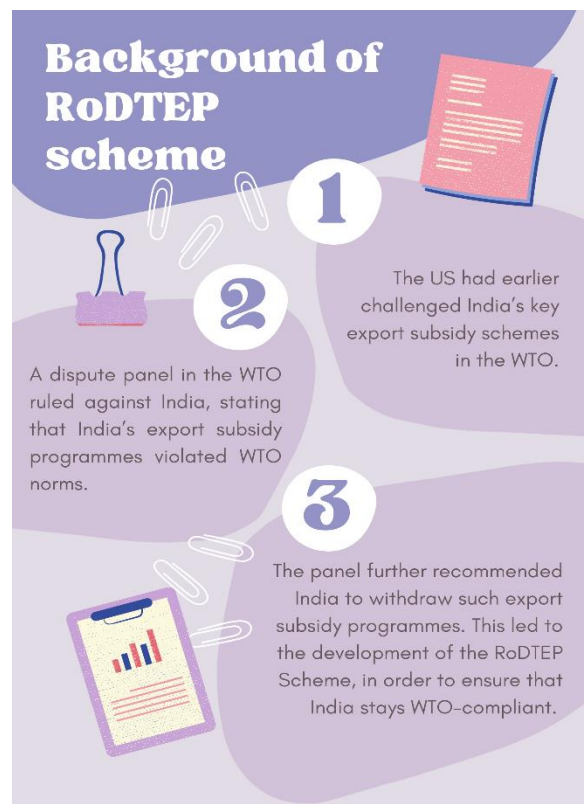
- Launched in **2011** as 'Aajeevika NRLM, it is a poverty alleviation project implemented by the Ministry of Rural Development. In 2015, the program was renamed Deendayal Antayodaya Yojana - NRLM (DAY-NRLM).
- It is focused on promoting self-employment and organization of rural poor. The basic idea behind this programme is to organize the poor into Self Help Groups and make them capable for self-employment.
- It works towards bringing at least one member (preferably a woman) from all poor families into the SHG network.
- NRLM rests on three major pillars – *universal social mobilization, financial inclusion and livelihoods enhancement*.

### **RoDTEP Scheme**

The Scheme for Remission of Duties and Taxes on Exported Products (RoDTEP) which was notified till 30th September 2023 has now been extended till 30th June 2024 at the same rates to the existing export items.

#### **Features of RoDTEP**

- RoDTEP was formed to replace the Merchandise Exports from India (MEIS) Scheme. It became applicable from **January 2021**.
- RoDTEP is based on the globally accepted principle that taxes and duties should not be exported, and taxes and levies borne on the exported products should be either exempted or remitted to exporters
- Before the introduction of RoDTEP, GST taxes and import/customs duties for inputs required to manufacture exported products were either exempted or refunded.
- However, certain taxes/duties/levies are outside GST, and were not refunded for exports, such as, VAT on fuel used in transportation, Mandi tax, Duty on electricity used during manufacturing etc.
- The RoDTEP scheme now covers these taxes/duties/levies



which are refunded for exported products.

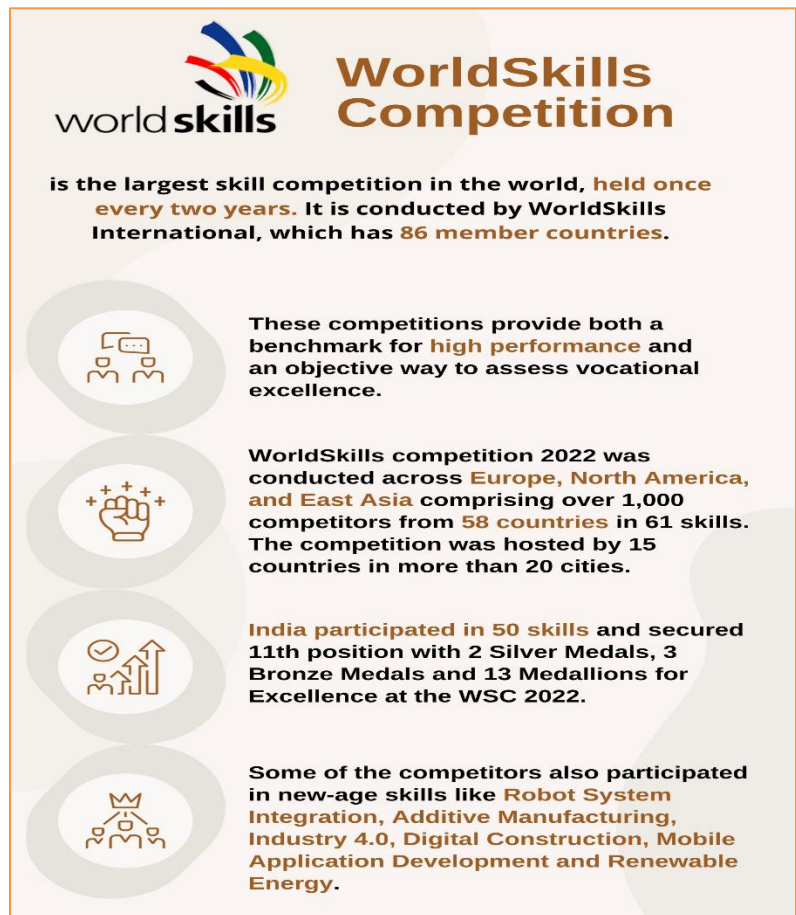
- The rebate is issued as **transferable electronic scrip** by the Central Board of Indirect Taxes & Customs in an end-to-end IT environment. RoDTEP Committee operates within the Department of Revenue.
- Moreover, a monitoring and audit mechanism, with an Information Technology based **Risk Management System (RMS)**, is used to physically verify the records of exporters.
- Under the Scheme, a support of Rs. 27,018 crores has been extended till March 2023.

#### Benefits of RoDTEP

- It helps the country to **comply with WTO norms**, while providing benefits to exporters.
- By covering previously uncovered taxes/duties, the **scheme leads to cost competitiveness of exported products** in international markets.
- Creates **better employment opportunities** in export-oriented manufacturing industries.
- The introduction of the digital platform helps clearance at a much faster rate and also increases the accuracy of transaction processing.

#### IndiaSkills 2023-24

- The Ministry of Skill Development & Entrepreneurship (MSDE) has launched the IndiaSkills 2023-24 programme and felicitated WorldSkills 2022 winners.
- India has secured 11th position in the global competition, the best-ever ranking so far.
- IndiaSkills Competition is organised by National Skill Development Corporation (**NSDC**), an apex skill development organisation working under MSDE.
- It is the country's biggest skill competition designed to demonstrate the highest standards of skilling and offers a platform to young people to showcase their talent at national and international levels.
- IndiaSkills is the precursor to the WorldSkills competition. Participants who will excel in IndiaSkills at the national level will take part in the global event in Paris next year.



The infographic features the WorldSkills logo at the top left, which consists of a stylized 'W' made of colorful lines. To its right, the text 'WorldSkills Competition' is written in a bold, sans-serif font. Below the logo, a paragraph states: 'is the largest skill competition in the world, held once every two years. It is conducted by WorldSkills International, which has 86 member countries.' The infographic is divided into four sections, each with an icon in a circle on the left and text on the right. The icons are: 1. A group of people talking (representing benchmarking). 2. A hand pointing up with plus signs (representing performance). 3. A bar chart with an upward arrow and a checkmark (representing participation and medals). 4. A crown above a group of people (representing excellence and new-age skills).

**WorldSkills Competition**

is the largest skill competition in the world, held once every two years. It is conducted by WorldSkills International, which has 86 member countries.

These competitions provide both a benchmark for high performance and an objective way to assess vocational excellence.

WorldSkills competition 2022 was conducted across Europe, North America, and East Asia comprising over 1,000 competitors from 58 countries in 61 skills. The competition was hosted by 15 countries in more than 20 cities.

India participated in 50 skills and secured 11th position with 2 Silver Medals, 3 Bronze Medals and 13 Medallions for Excellence at the WSC 2022.

Some of the competitors also participated in new-age skills like Robot System Integration, Additive Manufacturing, Industry 4.0, Digital Construction, Mobile Application Development and Renewable Energy.

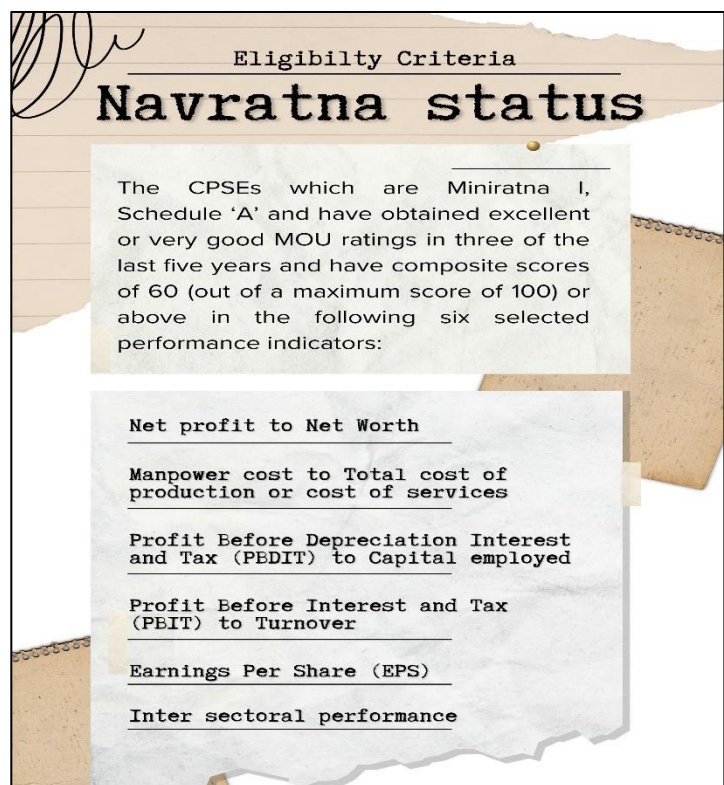
#### Technology MoUs With IBM

- IBM has signed 3 MoUs with Ministry of Electronics and Information Technology (MeitY) in areas of semiconductors, artificial intelligence (AI) and quantum computing.
- IBM will develop an **AI innovation sandbox environment** to help startups solve challenges related to AI. It aims to help startups build minimum viable products using tools and resources from the sandbox.

- A sandbox is a type of **software testing environment** that enables the isolated execution of software/ programs for independent evaluation, monitoring/testing.
- Additionally, IBM will work with IndiaAI—an independent business division under the non-profit Digital India Corporation (DTC) that serves as a portal for all AI-related development in India.
- The two entities aim to create a **national AI Innovation Platform (AIIP)**, focusing on AI skill development and ecosystem growth, accelerating the incubation and development of AI technologies for national priority use cases.
- IBM will offer its **watsonx** platform to train, validate, tune and develop AI models across various domains.
- IBM will also be a **knowledge partner of India Semiconductor Mission**—another independent division of DTC that aims to encourage the semiconductor and display ecosystem.
- Additionally, the government will soon announce India’s largest semiconductor research facility where IBM will help with manufacturing and design research.
- IBM and the Centre for Development of Advanced Computing (C-DAC) plan to collaborate in **advancing India's National Quantum Mission**.
- This partnership aims to build expertise in quantum applications in nationally significant areas, and nurture a skilled quantum workforce.

### IRCON and RITES Granted Navratna Status

- The Ministry of Finance has conferred Navratna status on Ircon International Limited (IRCON) and RITES Ltd (RITES) both Central Public Sector Enterprise (CPSE) under the **Ministry of Railways**.
- Founded in 1974, RITES Ltd was formerly known as Rail India Technical & Economic Service Limited
- It provides services in the diverse sectors of transportation, railways, export of rolling stock, *highways, airports, metros, urban engineering & sustainability, ports & waterways, and energy management*.
- Incorporated in 1976, IRCON covers the entire spectrum of construction activities and services in the infrastructure sector.
- IRCON has so far completed more than 3000 infrastructure projects in India and more than 100 projects across the globe in more than 21 countries.



### Benefits of Navratna Status

- The Navratna companies are granted financial independence to invest up to **₹1,000 crore** without seeking approval from the central government.
- Navratna companies are also allowed to invest up to **15% of their net worth** on a single project, or 30% of their net worth in a given year, subject to a cap of ₹1,000 crore.

## Golden Peacock Award

- REC Limited, the Maharatna Central Public Sector Enterprise under the Ministry of Power, has been recognized for its **exceptional performance in risk management** with the esteemed Golden Peacock Award, given by the **Institute of Directors (IOD), India**.
- The Golden Peacock Awards, **established in 1991**, has emerged as an internationally acclaimed standard for corporate excellence.
- REC Limited is a Non-Banking Financial Company (NBFC) focusing on Power Sector Financing and Development across India.
  - Established in 1969, it provides financial assistance to state electricity boards, state governments, central and state power utilities, independent power producers, rural electric cooperatives and private sector utilities.

## Passport to Earning Initiative

- **UNICEF's** global learning-to-earning solution, Passport to Earning (P2E), has skilled and certified more than one million young people in India in areas of financial literacy and digital productivity.
- Notably, **62 per cent** of all young learners who benefitted from P2E courses in India are **adolescent girls and young women**.
- In India, aligned with the National Education Policy (NEP) 2020, P2E provides free access to certificate courses in digital productivity, financial literacy, employability skills, and other in-demand, job-ready skills.
- It also offers provisions for online, hybrid, and offline learning models.
- It aims to deliver long-term sustainable **skilling to 5 million youth in the age group of 14-29 in India by 2024** and then connect them to opportunities in job, self-employment and entrepreneurship to be financially independent.

## Vizhinjam International Seaport Project

- Recently, the first-ever cargo ship arrived at the **under-construction** Vizhinjam International Seaport Project (VISP), **the country's first deepwater transshipment port**.
- Located near Thiruvananthapuram, Vizhinjam would be India's first **international deepwater transshipment port** with a natural depth of more than 18 meters, scalable up to 20 meters, which is crucial to get large vessels and mother ships.
- The Rs 7,600 crore transshipment deepwater multipurpose seaport project is being built by Adani Ports and SEZ Private Limited on a **design, build, finance, operate and transfer (DBFOT) model**.
  - Out of the total investment, Adani Group is supposed to invest Rs 2,454 crore and another Rs 1,635 crore will be mobilised from the state and central governments as viability gap funding.
- The DBFOT deal is for 40 years, with provisions extending for 20 years.

### Deepwater Port

- A deepwater port is a man-made structure that is used as ports or terminals to transport, store, or handle oil or natural gas.
- These structures can be fixed/ floating, located beyond state seaward boundaries. They can include: Pipelines, Pumping stations, Service platforms, Mooring buoys

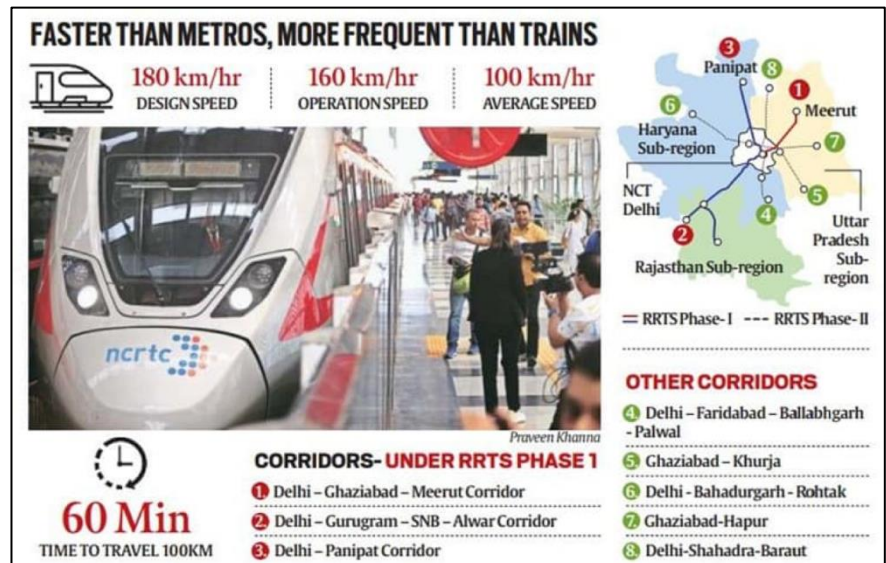
### Significance

- India has **13 major ports**. However, the country lacks a landside mega-port and terminal infrastructure to deal with ultra-large container ships.

- Hence, nearly 75 per cent of India's transshipment cargo is handled at ports outside India, mainly **Colombo, Singapore, and Klang**.
- In fiscal 2021-22, the total transshipment cargo of India was about **4.6 million TEUs** (twenty-foot equivalent units), out of which about 4.2 million TEUs were handled outside India.
- VISP is designed to cater to container transshipment, multi-purpose, and break-bulk cargo. Also, the port is located ten nautical miles from the international shipping route.
- Thus, the cost of movement of containers to and from foreign destinations is likely to come down. Its capacity in the first phase is **one million TEU**, which can be increased to 6.2 million TEU.
- Moreover, it offers large-scale automation for **quick turnaround** of vessels with state-of-the-art infrastructure to handle Megamax container ships.
- Developing a port into a Transshipment Hub will lead to forex savings, FDI, increased economic activity at other Indian Ports, development of related logistics infrastructure, improved operation/logistics efficiencies and increase in revenue share.
- Several other allied businesses viz. ship chandlery(ship supplies), ship repair, crew change facility, logistics value-added services, warehousing and bunkering also come up at the transshipment port.
- The project is expected to generate 5,000 direct job opportunities, apart from giving a boost to an industrial corridor and cruise tourism.

### Regional Rapid Transit System

- The Prime Minister inaugurated the first leg (Delhi-Ghaziabad-Meerut corridor) of the Regional Rapid Transit System (RRTS), India's first mass rapid system dedicated to regional connectivity.
- The RRTS is an integrated, mass transit network which aims to ensure balanced and sustainable urban development through better connectivity and access across the National Capital Region (NCR).
- NCR is spread across an estimated 55,000 square kilometres with a population of over 46 crores with a combined GDP of an estimated \$370 billion.



### Background

- The idea of this network lies in a study commissioned by the Indian Railways in 1998-99. The study identified the possibility of an RRTS network to connect various locations in the NCR through fast commuter trains.
- The proposal was re-examined in the year 2006 with the extension of the Delhi Metro lines to some NCR towns such as Gurgaon, Noida and Ghaziabad.
- It was soon taken up by the National Capital Region Planning Board (NCRPB) while developing its “Functional Plan on Transport for NCR-2032”.
- The NCRPB identified and recommended **eight RRTS** corridors to connect NCR towns with high speed rail-based commuter transit services.



## RRTS Details

- The RRTS also known as **Namo Bharat** has been constructed by the **National Capital Region Transport Corporation (NCRTC)**.
- NCRTC is a **joint venture company** of the Central government and the governments of Delhi, Haryana, Rajasthan and Uttar Pradesh. NCRTC comes under the **Ministry of Housing and Urban Affairs**.
- **Eight corridors** will be developed under the project of which three are being constructed under phase I: *(given in figure above)*
- When compared with metros, the **RRTS network is significantly faster**.
  - Delhi Metro trains can operate at 100 km/hour to 120 km/hour, at the most.
- Compared with the Indian Railways, though the RRTS train will cover relatively smaller distances, it will do so at higher frequency and provide relatively more comfort than the average Railways coach.
- RRTS is modelled on systems such as the RER in Paris, Regional-Express trains in Germany and Austria as well as the SEPTA Regional Rail in United States.

## Significance of RRTS

- The RRTS seeks to unlock the entire potential of the NCR in various ways in addition to *enhancing multi-modal connectivity* at the existing transportation hubs within it.
- To **nudge commuters towards public transportation** and have a positive impact on **relieving the congestion** both on its road/highways as well as existing metro and railway networks.
- Push to employment generation and the **opening of newer commercial hubs** along the NCR.
- This is expected to allow more citizens residing in regional centres located in Delhi's suburbs to be a part of economic activity in the capital, and vice versa, without the necessity to relocate near their workplace or place of business.
- Shorter travel times are expected to increase the overall economic productivity of the region and allow more economic activity to come up in and around suburban locations spread across the states of Uttar Pradesh, Rajasthan and Haryana.

## Proxy Advisory Firms

- A proposal to appoint Anant Ambani, the youngest son of Mukesh Ambani, on the board of Reliance Industries Ltd (RIL) is facing opposition from two proxy advisory firms.
- Institutional Investor Advisory Services India Ltd (IIAS) and Institutional Shareholder Services (ISS) – have advised RIL shareholders to vote against the proposal.

## Role of Proxy Advisory Firms

- To **educate investors**: They position themselves as **independent firms** that provide advice to individual shareholders, minority shareholders or institutional investors.
- These firms examine the performance and resolutions of listed companies, and advise shareholders related to the exercise of their rights in a company.
- They work in the interest of shareholders who might not be able to analyse the impact of any resolution adopted by a company.
- These firms suggest investors to vote for or against any corporate decisions. However, the **recommendations** given by proxy advisors are **non-binding for investors**.
- Proxy advisory firms also work with companies to improve their corporate governance practices.
- Proxy advisors are **regulated by** the markets regulator **Securities and Exchange Board of India (Sebi)**.

**Criticism:** These firms have been criticised for lacking transparency and have also face regulatory scrutiny over conflicts of interest, as they have a powerful influence over corporate governance.

### Super Power Retailer Program

- The National Skill Development Corporation (NSDC), under the Ministry of Skill Development & Entrepreneurship (MSDE), announced a partnership with **Coca-Cola India** to launch the **Super Power Retailer Program** in Odisha and Uttar Pradesh under the **Skill India Mission**.
- The program is being **piloted** in Odisha and will provide 14 hours of quality retail training through the Skill India Digital Portal to 1.40 crore retailers of the country.
- These training modules will be available in **multiple languages** which will enable small shopkeepers as well as big businessmen across the country.
- Retailers will be provided with skills, tools and techniques that are required to succeed in the constantly changing retailer ecosystem.
- It will offer **industry-specific skills** such as customer management, inventory and stock management, financial management etc. that are tailored to the professional needs of retailers.
- The initiative will play a pivotal role in strengthening India's economy by skilling, reskilling, and upskilling the retailers.

### PLI Scheme for White Goods

- The government notified changes in the Production Linked Incentive (PLI) Scheme for White Goods (ACs and LED lights).
- This has been done to simplify the operation of the scheme and improve ease of doing business.
- PLI Scheme for White Goods for manufacture of components and sub-assemblies of ACs and LED Lights was launched in 2021.
- The scheme is to be **implemented over a seven year period**, from FY 2021-22 to FY 2028-29 and has an outlay of ₹ **6,238 crore**.
- The scheme is designed to create a complete component ecosystem for Air Conditioners and LED Lights Industry in India and make India an integral part of the global supply chains.
- Under it, domestic value addition is expected to grow from the current 15-20% to 75-80%.

### Changes Announced

- Replacement of the **Comparable Uncontrolled Price (CUP)** method with the **Cost-Plus method** for determining sales prices in cases of captive consumption or supplies to group companies.
- Consider investments in tool room for manufacturing of Mould& Dies etc. as eligible investments under capital investment.
- Extending the time frame for beneficiaries to notify the establishment of an additional manufacturing facility by one more year, in addition to the initial two years.
- Revision of the deadline for claim submission and the refund of excess incentives by beneficiaries due to any discrepancies between statutory compliance and the records provided during claim submission.
- Introduction of site visits by the administrative ministry.
- Provision for the rollover of bank guarantees.

## Pramod Mahajan Grameen Kaushalya Vikas Kendras

- Prime Minister recently launched 511 Pramod Mahajan Grameen Kaushalya Vikas Kendras in Maharashtra.
- Established across 34 rural districts of Maharashtra, these Kendras will conduct skill development training programs across various sectors to provide employment opportunities to rural youth.
- Each Kendra will train about 100 youngsters in at least two vocational courses.
- The training will be provided by empanelled industry partners and agencies under the National Skill Development Council (NSDC).

## Renewable Energy Project in Ladakh

The Cabinet Committee on Economic Affairs has approved the project on Green Energy Corridor (GEC) Phase-II – Inter-State Transmission System (ISTS) for 13 GW Renewable Energy Project in Ladakh.

### Background

- The Prime Minister, during his Independence Day Speech in 2020 had announced setting up of **7.5 GW Solar Park in Ladakh**.
- After extensive field survey, the Ministry of New and Renewable Energy (MNRE) prepared a plan to set up 13 GW Renewable Energy (RE) generation capacity along with 12 GWh Battery Energy Storage System (BESS) in Pang, Ladakh.
- For evacuating this huge quantum of power, it will be necessary to create an inter-state transmission infrastructure.

### Details Of The Project

- The project is targeted to be set up by FY 2029-30 with total estimated cost of Rs.20,773.70 crore and Central Financial Assistance (CFA) at 40% of the project cost.
- Power Grid Corporation of India Limited (POWERGRID) will be the implementing agency.
- The transmission line for evacuating this power will pass through Himachal Pradesh and Punjab up to Kaithal in Haryana, where it will be integrated with the **National Grid**.
- An interconnection is also planned from this project in Leh to existing Ladakh grid to ensure reliable power supply to the Ladakh.
- It will also be connected to Leh-Alusteng-Srinagar line to provide power to Jammu & Kashmir.
- This project is in addition to Intra-State Transmission System Green Energy Corridor Phase-II (InSTS GEC-II), already under implementation in Gujarat, Himachal Pradesh, Karnataka, Kerala, Rajasthan, Tamil Nadu and Uttar Pradesh for grid integration and power evacuation.
  - ✓ The InSTS GEC-II is expected to be completed by 2026.

### Significance

- The project will contribute to achieving the target of 500 GW of installed electricity capacity from non-fossil fuels by year 2030.
- It will also help in developing *long term energy security* of the country and promote ecologically sustainable growth by reducing carbon footprint.
- It will generate large direct & indirect employment opportunities for both skilled and unskilled personnel in power and other related sectors, especially in Ladakh region.

## Impact of Disasters on Agriculture Report

- **Food and Agriculture Organization (FAO)** has released the report **The Impact of Disasters on Agriculture and Food Security**.
- This is the **first-ever global estimation** of the impact of disasters on agricultural production *focused on crops and livestock*.
- Agriculture is one of the most highly exposed and vulnerable sectors in the context of disaster risk, due to its high dependence on natural resources and climate conditions.
- Repeated disasters have the potential to erode gains in food security and undermine the sustainability of agrifood systems.
- Farmers, particularly smallholders farming under rain-fed conditions, are the most vulnerable actors in the agrifood systems and bear the brunt of disaster impacts.

### Highlights Of The Report

- Disaster events have increased from 100 per year in the 1970s to around 400 events per year worldwide in the past 20 years.
- An estimated **\$3.8 trillion** worth of crops and livestock production has been lost due to natural disasters over the last 30 years.
- The loss corresponded to an average of **\$123 billion per year**, or 5 per cent of annual global agricultural gross domestic product (GDP).

### Food Categories

Losses related to major agricultural products are showing increasing trends.

- Losses in cereals amounted to an average of **69 million tonnes per year** in the last three decades.
- Losses in cereals were followed by fruits and vegetables and sugar crops, with each witnessing average losses of 40 million tonnes per year.
- Meats, dairy products and eggs showed an average estimated loss of **16 million tonnes per year**,
- Furthermore, the loss figures may be higher if systematic data on losses in the fisheries, aquaculture and forestry subsectors were available.

### Regional Variation

- Global losses masked significant variability across regions, subregions and country groups. Along with Asia, Africa, Europe and the Americas also displayed a similar magnitude of losses.
- However, losses in Asia only accounted for 4% of the agricultural added value, while in Africa, they corresponded to nearly 8%. The variability was even higher across subregions.
- Overall, over the last three decades, disasters inflicted the highest relative losses on lower and lower-middle-income countries, up to 15% of their total agricultural GDP.
- Disasters also significantly impacted Small Island Developing States, causing them to lose nearly 7% of their agricultural GDP.

### Way Ahead

- Proactive and timely interventions in response to forecasted hazards are crucial to build resilience by preventing and reducing risks in agriculture.
- The report showed that, for every \$1 invested in anticipatory action, rural families can gain up to \$7 in benefits and avoid agricultural losses.
- The report outlines three key priorities for action:

- ✓ Improving data and information on the impacts of disasters on all subsectors of agriculture — crops, livestock, fisheries, aquaculture and forestry.
- ✓ Developing and mainstreaming multisectoral and multi-hazard disaster risk reduction approaches into policy and programming at all levels.
- ✓ Enhancing investments in resilience that provide benefits in reducing disaster risk in agriculture and improve agricultural production and livelihoods.

### Global Maritime India Summit 2023

- The Prime Minister inaugurated the third edition of Global Maritime India Summit 2023 in Mumbai. The first summit was held in 2016 in Mumbai while the Second Maritime Summit was held virtually in 2021.
- It is the biggest Maritime Event in the country and witnessed the participation of Ministers from across the globe representing countries from Europe, Africa, South America, and Asia (including central Asia, Middle East and BIMSTEC region).
- The summit provides an excellent platform for attracting investment in the country's maritime sector.
- Key issues of the maritime sector including ports of the future; decarbonisation; coastal shipping and inland water transportation; shipbuilding; repair and recycling; finance, insurance & arbitration; and maritime clusters were discussed at the summit.
- During the programme, the Prime Minister unveiled 'Amrit Kaal Vision 2047', the long-term blueprint for the Indian maritime blue economy.
  - ✓ The blueprint outlines strategic initiatives aimed at enhancing port facilities, promoting sustainable practices, and facilitating international collaboration.
- In line with this futuristic plan, the Prime Minister laid the foundation stone of projects worth more than Rs 23,000 crores that are aligned with the Vision 2047.
- He laid the foundation stone of **Tuna Tekra** all-weather deep draft terminal, to be built at a cost of more than Rs 4,500 crores at Deendayal Port Authority in Gujarat. This state-of-the-art greenfield terminal will be developed in PPP mode.
- The terminal, which is likely to emerge as an international trade hub, will handle next-gen vessels exceeding 18,000 twenty-foot equivalent units (TEUs) and will act as a gateway for Indian trade via **India-Middle East-Europe Economic Corridor (IMEEC)**.
- Prime Minister also dedicated more than 300 MoUs worth more than 7 lakh crore for global and national partnerships in the maritime sector.

#### Blue Economy

- The World Bank defines the blue economy as the **sustainable use of ocean resources** to benefit economies, livelihoods and ocean ecosystem health.
- Activities under blue economy include maritime shipping, fishing and aquaculture, coastal tourism, renewable energy, water desalination, undersea cabling, seabed extractive industries and deep sea mining, marine genetic resources, and biotechnology.
- The blue economy is estimated to be worth more than US\$1.5 trillion per year globally and the OECD expects it to double in size by 2030.
- It provides over 30 million jobs and supplies a vital source of protein to over three billion people.
- It also contributes to environmental protection by providing alternative energy sources such as wind energy, hydropower and tidal energy.

## Linguistic Inclusion In Financial Domain

- The Reserve Bank Innovation Hub (RBIH) and Digital India Bhashini Division (DIBD) have collaborated to break down language barriers in the domain of financial services.
- The primary objective is to extend the reach of digital financial services to users in their native tongues, ultimately striving for seamless banking experiences for all.
- BHASHINI, with its capabilities in language translation and voice processing, will play a pivotal role in achieving these goals.
- Utilizing voice as a medium, BHASHINI can promote financial inclusivity, economic empowerment, and enhance financial literacy.
- In this rapidly evolving digital world, **three pillars guide innovation: trust, speed, and convenience**. Digital solutions provide speed and convenience, but the trust of the user has to be earned.
- Offering financial services in the mother tongue of users will help boost their confidence in digital financial solutions.
- Bhashini plans to launch a Public Tech Platform for Frictionless Credit in multiple languages. This platform aims to streamline and enhance credit delivery by financial institutions, contributing significantly to greater financial inclusion.

### Digital India Bhashini Division (DBID)

- It is a **Division under Digital India Corporation**, section 8 Company under Ministry of Electronics and Information Technology.
- The vision of Bhashini is to utilise natural language technologies to enable a diverse ecosystem of contributors, partnering entities and citizens to overcome language barriers, thereby ensuring digital inclusion and digital empowerment.

### Reserve Bank Innovation Hub (RBIH)

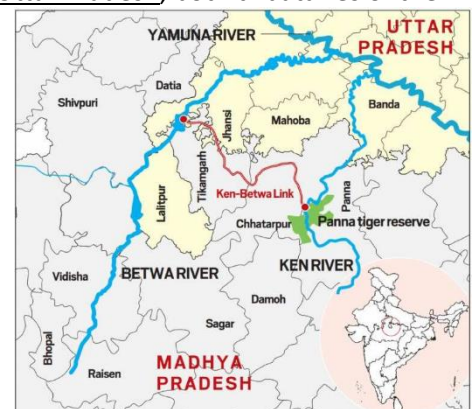
- RBIH – a **wholly-owned subsidiary of the Reserve Bank of India (RBI)** – is an organisation that works to enable frictionless finance for a billion Indians.
- RBIH acts as an enabler and facilitator in the ecosystem, bringing together members from financial, technological, and academic institutions to promote and accelerate innovation across the financial sector.

## Ken-Betwa Link Project (KBLP)

- The Ken-Betwa Link Project (KBLP) recently secured its final forest clearance. However, the project's wildlife clearance is under examination at the Supreme Court and it may still require a fresh environmental clearance before work can take off.
- KBLP is the first project under the **National Perspective Plan** for interlinking of rivers. It involves transferring of water from the Ken river in Madhya Pradesh to the Betwa river in Uttar Pradesh, both tributaries of the Yamuna.

### Background

- The idea of linking Ken with Betwa got a major push in 2005, when a tripartite MOU for preparation of a detailed project report (DPR) was signed among the Centre & 2 states.
- In 2008, the Centre declared KBLP a National Project. Later, it was included as part of the Prime Minister's package for development of drought-prone Bundelkhand region.
- In 2009, it was decided that the DPR will be prepared in two



phases. In 2018, a comprehensive DPR was prepared.

- In March, 2021, a memorandum of agreement was signed among the Ministry of Jal Shakti and the governments of Madhya Pradesh and Uttar Pradesh to implement KBLP.

### Details Of The Project

- The project has **two phases**, with mainly four components.
- **Phase-I** will involve one of the components — **Daudhan Dam complex** and its subsidiary units such as Low Level Tunnel, High Level Tunnel, Ken-Betwa Link Canal and power houses.
- **Phase-II** will involve three components — Lower Orr Dam, Bina Complex Project and Kotha Barrage.
- Total **cost** of KBLP has been assessed at **Rs.44,605 crore**. Centre would fund Rs 39,317 crore, with Rs 36,290 crore as a grant and Rs 3,027 crore as a loan.
- A Special Purpose Vehicle (SPV) called Ken-Betwa Link Project Authority (KBLPA) will be set up to implement the project.
- In fact, the Centre has initiated the process to create the National Interlinking of Rivers Authority (NIRA).
  - ✓ NIRA would be an independent autonomous body for planning, investigation, financing and implementation of the interlinking of river projects in the country. It will have powers to set up SPV for individual link projects.

Benefits of KBLP	Concerns
<ul style="list-style-type: none"> <li>• The project has the potential to <b>irrigate 1.06 million hectares</b> of land and thus enable an increase in food grains production.</li> <li>• It will <b>provide drinking water to 6.2 million people</b> across MP and UP, which will lead to fulfilment of SDG goals.</li> <li>• It will also lead to generation of <b>103 MW of hydel power</b>.</li> <li>• With groundwater recharge and drinking water supply, it has the potential to <b>generate local agricultural employment</b>, consequently reducing migration.</li> </ul>	<ul style="list-style-type: none"> <li>• Nearly 4000 hectares of forest land in the core tiger habitat of Panna Tiger Reserve will get submerged.</li> <li>• This will impact the conservation of tigers, vultures and also impact the breeding pattern of gharials and other aquatic life.</li> <li>• Large scale clearance of forest land, may <b>impact the local rainfall pattern</b>, which will further impact the wildlife habitat.</li> </ul>

### Global Innovation Index 2023

- The World Intellectual Property Organization (WIPO) released the Global Innovation Index (GII) 2023 (16th edition).
- GI was **launched in 2007** to find and determine methods that could **capture a picture of innovation in society**. WIPO started its association with the GI in 2011.
- The GI is a reliable tool for governments across the world to assess the innovation-led social and economic changes in their respective countries.
- GI 2023 used 80 indicators to track global innovation trends in **132 economies**, which represent **94.3% of the world's population** and **99% of the world's GDP** in purchasing power parity (PPP).

### Key Findings

- For the 13<sup>th</sup> year in a row, **Switzerland is the most innovative economy** in 2023.
- Except China (12th place), no other middle or lower-middle-income economy features in the top 30.
- A total of 21 economies outperformed on innovation as expected



relative to their level of development, the majority located in Sub-Saharan Africa and South East Asia, East Asia, and Oceania.

- The top Science and Technology (S&T) innovation clusters in the world in 2023 are Tokyo–Yokohama, followed by Shenzhen–Hong Kong–Guangzhou, Seoul, Beijing and Shanghai–Suzhou.
- China now has the largest number of S&T clusters in the world, overtaking the USA.
- The world’s five biggest S&T clusters are all located in East Asia.
- Scientific publications, R&D, the number of venture capital (VC) deals (but not their value) and patents continued to increase to higher than ever levels. However, growth rates were lower than the exceptional increases seen in 2021.
- Indicators in the fields of information technology, health and energy continue to show progress – the Digital Age and Deep Science innovation waves

### Key Findings From India

- India retained its 40th position on the index with a score of 38.1, due to its vibrant start-up ecosystem, knowledge capital and the work done by public and private research organisations.
- India also retained its top position in the lower-middle-income group and the Central and South Asian region.
- India has been on a rising trajectory, from a rank of 81 in 2015 to 40 in 2023.
- India holds top rankings in key indicators, including ICT services exports (5th rank), Venture Capital received (6th), graduates in science and engineering (11th) and global corporate R&D investors (13th).
- Other parameters where India performed fairly better include– cultural and creative services exports as percentage of trade (18th), intangible asset intensity (8th), and overall market sophistication (20th).
- The broad areas where a lot of improvement needs to happen are infrastructure (84th rank), business sophistication (57) and institutions (56).

### World Intellectual Property Organization (WIPO)

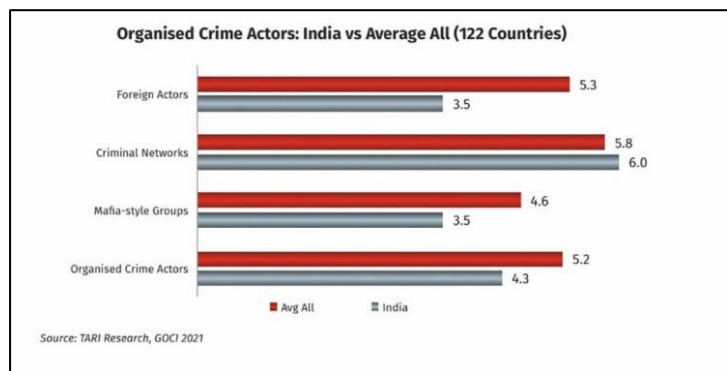
- WIPO is one of the 15 specialized agencies of UN. It acts as the global forum for intellectual property (IP) services, policy, information and cooperation.
- It was created in 1967 with a mission to lead the development of a balanced and effective international IP system that enables innovation and creativity for the benefit of all.
- WIPO currently has 193 member states and is headquartered in **Geneva**, Switzerland.
- The predecessor to WIPO was the United International Bureaux for the Protection of Intellectual Property, which had been established in 1893.

### Illicit Trade In India

FICCI CASCADE released a report titled ‘Hidden Streams: Linkages Between Illicit Markets, Financial Flows, Organised Crime and Terrorism’, that throws light on illicit trade in India.

#### Key Findings

- India’s benchmarking with 122 countries shows that the aggregate score of organised crime actors in India is low, at **4.3** on a scale of 1-10, compared to the average benchmark of 5.2 for 122 countries.
- The criminal network, however, has a





significant influence in India

- On the other hand, the **illegal economy in India** has an overall score of 6.3 which is higher than the average score of 5 of 122 countries.
- This suggests that although there are **fewer criminal actors**, they are widespread and engage in a variety of unlawful activities, including drug and human trafficking and the illegal trade in wildlife products.
- This contradiction is due to the **efficacy of criminal networks in India**, which enables them to generate substantial illicit financial flows despite their small numbers.

### Drug Economy In India

- India's location near major drug-producing regions, including the Golden Triangle (Myanmar, Laos, and Thailand) and the Golden Crescent (Afghanistan, Pakistan, and Iran) leads to activities that involve the transportation and distribution of controlled substances.
- There has been an increase in the illicit drug trade in India in recent years. 3,172 cases of drug seizures were recorded during 2014-2022 as against 1,257 cases in 2006-2013.
- Among the various kinds of drugs, Cannabis has a higher score of 7.5, compared to the benchmark average of 5.4, indicating its significant presence in India in comparison to other countries.
- The synthetic drug trade and the heroin trade both had scores of 6.5, which exceeded the benchmark averages of 5.3 and 4.6, respectively.

### Illicit Financial Flows – Value Gap India (2009-2018)

For the given period, the total aggregate value gap of mis-invoicing (imports and exports) was over \$674.9 billion.

### Economic Impact of Violence for India (Billions PPP)

- In 2021, India's economic cost for violence was at US \$1170 billion at purchasing power parity (PPP), which accounts for approximately 6% of the country's GDP; and violence per capita impact is estimated at US \$841 at PPP.
- The report stated that nearly 80% of such containment costs relates to security and as the economy grows (along with it the illegal economy), India's cost of addressing terror and crime will be significant.

### FICCI CASCADE

- FICCI CASCADE (Committee Against Smuggling and Counterfeiting Activities Destroying Economy), is an initiative of the Federation of Indian Chambers of Commerce and Industry (FICCI).
- It was established in 2011 to address the issue of growing illicit trade in counterfeits, pass offs and smuggled goods.

### Nobel in Economics

- Claudia Goldin, Professor of Economics at Harvard University, has won the SverigesRiksbank Prize in Economic Sciences in Memory of Alfred Nobel for 2023 — popularly referred to as the Nobel prize in Economics.
- Goldin had provided the first comprehensive account of women's earnings and labour market participation through the centuries. Her research reveals the causes of change, as well as the main sources of the remaining gender gap.

### Goldin's Findings

- Before Goldin started her work in the 1980s, there were several misconceptions about the role women played in an economy.

- For instance, it was believed that as economies had become more industrialised and grown in size, women’s participation had gone up.
- By studying US data going back two centuries, Goldin showed this was not true. Goldin showed that female participation in the labour market did not have an upward trend over this entire period, but instead forms a **U-shaped curve**.
- Women’s engagement in the economy first went down (during the 19th century) as the US economy transitioned from agrarian to industrial in the early nineteenth century.
- And then the participation went up (in the 20th century) with rising education levels, growing scientific achievements (most notably, the development of the **contraceptive pill**), and evolution of social norms (especially about marriage and parenting).
- Women also went beyond the services sector, studying subjects like law, economics, and medicine.

### Pay Gap And Parenthood

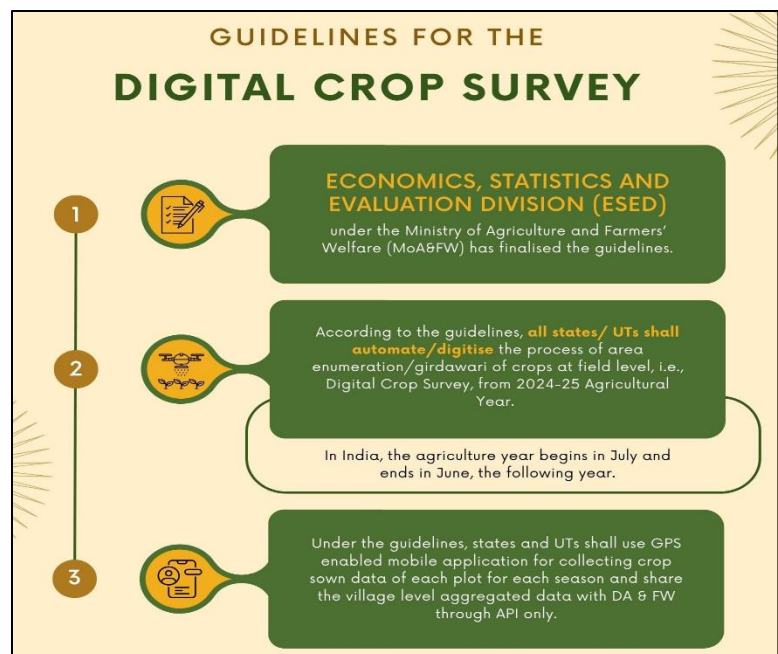
- Till the time men and women worked in factories, where the pay depended on the **day’s countable output**, the pay gap was not too high. The gap became wider when monthly pay contracts started.
- One factor significantly impacted how men were paid versus women — childbirth.
- As women had to handle more of the parenting responsibilities once a child was born, they were also punished for this on the work front in terms of a slower rise on the pay scale.
- Goldin demonstrated that initial earnings differences are small. However, as soon as the first child arrives, the trend changes.
- Earnings immediately fall and do not increase at the same rate for women who have a child as they do for men, even if they have the same education and profession.

### Adopting The Digital Crop Survey System

Highlighting that the present system of estimation of crop area and production is completely manual, the Centre has asked states and UTs to digitise the process by adopting the Digital Crop Survey System from July next year.

### Need For Digital Crop Survey

- **Currently**, the collection and compilation of crop statistics is **completely manual except in a few states**, resulting in *delay and manual errors*.
  - **Only a few of the states** like Karnataka, Telangana, and Andhra Pradesh have established a digital data collection system in the form of GPS-enabled mobile applications for crop area and crop-cutting experiments (CCEs) data collection directly from the field for crop yields.
  - **States like Maharashtra and MP** have also developed such digital systems but only for crop area recording.
- **India suffers for want of reliable agricultural production estimates** and stressing on the need for “a real time assessment estimate” of crops.



## About Digital Crop Survey

- As part of the Digital Crop Survey, the MoA&FW has asked states **to collect information on “basic parameters”**, including -
  - Village name, year, season, farmer ID, farm ID,
  - Crop name (at farm plot level),
  - Crop variety,
  - Crop sown area (at farm plot level),
  - Geotags of crop photos,
  - Geotags of farm boundary where the crop is sown,
  - Sowing/planting date (at farm plot level), irrigation type (at farm plot level), and
  - Irrigation source (at farm plot level).
- This move comes after the Centre launched a pilot Digital Crop Survey across a dozen states earlier this year.
- **In a separate move**, the MoA&FW has also revamped the timelines of the estimate release.
  - As per the earlier system, the ministry used to release estimates in five phases.
  - However, now the ministry has decided to do away with the fourth phase that had been released every August.
  - The ministry will release the final estimates covering all states and all seasons (kharif, rabi, summer) in September-October.
  - Earlier, the final estimates used to be released in the month of February, the following year.

## First US Speaker Ever To Be Ousted From The Office

- The Speaker of the United States House of Representatives Kevin McCarthy was voted out of the job by a handful of hand-liner Republican leaders.
- This is the **first time ever that a House Speaker has lost a no-confidence vote**.
  - The final tally stood at 216-210, with eight Republicans voting with 208 Democrats.
  - There are 222 Republicans members and 208 Democrat members. This means that McCarthy could have afforded to lose only 5 Republicans, instead he lost eight.
  - This marked the end of McCarthy's nine-month-long leadership of the Republican majority in the lower chamber of Congress.

## Speaker of the United States House of Representatives

- The US Constitution established the role of Speaker of the House, which oversees the lower chamber of Congress.
- The Speaker is both traditionally and historically a sitting member of the majority party, though this is not a constitutional requirement.
- Therefore, in addition to leading the House of Representatives, they are also leader of the majority party in the chamber.

### What does the Speaker do?

- Runs the House of Representatives
- Oversees daily business and sets voting agenda
- Leader of the largest party in the House
- Second in presidential line of succession
- Elected by the House every two years

## Election of a Speaker

- **No House without a speaker**
  - The House of Representatives functions on a two-year cycle, known as a "session."
    - The mid-term elections were held in the United States on 8 November, 2022.
    - The new Congress began on 3 January 2023 and Republicans were in the majority.
  - The very first thing a new session of the House of Representatives must do is vote for a Speaker of the House.
- **Nomination for Speaker**
  - In the weeks after an election, the Republican conference and the Democratic caucus hold an informal vote among their members.
    - This voting is done to decide who they want to nominate to **lead their party**.
  - But members are not obligated to vote for the party's chosen candidate.
  - While it has been the tradition for the speaker candidate to be a member of the House, **it is not required**.
- **Voting**
  - The vote for Speaker requires a candidate to receive the support of a majority of the House - **218 votes** (out of the 435 members of the House).
  - The leader of the majority party is usually presumed to be the person to assume the speakership.
  - For more than a century, the Speaker of the House was decided on the first vote.
    - However, this time, a record-making 15 voting rounds were conducted before McCarthy succeeded in acquiring the Speaker's gavel.

## Removal Of The Speaker Of The House

- Under the newly adopted rule (in January 2023), any single member of the House could offer a **privileged resolution** declaring the Office of Speaker vacant.
  - The term “privileged” refers to a matter that has precedence over regular House business.
- Procedural votes could be offered to slow down the motion, but when it does come to the floor, it would need only a simple majority of the House — or 218 members currently — to pass.

## Presidential Election in Maldives

- Front runner and Opposition candidate **Mohamed Muizzu** was elected President of the Maldives.
- He defeated the India-friendly incumbent, Ibrahim Mohamed Solih, in a closely fought contest.

## Possible Change In Foreign Policy Of Maldives

- Muizzu’s victory may signal a shift in the Maldives’ foreign policy.
- He is supported by former President Abdulla Yameen, who had a pro-China stance and wanted India out of the country.
  - Abdulla Yameen had launched ‘India out’ campaign.
- However, observers within the Maldives feel that Mr. Muizzu is unlikely to abruptly sever ties with India.
- The newly elected leader would seek to balance India-China ties, they note, even as New Delhi hopes for continuity in India’s many infrastructure projects across the island nation.
  - India’s recent projects in Maldives include:
    - water and sanitation in 34 islands,
    - roads and land reclamation under the Addu development project,
    - a cancer hospital, a port project, a cricket stadium, 2 airport development projects,
    - the Greater Male connectivity project with bridges,
    - causeways and roads, social housing projects, renovation of a mosque, building the national college for police.
  - Estimates suggest that between 2018 to 2022, Indian aid was over Rs 1,100 crore, more than double the previous five year-term (about Rs 500 crore).

## Electoral System in Maldives

- **Name of the Parliament:** Majlis/People’s Majlis.
  - The structure of Parliament is Unicameral.
- **First-past-the-post majority system:** Parliament and Council elections run under the first-past-the-post majority system. Voters vote for only one candidate.
- **Tenure:** The Assembly (Majlis) has 87 members. All members are elected directly for a term of **five years** from 87 single-member constituencies.
- **Two-round system:** The President of the Maldives is elected using the two-round system. If no candidate wins more than 50% of the votes, then a second round, or run-off, is held.
- **2023 Election in Maldives:** 1<sup>st</sup> round was a crowded battlefield, with 8 candidates (highest so far).

## Maldives’ Presidents and India

- India’s experience with Maldives politics has been a mixed bag, with **Solih’s government being the most favourable so far.**
- India worked with Abdul Gayoom closely for three decades (1978-2008)

- When Mohamed Nasheed came to power in 2008, then Vice President Hamid Ansari attended his oath-taking ceremony, signalling New Delhi's support.
- The Maldives government cancelled the GMR contract for the Maldives airport in 2012, a major setback to the ties.
- After Yameen came to power in 2013, he courted China much more aggressively. Under him, Maldives joined President Xi Jinping's Belt and Road Initiative.
  - When India and Western lenders were not willing to offer loans to Yameen's administration due to allegations of human rights violations, he turned to Beijing, which offered the money without any conditions.
- When Solih won the 2018 elections, Delhi heaved a sigh of relief. PM Modi went to Maldives to attend the swearing-in ceremony.

### China-Bhutan Boundary Talks

- China and Bhutan held their 25th round of boundary talks in Beijing. The Boundary talks were held after a gap of **seven years** and indicate significant progress that has been made.
  - Since 1984, Bhutan & China had held 24 rounds of talks to resolve the disputes until 2016.
  - But the 25th round appeared to have been held up after the Doklam Standoff between Indian and Chinese armies in 2017, and then the COVID-19 pandemic in 2019-2021.
- Both the countries signed a Cooperation Agreement on the Responsibilities and Functions of the Joint Technical Team (JTT) on the Delimitation and Demarcation of the Bhutan-China Boundary.
- This advances their **3-Step Roadmap initiated in 2021** for border resolution, building on the positive momentum since their last talks in 2016.

### 3-Step Roadmap

- Bhutan and China do not have diplomatic ties, as Bhutan has avoided diplomatic relations with all the United Nations Security Council permanent members.
- The 3-Step Roadmap involves:
  - agreeing to the border on the table; then visiting the sites on the ground; and then formally demarcating the boundary.

### China - Bhutan Border Dispute

- Bhutan shares a 477 km-long border with China, which claims certain territories from Bhutan:
  - **In the north**— Pasamlung and Jakarlung valleys; and
    - Both of these places are culturally vital for Bhutan.
  - **In the west** - Doklam, Dramana, and Shakhatoe, Yak Chu and Charithang Chu, and Sinchulungpa and Langmarpo valleys.
    - These places are pasture-rich and strategically located in the Bhutan-India-China trijunction, lying precariously close to India's Siliguri Corridor.
- In 2020, China made new claims on Bhutan's East in the Sakteng sanctuary.
  - Surprisingly, there has been no mention of Eastern Bhutan in the previous rounds of boundary negotiations held between the two countries.
  - Hence, addition of Eastern Bhutan in the list of disputed territories has baffled Bhutan.
  - This eastern sector of Bhutan has a large Bhutanese population, traditional Dzongs (Medieval Fortresses) and two Bhutanese districts since time immemorial.

## South Korea, US, Japan Hold First Joint Air Drills

- The two-day exercise was part of a defense cooperation against North Korea's missile and nuclear threats.
- The exercise simulated intercepting North Korean smuggling vessels.

## USS Dwight D Eisenhower

- The **nuclear-powered USS Dwight D. Eisenhower Carrier Strike Group (CSG)** has been directed to move to the Eastern Mediterranean - a place right next to the ongoing conflict between Israel and the militant organisation Hamas.
  - USS Eisenhower has been described as the Navy's finest **5-star aircraft carrier**.
- The Eisenhower CSG joined the USS Gerald R. Ford Carrier Strike Group, which arrived earlier in the region.
  - USS Gerard R. Ford is the US Navy's newest and **most advanced aircraft carrier yet**.
- The presence of carriers can reiterate American support for its longtime ally Israel in the region.
  - It would act as a deterrent for any other actor, including Hezbollah, that might think that widening this conflict is a good idea.
  - There are indications that if the Iran-backed group Hezbollah decides to join the conflict on a full-scale level, it could draw other regional powers in.

## UN Approved A Kenya-Led Security Mission To Troubled Haiti

- The UNSC has approved international intervention in the form of a foreign security mission, led by Kenya, to restore security, and control spiralling violence in Haiti.
- The United Nations Security Council (UNSC) voted to adopt the resolution in this regard.

## Violence In Haiti

- **Where is Haiti?**
  - Haiti occupies the western third of the **island of Hispaniola**, situated between Cuba and Puerto Rico, which it shares with the Dominican Republic.
  - The Atlantic Ocean borders Haiti's northern shores, while the Caribbean Sea is to the west and south.
- **Violence in Haiti**
  - Haiti has experienced a surge in violence over the past year as armed groups took control of large parts of the country, including the capital Port-au-Prince.
    - The country plunged into a crisis when a **group of gangs called G9 and Family** seized control of the entry of the main fuel port Varreux in the capital.
      - ✓ They were protesting the PM's decision to cut fuel subsidies.
    - To make matters worse, there was a shortage of bottled water in the backdrop of a new outbreak of cholera.

## Torres Strait Islands

- Recently, Australians voted in a referendum to decide whether the country's indigenous peoples should be formally consulted in making laws.
  - The referendum failed as it could not garner more than 50% of the votes in favour.
- The referendum asked whether to recognise Indigenous people and establish a representative body that can provide non-binding advice to parliament.

- The referendum question reads:
  - “A Proposed Law: to alter the Constitution to recognise the First Peoples of Australia by establishing an Aboriginal and **Torres Strait Islander Voice**. Do you approve this proposed alteration?”
- The Torres Strait Islands, mentioned in the referendum question, is an **archipelago of small islands in the Torres Strait**.
  - Torres Strait is a narrow body of water between the northern tip of the state of Queensland and the large island of Papua New Guinea.

### **Qatar Court Sentenced 8 Indian Navy Veterans To Death**

- Eight Indian Navy veterans sentenced to death in Qatar, purportedly on charges of spying for Israel. The officers were jailed in 2022 on charges that have not been made public.
- The eight former Navy personnel were working at *Al Dahra Global Technologies* and Consultancy Services, a defence services provider company.
- The company is owned by an Omani national, Khamis al-Ajmi, a retired squadron leader of the Royal Oman Air Force.
  - This man too, was arrested along with 8 Indians, but he was released in November 2022.
- The company’s old website, which no longer exists, said it provided training, logistics and maintenance services to the Qatari Emiri Naval Force (QENF).

### **India’s Stance**

- The Ministry of External Affairs has been closely monitoring the situation and has extended every possible support to the arrested sailors.
- The matter has been taken up at various diplomatic and political levels, and India and Qatar remain engaged.
- In addition to the GoI’s efforts, the families of the former Navy personnel have also filed a Mercy Plea to the Emir of Qatar, who is known to grant pardons during Ramadan and Eid.

### **India – Qatar Bilateral Relation**

- **High-level visits**
  - The two countries have had friendly relations for decades.
  - Since PM Manmohan Singh’s visit to Qatar in November 2008, the first by an Indian PM, the relationship has burgeoned.
  - The Emir of Qatar, Sheikh Tamim Bin Hamad Al Thani, visited India in 2015, and PM Modi went to Qatar in 2016.
  - The late Sushma Swaraj became the first Indian Foreign Minister to visit Qatar in 2018.
- **Bilateral trade**
  - In 2021, India was among the top four export destinations for Qatar; it is also among the top three sources of Qatar’s imports.
  - The bilateral trade is valued at \$15 billion, **which is mostly LNG** and LPG exports from Qatar worth over \$13 billion.
- **Energy cooperation**
  - Qatar is **India’s largest source of LNG** (gas that has been super cooled to liquid form so that it can be transported by sea).
  - Government-owned Petronet LNG, India’s largest LNG importer, has a long-term contract with Qatar for the import of 8.5 million tonnes per annum (mtpa) of LNG.



- In addition, Qatari gas has a sizable share in India's LNG purchases from the **spot market**.
- This becomes significant as India has set itself an ambitious target to increase the share of natural gas in the primary energy mix to 15% by 2030 from a little more than 6% at present.
- **Defence co-operation**
  - Defence co-operation has been officially described as a "pillar" of Indian-Qatar ties.
  - India-Qatar Defence Cooperation Agreement, signed during PM Singh's 2008 visit, was a significant turning point. The agreement was extended for another 5 years in 2018.
    - Experts at that time described the agreement as just short of stationing troops.
  - Indian Naval and Coast Guard ships regularly visit Qatar. QENF delegations participated in two maritime exercises in India in 2021.
  - Two editions of a joint naval exercise called **Zair Al Bahr** have been held.

### Challenges In India – Qatar Bilateral Relation

- **BJP spokesperson's derogatory references in June 2022 to the Prophet on a TV show**
  - Qatar was the first country to object, and demand a "public apology" from India soon after the controversy erupted.
- **Jailing of the eight ex-Navy personnel**
  - The development blindsided New Delhi in a country where 800,000 Indians live and work. Indians are the largest expatriate community in Qatar.
  - **Qatar's 210-strong delegation at the PravasiBharatiya Diwas event in Indore last year was the second biggest**, next only to the Mauritius delegation.
- **The boil over the Israeli bombardment of Gaza**
  - Qatar, which is deeply sympathetic to the Palestinians, has mediated the release of two American hostages from Hamas captivity in Gaza, and the country's diplomats are said to be working as a regional mediator in the crisis.

### Sri Lanka Offers Free Visas To Indians To Revive Tourism

- The Sri Lankan foreign ministry announced that Indians will get free visas to the nation as part of a pilot programme which will extend till March 31, 2024.
  - India has traditionally been Sri Lanka's top inbound tourism market, followed by China.
  - As per latest data from the Sri Lanka Tourism Development Authority, **India is the largest source for tourists** with 2,00,310 arrivals so far this year, followed by Russia.
- This scheme is also **extended to citizens from six other countries** – Russia, China, Thailand, Malaysia, Indonesia and Japan.
- This step was taken to generate a target of five million arrivals by 2026.

### Nature of India – Israel Relationship

- As Hamas, the militant group ruling the Gaza Strip, mounted one of the most audacious attacks on Israel, PM Modi expressed shock at what he called terrorist attacks and conveyed solidarity with Israel. Later, India sought to balance its position.

### India's Stand Towards Israel After Independence

- Post-independence, Jawaharlal Nehru and Mahatma Gandhi vowed to support the Palestinian cause as **they rejected the idea of two nations on the basis of religion**.

- While they had sympathy for the Jews, both were of the view that any State based on religious exclusivity could not sustain on moral and political grounds.
- India's position with regard to Palestine was also guided by the general consensus in the **Arab world** and the **United Nations-the Non-Aligned Movement**.
- When the partition of Palestine plan was put to vote at the UN in 1947, India voted against, along with the Arab countries.
- When Israel applied for admission to the UN, India again voted against.
- **India recognised Israel in 1950**, after two Muslim-majority countries, Turkey and Iran, did so.
- In 1953, Israel was allowed to open a consulate in Mumbai, but no diplomatic presence was granted in New Delhi.

### **Change In India's Approach Towards Israel**

- By the late 1980s, there were critics within India of the country's Palestine policy and its outright support to the Arab world.
  - ✓ The Arab countries' neutral position during the 1962 India-China war and their support to Pakistan during the 1965 and 1971 wars did not go down well with many.
- On the other hand, Israel helped India with arms and ammunition in the 1962 and 1965 wars.
- Meanwhile, the disintegration of the Soviet Union and the weakening of the Non-Alignment Movement reduced India's ideological hostility towards Israel.
- **In 1992, India established full diplomatic relations with Israel.**
- Establishing full diplomatic ties with Israel came in especially handy during India's Kargil conflict with Pakistan in 1999.
  - Israel helped India with arms and ammunitions. Israel used their emergency stockpiles and shipped the weapons to India, which proved to be decisive in the hour of need.

### **India – Israel Bilateral Relation In Brief**

#### **Economic Partnership**

- Bilateral trade has increased and diversified (to include electronic machinery, nuclear products and medical equipment) **from US\$900 million in 2000 to US\$7.86 billion in 2021.**
- Offices of big Indian tech firms like TCS, Infosys, Wipro have found their way to Israel's capital Tel Aviv.

#### **Water & Agriculture**

- A unique aspect of ties is their growing collaboration in the areas of water and agriculture since 2017.
- Currently, there are over 30 Israeli projects in India looking at various aspects including water distribution and management, leak detection, wastewater treatment, desalination, and water security.
  - Israel's has an impressive track record of reusing 90 percent of its wastewater.
- **India is the only country where Israel has stationed a water resources specialist as the Water Attaché at its embassy in Delhi.**
  - He/She spearheads Israel's participation across four pillars—agriculture, industry, nature, and urban consumption.

#### **Defence & Security**

- India is one of the largest importers of weapons from Israel, contributing to about 40% of its annual arms exports.
- Their defence partnership also extends to sharing of crucial technologies by Israel for missiles, electronic warfare systems, radar systems, navigation systems, and weapon control systems designed and produced by

DRDO.

- In 2020, Israel's National Cyber Directorate (INCD) and Indian Computer Emergency Response Team (CERT-In) signed an MoU to exchange information on cyber threats and build a framework to enhance capacity-building initiatives.

### Canada Visa Services Now Available Only In Delhi

- Canada has stopped visa and consular services at its Chandigarh, Mumbai, and Bengaluru consulates. These services will now be available only at the Canadian High Commission in New Delhi.
- This has happened after Canada withdrew 41 diplomats from India after New Delhi said it would revoke their diplomatic immunity.
- Canada has since called for New Delhi to uphold its obligations under the **1961 Vienna Convention on Diplomatic Relations**.
  - India insists that its actions are consistent with the tenets set forth in **Article 11.1 of the Vienna Convention on Diplomatic Relations**.
- This decision is the most recent fallout of the diplomatic dispute between the two countries.
  - The diplomatic dispute was triggered by PM Trudeau's allegation that India may have had a hand in the killing of a Khalistani separatist in Canada this June.

### Expected Fallout Of This Situation

- This downsizing will lead to a significant slowdown of Indian visa applications for Canada.
- A very large chunk of these visa applications are from Indian students who seek to study in Canadian universities.
- Around two million Canadians, 5% of the overall population, have Indian heritage.
- **Canada is the second largest overseas destination for Indian students after the United States.**
  - India is by far Canada's largest source of global students, making up for roughly 40% of study permit holders.
- As of December 31, 2022, Indian students comprised 39.5% of the international student population in Canada.

### 1961 Vienna Convention on Diplomatic Relations

- It is an international treaty signed by 61 countries in 1961.
- It puts forth a framework for diplomatic interactions between independent nations and aims to ensure the 'development of friendly relations among nations'.
- At present 193 countries are party to the document.

#### Article 11.1 of the convention

- It says that if there is no clear agreement on how big a mission should be, the country hosting the mission can ask that the mission size stays within what they consider reasonable and usual.
- This decision will depend on the situation in the hosting country and the mission's specific needs.

[For detailed discussion, refer the topic "**Diplomatic Tussle Between India and Canada**" from The Recitals – September 2023]

## India Sri Lanka Ferry Services Restarted

- An age-old sea route between India and Sri Lanka has been rejuvenated with **the inauguration of a passenger ferry service** - a High Speed Craft, named 'Cheriyapani', from Nagapattinam (TN) to Kankesanthurai in Jaffna, Northern Sri Lanka.
  - This service has been resumed after 40 years.
  - The **Indo-Ceylon Express or Boat Mail** - a train - ran between Chennai and Colombo via the Thoothukudi port from the early 1900s up until 1982.
  - Passengers from Chennai would get onto the train and then transfer to a coal-powered steam ferry in Dhanushkodi, which would take them to Talaimannar in roughly two hours.
  - However, the civil war in Sri Lanka resulted in the halting of these services.
- The initiative is aimed at bolstering bilateral ties, boosting tourism, increasing people-to-people relations and is expected to benefit local traders on both shores.

## India-Japan Chip Supply Chain Partnership

- The Union Cabinet has approved a Memorandum of Cooperation (MoC) between India and Japan on developing a semiconductor supply chain partnership.
  - The MoC was signed in July 2023.
- This partnership will focus on R&D, manufacturing, design, and talent development for the industry.
- The partnership will involve both G2G and B2B bilateral cooperation to co-develop semiconductor supply chains, including chips designed in both countries and R&D
- India is looking to establish itself as a reliable presence in the semiconductor supply chain, especially at a time when companies are looking to diversify from China.
  - New Delhi has rolled out a \$10 billion plan to boost local chip manufacturing.
  - US memory maker **Micron Technology** is constructing an assembly and packaging plant in Gujarat under the plan.
  - India is also working with the United States on chip supply chains.
  - **Advanced Micro Devices (AMD)** will invest up to \$400 million in India over the next five years and will set up its biggest design facility in Bengaluru.
  - **Lam Research** had announced a proposal to train 60,000 Indian engineers through its Semiverse Solution virtual fabrication platform.
  - **Applied Materials** announced a proposed investment of \$400 million to establish a collaborative engineering centre in India.

## Indian Diaspora in Trinidad

- Ramleela is one of India's most famous folk theatre traditions, performed across the country during the autumnal (October) Navratri celebrations.
- It has travelled to distant corners of the world with the Indian diaspora and one such example is Trinidad, an island in the Caribbean with a significant Indian population.
- **In early 19th century Britain**, with the calls to abolish slavery intensified, slave trade was banned in 1807, and finally abolished in 1834 in the British Empire.
- This, however, **created a massive problem in many British colonies** whose economy depended on slave labour.

- **The island of Trinidad**, where sugar formed the backbone of the economy, was one such colony.
- **In 1838**, the enactment of the emancipation legislation in Trinidad was followed by a large-scale emigration of emancipated slaves from the sugar estates.
- Plantation owners, desperate to keep their economy afloat, **turned to indentured labour from India**.
- On May 30, 1845 the very first boatload of indentured Indians came to Trinidad.
- While seen as more human than slavery, **indentured servitude** was nonetheless brutal for labourers.
- **Today**, Indians - mostly descendants of these labourers who continued to enter Trinidad as late as 1917 - **form the largest ethnic group in Trinidad (~35% of the total population)**.
- Most came from the present day eastern UP and Bihar.

## Project Udbhav

### About Project Udbhav

- ▶ It was started in 2021 by the **Indian Army in collaboration with the United Service Institution of India**, a defence think-tank.
- ▶ It is an initiative to rediscover the profound Indic heritage of statecraft and strategic thoughts derived from ancient Indian texts of statecraft, warcraft, diplomacy and grand strategy.
- ▶ It focuses on a broad spectrum including Indigenous Military Systems, Historical Texts, Regional Texts and Kingdoms, Thematic Studies, and intricate Kautilya Studies.
- ▶ This pioneering initiative stands testimony to the **Indian Army's recognition of India's age-old wisdom** in statecraft, strategy, diplomacy, and warfare.



### Significance of the Project

- At its core, Project Udbhav seeks to **bridge the historical and the contemporary** to integrate age-old wisdom with modern military pedagogy.
- By reintroducing these classical teachings into contemporary military and strategic domains, **the Army aims -**
  - **To nurture its officers to apply ancient wisdom in modern scenarios** and
  - To allow a more profound understanding of international relations and foreign cultures.
- It seeks to understand the **profound depths of indigenous military systems**, their evolution, strategies that have been passed down through the ages, and the strategic thought processes that have governed the land for millennia.
- The Project is **not limited to just rediscovering these narratives** but also to also develop an indigenous strategic vocabulary, which is deeply rooted in India's multifaceted philosophical and cultural tapestry.

### Goa Maritime Conclave (GMC) 2023

- The **4th edition of GMC** was held by the Indian Navy under the aegis of Naval War College in Goa.
- While addressing at the conclave, the Defence Minister of India said 'might is right' has no place in a 'free, open and rule-based' maritime order.
- He also stressed on the need for establishing multi-national collaborative frameworks to effectively tackle common maritime challenges in the Indian Ocean Region (IOR).
- **The GMC is the Indian Navy's outreach Initiative** providing a multinational platform to harness the collective wisdom of practitioners of maritime security and the academia towards garnering outcome-oriented maritime thought.
- The previous editions of the **biennial** event were held in **2017, 2019, and 2021**.
- **At the GMC-23**, Admiral R Hari Kumar (Chief of the Naval Staff) hosted chiefs of navies/ heads of maritime forces/ senior representatives **from 12 Indian Ocean littorals**.
- **This includes** Bangladesh, Comoros, Indonesia, Madagascar, Maldives, Malaysia, Mauritius, Myanmar, Seychelles, Singapore, Sri Lanka, and Thailand.
- **Theme** for GMC 2023 - "Maritime Security in the Indian Ocean Region: Converting Common Maritime Priorities into Collaborative Mitigating Frameworks".

- As part of the conclave, visiting delegates got an opportunity to -
  - ✓ Witness India's Indigenous shipbuilding industry at the "Make in India" exhibition
  - ✓ Witness the indigenous warships as well as capabilities of **Deep Submergence Rescue Vessel (DSRV)**.

### Contours of Joint Theatre Commands Ready

- The Armed Forces have narrowed down the final contours of the integrated theatre commands.
- The structures of the theatre commands are awaiting the approval of the government, based on which there may be further changes.

### Key Highlights

- **Creation of a national defence committee:** There is a proposal for theatre commanders under a national defence committee likely to be headed by the Defence Minister.
- **Members of national defence committee:** Members of the Chiefs of Staff Committee (COSC) are also likely to be part of the defence committee that will oversee the work of theatre commanders.
  - The COSC comprises the three service chiefs and the Chief of Defence Staff (CDS) and takes important decisions related to matters of higher defence.

### Recent Steps Taken By India Towards Theaterisation

- India has kickstarted the process to set up theatre commands, which involves jointness and integration of the disparate war-fighting units.
- The **Inter-Services Organisation (Command, Control and Discipline) Bill, 2023**, a key prerequisite for theatre commands, got parliamentary approval in August 2023.
  - The act empowers the commander-in-chief and the officer-in-command of inter-services organisations with disciplinary and administrative powers over personnel from the other services serving in them.
  - It also empowers the central government to constitute an Inter-Services Organisation.
- Limited cross-postings between the Army, Navy and IAF have already been implemented to promote jointness.
  - Restructuring of the headquarters and the subsequent postings will take place after the final approval from the govt.

### Theaterisation of Armed Forces

- Theaterisation is a concept which seeks to integrate the capabilities of the three services - army, air force and navy – in order to optimally utilise their resources for wars and operations.
- A **theatre command/unit** will be created by integrating elements/assets from all 3 services.
  - Simply put, a theatre command deploys elements of the three services under a single, unified command structure.
- Each command is assigned a specific geographical region.
- Almost all major countries like China, Russia, the US, the UK and France work on a theatre command concept.
  - Eg., **China's Western Theatre Command** looks after the entire borders with India.

### Theatre Commands And India

- The **Kargil Review Committee**, the Naresh Chandra Committee and the Group of Ministers had called for structural changes in higher defence management.
- It was the **Shekatkar committee**, which had recommended the creation of the post of Chief of Defence Staff (CDS) and theatre commands.

## Theaterisation Model Under Consideration In India

- At the moment, not much details about the theaterisation effort are available in the public domain. However, experts say various models are already being discussed.
- As per media reports, **three theatre commands will be set up first** — one facing Pakistan, another opposite China, and a maritime theatre command to tackle maritime threats outside the coastal borders of the country.
- These theatre commands are likely to be located in Jaipur, Lucknow and Karwar.



## Current Command Structure In India

- At present, India has 17 single service commands and only two tri-service commands.
- The 17 single service commands are divided as: Army (7), Airforce (7), Navy(3)
- Two tri-service commands** are: Andaman and Nicobar Command (ANC), and The Strategic Force Command (handles the nuclear weapons).

## IAF To Induct Astra Missiles By End Of 2023

- The Indian Air Force (IAF) is expected to induct the first batch of indigenous Astra Beyond Visual Range (BVR) Air to Air Missiles by the end of 2023.
- The Astra missile has a range of over 100 kms and can destroy highly maneuverable supersonic aerial targets.
- It has a smokeless solid-fuel rocket engine that propels the missile to **Mach 4.5**. The missile can reach a maximum altitude of 66,000 feet and has a range of 160 kilometers.
- Astra is fully integrated on the SU-30MKI and in August 2023 it was successfully test-fired from the Light Combat Aircraft (LCA) Tejas off the coast of Goa.

## Mod Releases Fifth Positive Indigenisation List

- Defence Minister Rajnath Singh released the fifth positive indigenisation list of 98 items for which **there would be an import ban** beyond indicated deadlines against them.
- In order to promote 'Aatmanirbharta' in defence, these items which will be procured by the three armed services from indigenous suppliers in a staggered manner.
- He also released the Indian Navy's updated indigenisation roadmap, named **Swavlamban 2.0**.



# SUMMITS AND ORGANISATIONS

## Russia Passes Law Pulling Ratification Of Nuclear Test Ban Treaty

Russia's parliament passed a law to withdraw ratification of the Comprehensive Nuclear Test Ban Treaty (CTBT). The bill was first proposed by Russian President Vladimir Putin late last month.

### About Comprehensive Nuclear Test Ban Treaty (CTBT)

- The Treaty **prohibits any nuclear weapon test explosion or any other nuclear explosion anywhere in the world.**
- Headquartered in Vienna, it was opened for signature in September 1996 and has been signed by 187 nations and ratified by 178.
- The treaty cannot formally enter into force until it is ratified by 44 specific nations (listed in Annex 2).
  - These States had nuclear facilities at the time the Treaty was adopted.
  - Eight of which have yet to do so: **India, China, Pakistan, North Korea, Israel, Iran, Egypt, and the United States.**
- In order to verify compliance with its provisions, the treaty establishes a global network of monitoring facilities and allows for on-site inspections of suspicious events.

Success of CTBT	Failure
<ul style="list-style-type: none"> <li>○ Since the conclusion &amp; opening for signature of CTBT, nuclear testing has become taboo.</li> <li>○ Today, even those nuclear-armed states that have not signed/not ratified the CTBT, including India, Israel, and Pakistan, observe nuclear testing moratoriums.</li> <li>○ Only North Korea has conducted nuclear test explosions in this century, and even that halted nuclear testing in 2017.</li> <li>○ Although the CTBT has not formally entered into force, the treaty has, for now, achieved its primary goal: ending nuclear weapon test explosions.</li> </ul>	<ul style="list-style-type: none"> <li>○ Since the CTBT, 10 nuclear tests have taken place.</li> <li>○ India conducted two in 1998, Pakistan also two in 1998, and North Korea conducted tests in 2006, 2009, 2013, 2016 (twice) and 2017.</li> <li>○ United States last tested in 1992, China and France in 1996 and the Soviet Union in 1990.</li> <li>○ Russia, which inherited most of Soviet nuclear arsenal, has never conducted a nuclear test.</li> </ul>

### India's Stand on CTBT

- India has not signed the treaty because it feels that the treaty is discriminatory.
- CTBT is perceived as partial and discriminatory by India. It seeks to create a nuclear discrimination.
  - UNSC permanent members have little marginal utility in testing further.
- CTBT does not link itself to the **total nuclear disarmament** in the time bound manner. CTBT is also silent on the issue of transfer of nuclear warheads.
- CTBTs' verification system does not provide a genuinely impartial international mechanisms but verification system of the countries like USA would decide whether a party to CTBT is adopting restraints or not. India considers it as a subjugation of sovereignty.
- India's decision to not sign the CTBT is also based on national security considerations.
  - India views nuclear weapons as a deterrent against potential security threats from neighbouring countries, especially Pakistan and China.

## 23<sup>rd</sup> Council of Ministers' Meeting Of The Indian Ocean Rim Association

- External Affairs Minister Dr. S. Jaishankar (EAM) attended the 23<sup>rd</sup> Council of Ministers' (COM) meeting of the Indian Ocean Rim Association (IORA).
- The meeting was hosted by Sri Lanka, the current IORA Chair. It was held under the theme of theme of “Strengthening Regional Architecture: Reinforcing Indian Ocean identity”.

### Key Highlights

- **Sri Lanka took over as Chair and India as Vice Chair of the IORA** for the term 2023-25.
  - India assumed the Vice-Chair role of IORA for 2023-25, leading to Chairship in 2025-27.
- **New Dialogue Partner: Saudi Arabia** became the 11th Dialogue Partner of the Association.
- **Adoption of the IORA's Outlook on the Indo-Pacific (IOIP)**
  - The outcome document welcomed the adoption of the IORA's (IOIP) by the 22nd Council of Ministers in Dhaka in November 2022.
  - It appreciated India's initiative to formulate a Roadmap for the implementation of IOIP.
- **3 Agreements signed between India and Sri Lanka on the sidelines of the summit**
  - Indian assistance for housing projects,
  - modernising schools and
  - a new joint project between the Indian National Dairy Development Board, Amul cooperative and Sri Lankan Cargill Group to increase milk production in Sri Lanka.

### About IORA

- IORA is an inter-governmental organisation which was established in March 1997.
  - It was formerly known as the Indian Ocean Rim Initiative and the Indian Ocean Rim Association for Regional Cooperation (IOR-ARC).
- The IORA Secretariat is based in Mauritius. It became an observer to the UN General Assembly and the African Union in 2015.
- **Members** – It has 23 Member States and 11 Dialogue Partners.
  - China is a dialogue partner in the IORA.
- **Objectives**
  - To promote sustainable growth and balanced development of the region;
  - To focus on those areas of economic cooperation which provide maximum opportunities for development, shared interest and mutual benefits;
  - To promote liberalisation, remove impediments and lower barriers towards a freer and enhanced flow of goods, services, investment, and technology within the Indian Ocean Rim.

### Significance of IORA

- The region is home to 35% of the world's population and also accounts for 19% of total GDP.
- 80% of seaborne trade uses routes through the Indian Ocean.
- 80% of seaborne oil trade and 100,000 commercial



vessels depend on this route every year.

### G20 Parliamentary Speakers Summit

- The Ninth G20 Parliamentary Speakers' Summit (**P20 Summit**) was hosted by Parliament of India in cooperation with **IPU** in New Delhi.
  - The P20 Summit was established in Canada in 2010.
  - It aims to strengthen parliaments to make them more representative and effective.
- **Theme of the summit** was "*Parliaments for One Earth, One Family, One Future*".
- During the summit, India registered its protest on the European Parliament's recent move to bring a resolution on the Manipur issue.

### Inter-Parliamentary Union (IPU)

- **About**
  - The IPU is the global organization of national parliaments.
  - It began in 1889 as a small group of parliamentarians dedicated to promoting peace through parliamentary diplomacy and dialogue.
  - It has since grown into a global organization with 179 Members & 14 Associate Members.
  - IPU empowers parliaments and parliamentarians to promote peace, democracy and sustainable development around the world.
- **Headquarter:** Geneva, Switzerland.
- **Slogan:** For democracy. For everyone.

### 141<sup>st</sup> Session of International Olympic Committee (IOC)

- PM Modi inaugurated the 141<sup>st</sup> Session of the International Olympic Committee (IOC) in **Mumbai**.
- India conducted the IOC session for the first time in 40 years. The country hosted its previous IOC session in New Delhi in **1983**.
- During the opening ceremony, he announced that India aspires to host the **2036 Summer Olympics**.
  - 2036 is the earliest available slot to host the Summer Olympic Games.
  - The next edition will be held in Paris in 2024 followed by Los Angeles in 2028 and Brisbane in 2032.
- India is eager to host the next Youth Olympic Games as a precursor to the mega event.
  - For the record, after Dakar (Senegal) hosts the Youth Games in 2026, the next edition will be held in 2030 as per IOC's four-year programme.

### Process Of Selection Of Host Country

- **Informal Dialogue:** IOC first gets into an informal dialogue with interested host countries.
- **Targeted dialogue:** If the world body is satisfied with the planning and capability of the candidate, then it enters a targeted dialogue when the IOC's Executive Board invites the "preferred host" to refine and present their proposal.
- **No fixed timeframe:** There is no fixed timeframe for electing the hosts.
- **What IOC looks at:** The IOC looks at multiple factors:
  - candidate city's funding strategy, the ability to deliver the Games, transport infrastructure, accommodation capacity,

- alignment of venues with local development plans, socio-economic and geo-political factors, and public support.

### IOC Session

- An IOC session is the annual meeting of the members of the IOC. It comprises 101 voting members and 45 honorary members.
- It decides on the key activities of the global Olympics movement.
- The powers of the Session are:
  - To adopt or amend the Olympic Charter.
  - To elect Honorary President and the honorary members of **IOC**.
  - To elect the President, vice-presidents and all other members of the **IOC Executive Board**.
  - To elect the host city of the Olympic Games.
- An Olympic Session is the general meeting of the members of the IOC and its supreme organ.
- All IOC Session decisions are final.

The infographic features a dark blue header with the text 'International OLYMPIC COMMITTEE (IOC)' in white and yellow. Below this, the word 'About' is written in red. A list of bullet points describes the IOC's role as the guardian of the Olympic Games and its vision to build a better world through sport. The 'As an Organisation' section, marked with red arrows, details Pierre de Coubertin's 1892 declaration and the IOC's establishment in 1894. The 'Roles & Responsibilities' section, accompanied by an illustration of a smartphone, lists the IOC's role in organizing modern Olympic Games and governing national Olympic committees (NOCs). The background is decorated with colorful icons like a lightbulb, gears, a globe, and a magnifying glass.

## War Crimes Laws Applicable To Israel-Palestinian Conflict

Conflict between Israel and Palestinian falls under a complex international system of justice that has emerged since World War II.

### Laws Governing The Conflict

- **1949 Geneva Conventions**
  - Internationally accepted rules of armed conflict emerged out of the 1949 Geneva Conventions.
  - These rules have been **ratified by all UN member states** and supplemented by rulings at international war crimes tribunals.
  - A siege can be considered a war crime if it targets civilians, rather than a legitimate means to undermine Hamas' military capabilities, or if found to be disproportionate.
  - Attacks on military objectives have to be proportional under international law.
    - This means they must not lead to excessive loss of civilian life or damage to civilian objects in relation to the direct and concrete military advantage expected.
- **International Humanitarian Law**
  - A series of treaties governs the treatment of civilians, soldiers and prisoners of war in a system collectively known as the **Law of Armed Conflict** or **International Humanitarian Law**.
  - It applies to government forces and organised armed groups, including Hamas militants.
- **International Criminal Court (ICC) in The Hague**
  - If alleged Palestinian perpetrators of atrocities in Israel and all alleged perpetrators of crimes on the occupied Palestinian territories are not brought to justice at home, the ICC can charge them.

- It is the only global court that can hold them accountable.
  - The ICC's founding **Rome Statute** gives it legal authority to investigate alleged crimes on the territory of its members or by their nationals, when domestic authorities are "unwilling or unable" to do so.
- The ICC recognises Palestine as a member state, while **Israel rejects the court's jurisdiction** and does not formally engage with it.

### Acts That Violate War Crime Law

- Experts cited as possible war crimes:
  - the deliberate targeting of civilians, indiscriminate rocket attacks, and the taking of civilians as hostages by Palestinian armed groups,
  - as well as the Israeli counter-strikes in Gaza that killed hundreds of Palestinians.
- The taking of hostages, murder and torture are explicitly banned under the Geneva Conventions.
- Also, Israel's response could also be subject to a war crimes investigation.
  - Israel drew criticism from UN officials and human rights groups by announcing a tightened blockade to prevent food & fuel from reaching the Gaza Strip, home to 2.3 million people.

### White Phosphorus Munitions

Two humanitarian organizations have accused the Israel Defense Forces (IDF) of using white phosphorus munitions in Gaza and Lebanon.

#### White phosphorus

- **About**
  - White phosphorus is a pyrophoric that ignites when exposed to oxygen, producing thick, light smoke as well as intense **815-degree Celsius heat**.
  - Under the Globally Harmonized System of Classification and Labeling of Chemicals, white phosphorus falls under "**Pyrophoric solids, category 1**".
    - This category includes chemicals that catch fire spontaneously when exposed to air.
  - White phosphorus emits a distinct garlic-like odour.
- **Military uses of white phosphorus**
  - Upon exposure, white phosphorus can cause severe burns, often down to the bone.
  - Particles of white phosphorus that remain lodged the body can reignite if in contact with air.
  - Inhaling white phosphorus particles or smoke can cause respiratory damage and harm to internal organs.

#### Legal Status Of White Phosphorus Munitions

- **Use is regulated:** White phosphorus munitions are not under a blanket ban, though their use is regulated under the International Humanitarian Laws.
- **Not considered a chemical weapon**
  - It is not considered a chemical weapon because its operational utility is primarily due to heat and smoke, rather than toxicity.
  - Thus, its use is governed by the **Convention on Conventional Weapons (CCW), specifically Protocol III**, which deals with incendiary weapons.
    - Palestine and Lebanon have joined Protocol III, while Israel has not ratified the protocol.
    - **Incendiary weapons** are weapons that use fire and heat to set fire to objects or cause burn or respiratory injury to people.

- **Protocol III of CCW regulates the use of incendiary weapons**
  - Protocol III prohibits the use of airdropped incendiary weapons in concentrations of civilians.
  - However, it has two significant loopholes.
  - First, it **restricts some but not all use of ground-launched incendiary weapons** where there are concentrations of civilians.
  - Second, the protocol's definition of incendiary weapons covers weapons that are primarily designed to set fire to and burn people.
    - **It excludes multipurpose munitions** such as those containing white phosphorus, which are considered to be primarily "smoking" agents.

### UNGA Adopts Gaza Resolution

- The United Nations General Assembly (UNGA) has passed a resolution calling for an immediate humanitarian truce between Israel and Hamas and demanding aid access to Gaza.
  - The 193 members of the UNGA met in a **resumed** 10th Emergency Special Session to vote on the resolution.
- A total of 120 countries voted in favour of the resolution, 14 countries voted against including Israel and the United States, while **45 others, including India, abstained.**
- India's abstention in the vote exemplified the balancing act it has adopted on the ongoing conflict in the Gaza Strip.

### Special Sessions of UNGA

- The United Nations Charter (Chapter IV, article 20) provides for the General Assembly to meet in special sessions as occasion may require.
- Special sessions are convened by the Secretary-General at the request of the Security Council or of a majority of the Members of the United Nations.

### About Emergency Special Sessions of UNGA

- An emergency special session of the UN is an **unscheduled meeting** of the United Nations General Assembly to make urgent recommendations on a particular issue.
- If the General Assembly is not in the session, the UN Charter allows it to meet in emergency special session within twenty-four hours of the request therefor.
- The procedure to call an emergency special session are laid out in the Rules of Procedure of the General Assembly.
  - Emergency special session is called if requested by the Security Council on the vote of any seven members, or by a majority of the Members of the UN.
- So far, only 11 such emergency sessions of the General Assembly have been held since 1950.

### Implications Of Resolutions Passed By The Special Emergency Sessions

- These resolutions are **not legally-binding.**
- These are symbolic of the world opinion on the crisis and carry political weight as they represent the will of the entire UN membership.

### Main Elements Of The Indian Statement at the UNGA

- It condemned violence, especially the October 7 attacks by Hamas, conveying its support for Israel.
- It then balanced out its support with a statement on the plight of the people of Gaza.
  - It welcomed the international community's de-escalation efforts and delivery of humanitarian

assistance to the people of Gaza. India too has contributed to this effort.

- India expressed concern at the security situation and urged all parties — which would include both Israel and its rival Iran, as well as groups like Hezbollah — **to exercise restraint and responsibility.**
- New Delhi reiterated its principled position on the Israel-Palestinian issue.
  - India has always supported a negotiated **Two-State solution to the Israel-Palestine issue.**
- India counselled diplomacy and dialogue, urging the parties to de-escalate, eschew violence and work towards creating conditions for an early resumption of direct peace negotiations.

# ENVIRONMENT AND GEOGRAPHY

## Graded Response Action Plan (GRAP) for Coming Winter Pollution

Delhi government began implementation of Graded Response Action Plan (GRAP) to check city's notorious winter pollution.

### About GRAP

<b>About</b>	<ul style="list-style-type: none"> <li>It is a set of emergency measures that kick in to prevent further deterioration of air quality once it reaches a certain threshold.</li> </ul>	
<b>Implemented by</b>	<ul style="list-style-type: none"> <li>Commission for Air Quality Management (CAQM).                     <ul style="list-style-type: none"> <li>✓ Till 2020, the Supreme Court-appointed Environment Pollution (Prevention &amp; Control) Authority (EPCA) used to order States to implement GRAP measures.</li> <li>✓ The EPCA was dissolved and replaced by the CAQM in 2020.</li> </ul> </li> </ul>	
<b>Stage of GRAP</b>	Stage 1	Activated when AQI reaches 'poor' category (201 to 300).
	Stage 2	Activated when AQI reaches 'very poor' category (301 to 400)
	Stage 3	Activated when AQI reaches 'severe' category (401 to 450)
	Stage 4	Activated when AQI reaches 'severe +' category (above 450).
<b>Features</b>	<ul style="list-style-type: none"> <li>It was approved by Supreme Court in 2016 after Supreme Court's order in the matter of M. C. Mehta vs. Union of India (2016).</li> <li>1st notified in January 2017 by Ministry of Environment, Forest and Climate Change (MoEFCC).</li> <li>Measures under different categories of plan are to be enforced by <b>Pollution Control Boards (PCB)</b> of NCR states and concerned departments and agencies, including traffic police, Transport Department and road-owning and construction agencies.</li> </ul> <p><b>Revisions To GRAP</b></p> <ul style="list-style-type: none"> <li>Revisions to the GRAP include taking <u>action based on the air quality index (AQI)</u>.             <ul style="list-style-type: none"> <li>Under the previous system, responses that kick in are based on <u>particulate matter concentrations (PM<sub>2.5</sub>/10)</u>.</li> </ul> </li> <li>The changes announced will let the <u>authorities take appropriate measures three days before</u> the situation deteriorates.             <ul style="list-style-type: none"> <li>Under the previous plan, action was initiated when pollution levels reached a certain threshold, and not in advance.</li> </ul> </li> <li>This will be facilitated by the latest technology which will help in anticipating the pollution levels in the near future.             <ul style="list-style-type: none"> <li>Curbs will be implemented based on forecasts made by Indian Institute of Tropical Meteorology.</li> </ul> </li> </ul>	
<b>Why is winter pollution challenging in north India?</b>	<p>Atmospheric changes during winter leads to <b>temperature inversion</b>, calm conditions, change in wind direction, and seasonal drop in ambient temperature entraps pollution across north India.</p> <ul style="list-style-type: none"> <li>This is further aggravated into a severe category by smoke from farm fires and Diwali firecrackers during November.</li> <li>Industrial emissions and vehicular pollution further exacerbate the problem.</li> </ul>	
<b>Has GRAP</b>	It has been successful in doing certain things that had not been done before	



<b>Helped?</b>	<ul style="list-style-type: none"> <li>• Creating a <b>step-by-step plan</b> for the entire Delhi-NCR region</li> <li>• <b>Getting on board several agencies:</b> The plan requires action and coordination among 13 different agencies in Delhi, Uttar Pradesh, Haryana and Rajasthan (NCR areas).</li> <li>• Fixing accountability and deadlines: For each action to be taken under a particular air quality category, executing agencies are clearly marked.</li> <li>• <b>Three major policy decisions that can be credited to GRAP are –</b> <ul style="list-style-type: none"> <li>○ Closure of the thermal power plant at Badarpur</li> <li>○ Bringing BS-VI fuel to Delhi before the deadline set initially, and</li> <li>○ Ban on Pet coke as a fuel in Delhi-NCR.</li> </ul> </li> </ul>
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### **Commission for Air Quality Management (CAQM)**

- It is a statutory body formed under the Commission for Air Quality Management in National Capital Region and Adjoining Areas, Act 2021.
- It aims at better coordination, research, identification, and resolution of problems related to air quality in NCR and adjoining areas.
- Adjoining areas refer to areas in neighbouring states of NCR namely, Punjab, Haryana, Uttar Pradesh and Rajasthan.

### **National Air Quality Index (AQI)**

- It was launched in October 2014 to disseminate information on air quality in an easily understandable form for the general public.
- The measurement of air quality is based on eight pollutants, namely, PM10, PM2.5, NO2, SO2, CO, O3, NH3, and Pb

<b>AIR QUALITY INDEX</b>		
▶ AQI scheme reflects 'one colour one code' for different types of air quality (good, satisfactory, moderate, poor, very poor and severe)	▶ Index can be accessed from websites of Union environment ministry or respective state pollution control boards	
<b>WHAT HAPPENS WHEN AQI LEVELS TURN FOUL</b>		
0-50	<b>Good</b>	Minimal impact
50-100	<b>Satisfactory</b>	Minor breathing discomfort to sensitive people
100-200	<b>Moderate</b>	Breathing discomfort to people with lungs, asthma and heart diseases
200-300	<b>Poor</b>	Breathing discomfort to most people on prolonged exposure
300-400	<b>Very Poor</b>	Respiratory illness on prolonged exposure
>400	<b>Severe</b>	Affects healthy people and seriously impacts those with existing diseases

### **Children Displaced in a Changing Climate Report**

A study conducted by UNICEF has revealed a shocking trend on children displaced due to the changing climate.

<b>Key findings of this Report</b>	<ul style="list-style-type: none"> <li>• ~43.1 million children have been displaced internally due to weather-related events over the last six years.</li> <li>• This number is equivalent to approximately 20,000 child displacements per day.</li> <li>• Almost all 95% of recorded child displacements were driven by floods and storms.</li> <li>• In three countries Philippines, India and China, a combined total of almost 23 million child displacements were due to weather related events between 2016 and 2021.</li> <li>• 6.7 million children were displaced in India alone.</li> <li>• Floods, Storms, Droughts and Wildfires are the most common weather-related hazards that lead to the displacement of Children.</li> </ul>
<b>Category specific data</b>	<ul style="list-style-type: none"> <li>• <b>Flood</b> - Floods triggered an estimated 19.7 million displacements of children across the globe. <ul style="list-style-type: none"> <li>✓ Hotspots countries were India (3.9 million), China (3.7 million) and the Philippines (1.3 million)</li> </ul> </li> <li>• <b>Storm</b> - Storms caused an estimated 21 million new displacements of children. <ul style="list-style-type: none"> <li>✓ Majority displacements were recorded in the Philippines (8.3 million), India (2.8 million) and China (2.6 million)</li> </ul> </li> <li>• <b>Drought</b> - Droughts triggered more than 1.3 million child displacements across 15 countries.</li> </ul>

	<ul style="list-style-type: none"> <li>• <b>Wildfire</b> - 810,000 new child displacements due to wildfires were recorded, including 280,000 in 2020 alone.</li> </ul>
<b>Significance of this Report</b>	<ul style="list-style-type: none"> <li>• Research highlights the profound impact of floods, storms, wildfires, and droughts on children and the urgent need for climate action.</li> <li>• It establishes the critical connection between climate, mobility and childhood – and its implications for policy and investment.</li> </ul>
<b>Recommendations</b>	<ul style="list-style-type: none"> <li>• Protect children and youth from the impacts of climate change and displacement by ensuring that child-critical services are shock-responsive, portable and inclusive.</li> <li>• Prepare children and young people to live in a climate-changed world by improving their adaptive capacities and resilience.</li> <li>• Prioritise the children and young people in climate, humanitarian and development policy, action and investments.</li> </ul>

### Report on Targeted Methane Mitigation

Report titled “Imperative of Cutting Methane from Fossil Fuels” released recently.

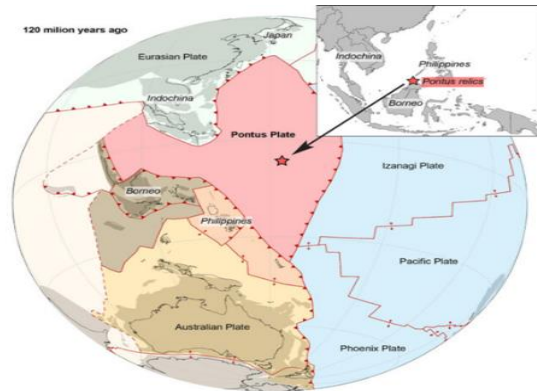
<b>Report Prepared by</b>	<ul style="list-style-type: none"> <li>• It was prepared by International Energy Agency (IEA) with contributions from UNEP and UNEP-Convened Climate and Clean Air Coalition (CCAC).</li> </ul>
<b>Key findings of this Report</b>	<ul style="list-style-type: none"> <li>• Targeted methane mitigation from fossil fuels could avoid 0.1 °C warming by 2050.</li> <li>• Without targeted action on methane, increase in the global average surface temperature will likely exceed 1.6 °C by 2050.</li> <li>• Around 580 million tonnes (Mt) of methane are emitted every year globally, 60% of which comes from human activities.</li> <li>• In 2022, fossil fuel operations alone were responsible for around 120 Mt of methane emissions.</li> <li>• Under current trajectories, total anthropogenic methane emissions could rise by up to 13% between 2020 and 2030.</li> <li>• Methane mitigation by 2050 can prevent Nearly 1 million premature deaths due to ozone exposure.</li> </ul>
<b>About Methane</b>	<ul style="list-style-type: none"> <li>• It is the simplest hydrocarbon, consisting of one carbon atom and four hydrogen atoms.</li> <li>• It is a powerful greenhouse gas, contributing at least a quarter of today’s climate warming.</li> <li>• Approximately 40% of methane emitted is from natural sources, about 60% comes from human influenced sources, including livestock farming, rice agriculture, biomass burning and so forth.</li> </ul>
<b>International Energy Agency</b>	<ul style="list-style-type: none"> <li>• It is an autonomous inter-governmental organisation within the OECD framework.</li> <li>• It was founded in 1974 to ensure the security of oil supplies.</li> </ul>
<b>United Nations Environment Programme</b>	<ul style="list-style-type: none"> <li>• It was established after the United Nations Conference on the Human Environment in Stockholm in June 1972.</li> <li>• It is responsible for coordinating responses to environmental issues within the United Nations system.</li> <li>• Major reports by UNEP are Emission Gap Report, Adaptation Gap Report, Global</li> </ul>

	Environment Outlook, Frontiers, Invest into Healthy Planet.
<b>UNEP-Convened Climate and Clean Air Coalition</b>	<ul style="list-style-type: none"> <li>It is a voluntary partnership of over 160 governments, intergovernmental organizations, and non-governmental organizations founded in 2012.</li> <li>It is the only international body working to reduce powerful but short-lived climate pollutants (SLCPs) – methane, black carbon, hydrofluorocarbons (HFCs), and tropospheric ozone.</li> </ul>

### Pontus Tectonic Plate

A long-lost tectonic plate named 'Pontus' was discovered in Borneo.

<b>About</b>	It is a minor tectonic plate in the northern part of the Eastern Hemisphere.
<b>Location</b>	It is located in present-day South China Sea.
<b>Pontus's History</b>	<p>It is approximately formed at least 160 million years ago.</p> <p>Over time, it gradually diminished in size before being pushed under the Australian plate to the south and China to the north.</p> <p>It disappeared 20 million years ago.</p>
<b>About Tectonic Plate</b>	<p>It is a massive, irregularly shaped slab of solid rock, generally composed of both continental and oceanic lithospheres.</p> <p>Plate size can vary greatly, from a few hundred to thousands of kilometers across; the Pacific and Antarctic Plates are among the largest.</p>
<b>Types of Plates</b>	<p>There are primarily seven major tectonic plates - African Plate, Antarctic Plate, Eurasian Plate, North American Plate, South American Plate, Pacific Plate, and Indo-Australian Plate.</p> <p>Additionally, there are several minor plates and microplates like Cocos plate, Nazca plate, Arabian plate, Philippine plate etc.</p>



### Mukundra Hills Tiger Reserve

The forest department inaugurated jungle safari at the Mukundra Hills Tiger Reserve (Rajasthan).

#### About Mukundra Hills Tiger Reserve (Darah Wildlife Sanctuary)

<b>Geographic Location</b>	<p>Situated in a valley formed by two parallel mountains, Mukundra and Gargola.</p> <p>Located on the eastern bank of the Chambal River and is drained by its tributaries.</p>
<b>Features</b>	
<p>The Mukundra Hills attained the status of a <b>Wildlife Sanctuary in 1955</b> and was later designated as a <b>National Park</b>, known as Mukundra Hills (Darah) National Park, in 2004.</p> <p>It was declared as <b>tiger reserve in 2013</b> under the Wildlife Protection Act, 1972.</p> <p>Mukundra Hills National Park consists of three wildlife sanctuaries: 1) Darrah WLS, 2) Chambal WLS and 3) Jaswant Sagar WLS</p>	

**Flora:** Kala Dhok or Kaladhi is the predominant species, along with Khair, Ber, Kakan, Raunj, etc.

**Fauna:** It is a home of Leopard, Sloth bear, Nilgai, Chinkara, Spotted Deer etc.

### Coral Reef Breakthrough

At the 37th ICRI General Meeting, 2023 International Coral Reef Initiative (ICRI) has launched the Coral Reef Breakthrough.

<b>Launched by</b>	Launched in partnership with the Global Fund for Coral Reefs (GFCR) and the High-Level Climate Champions (HLCC).
<b>About Coral Reef Breakthrough</b>	<ul style="list-style-type: none"><li>It aims to secure the future of at least 125,000 km<sup>2</sup> of shallow-water tropical coral reefs with investments of at least US\$12 billion to support the resilience of more than half a billion people globally by 2030.</li><li>It was launched to prevent extinction of one of the world's most threatened, most biodiverse ecosystems.</li></ul>
<b>Four action points of this Initiative</b>	<ul style="list-style-type: none"><li><b>Action point 1</b> - Mitigate local drivers of loss including land-based sources of pollution, destructive coastal development, and overfishing.</li><li><b>Action point 2</b> - Double the area of coral reefs under effective protection.</li><li><b>Action point 3</b> - Assist the development and implementation of innovative solutions at scale and climate smart designs that support coral adaptation to impact 30% of degraded reefs by 2030.</li><li><b>Action point 4</b> - Secure investments of at least USD 12 billion by 2030 from public and private sources to conserve and restore these crucial ecosystems.</li></ul>
<b>About International Coral Reef Initiative (ICRI)</b>	<ul style="list-style-type: none"><li>It is an informal partnership between Nations and organizations which strives to preserve coral reefs and related ecosystems around the world.</li><li>It was announced at the 1<sup>st</sup> Conference of the Parties of the Convention on Biological Diversity, 1994.</li><li>It has 101 members, India is one of them.</li><li>The Initiative is an informal group whose decisions are not binding on its members</li></ul>

### Invisible e-waste

The Brussels-based organization Waste Electrical and Electronic Equipment (WEEE) Forum commissioned the United Nations Institute for Training and Research (UNITAR) to calculate the annual volume of "invisible" e-waste items. The study has found that consumers fail to recognise almost one-sixth of electronic waste generated globally, amounting to nearly 9 billion kilogrammes per year.

#### About Invisible e-waste

- It refers to e-waste that goes unnoticed due to its nature or appearance, leading consumers to overlook its recyclable potential.
- It includes cables, e-toys, e-cigarettes, e-bikes, power tools, smoke detectors, USB sticks, wearable health devices and smart home gadgets.

#### Key Highlights of this Study

- Some 3.2 billion kg or 35% of the roughly 9 billion kg of invisible e-waste are in the e-toy category: Race car sets, electric trains, music toys, talking dolls and other robotic figures, biking computers, drones, etc.
- In all, some 7.3 billion individual items discarded annually, an average of about one e-toy for every man, woman and child on earth.

- An estimated 844 million vaping devices are thrown away each year.
- About 950 million kg of cables containing precious, easily recyclable copper was discarded in 2022. This was enough cable to circle the earth 107 times.
- Much of this e-waste is stored in homes, perhaps put aside for potential future use, the study said.
- Improper disposal of invisible e-waste poses a substantial environmental risk, as hazardous components in these items, such as lead, mercury, and cadmium, can contaminate soil and water if not appropriately managed.

#### About WEEE Forum (Established in 2002)

It is an international association that works towards promoting the proper collection, recycling, and disposal of electronic waste, aiming to minimize its environmental impact and maximize resource recovery.

#### Provisions Regarding E-Waste In India

- **E-Waste Management Rules, 2016** - These rules were introduced by the Ministry of Environment, Forest and Climate Change (MoEFCC) to regulate the management of e-waste in the country.
- **Extended Producer Responsibility (EPR)** - It holds manufacturers, importers, and brand owners responsible for the collection, recycling, and safe disposal of e-waste generated from their products.
- **Authorized E-Waste Recyclers** - Only authorized recyclers are permitted to handle and process e-waste. These recyclers are required to adhere to strict guidelines to ensure safe and environment friendly recycling practices.
- **E-Waste Exchange** - It encourages the establishment of e-waste exchange platforms, which facilitate the proper disposal and recycling of e-waste by connecting waste generators with authorized recyclers.

#### High Cost of Cheap Water Report

A new report titled “The High Cost of Cheap Water,” was released by the Worldwide Fund for Nature (WWF) on World Food Day (on 16th October).

#### Key Highlights of the Report

- **Water Blindness:** There is a lack of awareness and understanding of the importance of water resources, the report refers to it as water blindness.
- **Global Economic Value (Direct & Indirect) of Water:** In 2021, the estimated global economic value of water was around US\$58 trillion, equivalent to 60% of the world's GDP.
  - Direct economic benefits, such as water consumption for households and irrigation amount to \$7.5 trillion annually.
  - Indirect benefits, including water purification, soil health improvement, carbon storage, and protection against floods and droughts, are estimated at approximately \$50 trillion annually.
- **Loss of Wetlands:** The world has lost a third of its remaining wetlands since 1970.
- Freshwater wildlife populations have, on average, declined by 83%, contributing to water shortages, pollution, and dwindling food sources like freshwater fisheries.

Primary Threats	Recommendations
<ul style="list-style-type: none"> <li>• Unsustainable agricultural practices (to rivers and floodplains)</li> <li>• Over-extraction of water for crop irrigation</li> </ul>	<ul style="list-style-type: none"> <li>• Sustainable land use practices</li> <li>• Countries must maintain free-flowing rivers for agricultural productivity.</li> </ul>

As per World Bank, agriculture currently accounts for over 70% of the freshwater used by humanity.

### **World Wildlife Fund for Nature (WWF) (headquartered at Gland, Switzerland.)**

- It is an international non-governmental organization established in 1961.
- It has been publishing the Living Planet Report every two years since 1998.
- It works around six areas: food, climate, freshwater, wildlife, forests, and oceans

### **World Food Day**

1. It is celebrated on 16th October every year (1st celebrated in 1979) to mark the anniversary of the establishment of the Food and Agriculture Organisation (FAO) in 1945.
2. FAO is a specialised agency of the United Nation that leads international efforts to defeat hunger (Focuses on Sustainable Development Goal 2 (SDG 2) i.e., Zero Hunger).
3. **Theme of World Food Day 2023:** “Water is life, Water is food. Leave no one Behind.”

### **Green Credit Program**

To take ahead 'Lifestyle for Environment' ('LiFE') movement the Ministry of Environment, Forest and Climate Change has introduced the Green Credit Program (GCP).

#### **About GCP**

- It was first announced in the 2023-24 Union Budget
  - Green Credit refers to a unit of incentive provided to individuals and entities engaged in activities that deliver a positive impact on the environment.
- The Indian Council of Forestry Research and Education (ICFRE) will be the administrator of the programme.

**Objective:** To create a market-based mechanism for undertaking environment-friendly activities such as afforestation programmes, water conservation by providing additional incentives in the form of green credits.

#### **Features**

- Benchmarks will be developed for each green credit activity under the programme.
- 8 activities (Sectors) in which green credit can be earned under this programme: 1) Tree plantation, 2) Water, 3) Sustainable agriculture, 4) Waste management, 5) Air pollution reduction, 6) Mangrove conservation, 7) Eco mark & 8) Sustainable Infrastructure

#### **About Mission LiFE (introduced by the PM of India during COP26 in Glasgow in 2021)**

- It is a global plan of action led by India that aims to save the planet from the disastrous consequences of climate change.
- India included LiFE in its updated Nationally Determined Contributions (NDCs) submitted to UNFCCC. LiFE puts individual and collective duty on everyone to live a life that is in tune with Earth and does not harm it. Those who practice such a lifestyle are recognised as Pro Planet People, under Mission LiFE.
- **Objectives:**
  - To mobilize at least one billion Indians and other global citizens to take individual and collective action for protecting and preserving the environment in the period 2022 to 2027.
  - Within India, at least 80% of all villages and urban local bodies are aimed to become environment-friendly by 2028.

- **Three-pronged strategy of Mission LiFE:**

- **Change in Demand (Phase I):** Nudging individuals across the world to practice simple yet effective environment-friendly actions in their daily lives.
- **Change in Supply (Phase II):** Enabling industries and markets to respond swiftly to the changing demand (supply)
- **Change in Policy (Phase III):** To influence government and industrial policy to support both sustainable consumption and production (policy).

### Climate Change and its Effect on Amphibians

Study titled 'Ongoing declines for the world's amphibians in the face of emerging threats' published in the Nature journal reveals significant threats to Amphibians worldwide particularly from Climate Change.

- The assessment evaluated the extinction risk of more than 8,000 amphibian species from all over the world, including 2,286 species evaluated for the first time.
- The study is based on the second global amphibian assessment coordinated by the Amphibian Red List Authority, a branch of the Amphibian Specialist Group of the International Union for Conservation of Nature's (IUCN) Species Survival Commission.

#### Key Findings of the Study

1. **High Threat to Amphibians:** Two of every five amphibians were threatened with extinction.
2. **Global Threat Comparison:** 40.7% of the species being globally threatened – the highest for any species. That compares with 26.5% of mammals, 21.4% of reptiles and 12.9% of birds.
3. **Drivers of Status Deterioration (between 1980 and 2004):**
  - **Climate change:** The primary threat for 39% of amphibian species. Climate change effects are of increasing concern.
  - **Habitat loss:** The second most common threat, affecting 37% of amphibian species.
  - **Other threats** to amphibians include Disease, Pollution, Toxic chemicals, UV radiation.
  - **Threats in terms of Occupational Structure:** The biggest threat was assessed to be agriculture contributing to 77%, timber and plant harvesting impacting 53% of them and infrastructure development at 40%.
4. **Emerging Concerns:** Ongoing climate change effects are now of increasing concern, driving 39% of status deteriorations since 2004, followed by habitat loss amounting to 37%.
5. **Hotspots of Threatened Species:** The highest concentration of threatened species was mapped to be located in India's Western Ghats, Sri Lanka, Madagascar, Caribbean islands, tropical Andes, Mesoamerica and the mountains and forests of western Cameroon and eastern Nigeria.

#### About Amphibians (For Example: frogs, toads, salamanders, and newts)

1. Amphibians (live both on land and water) are a class of cold-blooded multicellular vertebrates.
  - Cold-blooded animals can be defined as animals which cannot regulate their internal body temperature with the change in the environment.
2. Semi-permeable skin All can breathe and absorb water through their very thin skin. Their moist, permeable skin makes amphibians vulnerable to drought and toxic substances

#### Importance of Amphibians

- **Indicators of Ecosystem Health:** Amphibians presence or absence can serve as an early warning system for environmental issues like pollution, habitat loss, and climate change.

- **Control of Insect Populations:** Many amphibians, such as frogs and toads, are voracious insect predators. They help control insect populations.
- **Nutrient Cycling:** Amphibians tadpoles and adults play roles in nutrient transfer between aquatic and terrestrial ecosystems, which benefits plant growth.
- **Diverse Diets:** Amphibians have a diverse diet, consuming various organisms, including algae, insects, and other invertebrates. It helps in preventing the overpopulation of specific organisms.
- **Prey for Other Species:** Amphibians serve as a food source for many predators, including birds, reptiles, and mammals.
- **Scientific and Medical Research:** Amphibians, especially frogs, have been valuable in scientific & medical research.
- **Cultural Significance:** They hold cultural & symbolic significance in various cultures worldwide. They are subjects of folklore, art, stories & can play essential roles in cultural identity.

### State of Global Water Resources 2022 Report

According to the World Meteorological Organization's (WMO's) State of Global Water Resources report 2022, the world's water cycle is severely impacted by climate change and human activities in 2022.

#### About the Report

It provides an independent, global scale quantitative assessment of the status of 2022 with respect to hydrological normal for various variables like river discharge, groundwater, evaporation, soil moisture, inflow to reservoirs etc.

#### Key Highlights Of This Report

1. **River Discharge** - Over 50% of global catchment areas and reservoirs displayed deviations from typically normal conditions, of which a majority were drier than usual.
2. **Anomalies in terrestrial water storage** - The anomalies in Terrestrial Water Storage for 2022 and trends since 2002 shows hotspots of decline in Ground Water levels.
3. **Soil moisture and evapotranspiration** - Anomalies in soil moisture and evapotranspiration also matched the deviations noted in river discharge conditions.
4. **Rising Incidences of Extreme Weather Events:** The impact on the hydrological cycle has resulted in droughts and intense precipitation events, causing unpredictable water cycles that have led to widespread disruptions.
5. Large parts of the world experienced drier conditions in 2022 than those recorded on average for the equivalent periods over the last 30 years.
6. **Asian Water Tower (AWT)** - From 2000 to 2018, total glacier mass in region decreased by approximately 4.3%.
  - AWT ranks as the third-largest repository of ice and snow globally, following the Arctic and Antarctic regions, both of which experienced substantial glacial melting in 2022. AWT includes Tibetan Plateau, Himalayas, Karakorum, Hindu Kush, the Pamirs, and Tien Shan Mountains - collectively called the Third Pole.
  - For instance, North Sikkim witnessed devastating glacial lake outburst floods after the South Lhonak Lake burst.

#### About WMO (Established in 1950 With HQ in Geneva)

- WMO originated from the International Meteorological Organization (IMO), which was established after the 1873 Vienna International Meteorological Congress.



- It is a specialized agency of the United Nations whose mandate covers weather, climate and water resources with membership of 193 Member States and Territories (including India).
- It is closely associated with the Intergovernmental Panel on Climate Change (IPCC).

### Melghat Tiger Reserve (MTR)

A tiger was recently found dead in the Melghat Tiger Reserve (MTR) buffer zone. The tiger toll in Maharashtra in the last 10 months has reached 42 — perhaps the highest in the country.

<b>Geographic Location</b>	<ul style="list-style-type: none"> <li>• Situated in the Amaravati district of Maharashtra.</li> <li>• Located on the southern offshoot of the Satpura Hill Range, called Gavilgarh Hill.</li> </ul>
<b>Features</b>	
<ul style="list-style-type: none"> <li>• It was established as a wildlife sanctuary in 1967 and was declared a tiger reserve in 1974.</li> <li>• It was the 1<sup>st</sup> tiger reserve in Maharashtra. It was among the 1<sup>st</sup> nine tiger reserves notified in 1973-74 under Project Tiger, a wildlife conservation project initiated in India in 1972 to protect Bengal tigers.</li> <li>• It is considered a stronghold of the critically endangered forest owl.</li> <li>• <b>Vegetation:</b> The forest is a tropical dry deciduous in nature, dominated by teak.</li> <li>• <b>Rivers:</b> The reserve is a catchment area for five major rivers: the Khandu, Khapra, Sipna, Gadga, and Dolar, all are tributaries of the river Tapti.</li> <li>• <b>Tribes:</b> The Korkus are the largest tribal community in Melghat. Other communities include the Gawli community, the Gond tribe.</li> </ul>	
<b>Fauna</b> - Sloth Bear, Indian Gaur, Sambar deer, Leopard, Nilgais, dhole, hyena, jungle cat, langur, etc.	
<b>Flora</b> - Teak, Bamboo, etc.	

### Global Declaration of River Dolphins

11 Asian and South American Countries Signed a first-of-its-kind Global Declaration to protect the world's six surviving species of River Dolphins by 2030.

<b>Signed &amp; adopted by</b>	11 countries: Bangladesh, Bolivia, Brazil, Cambodia, Colombia, Ecuador, India, Nepal, Pakistan, Peru and Venezuela.
<b>Aim</b>	To coordinate conservation efforts and implement key actions needed to halt the decline of river dolphin species globally.
<b>Status of Decline in River Dolphin Population</b>	
<ul style="list-style-type: none"> <li>• River dolphin populations have fallen by 73% since the 1980s due to multiple threats, such as hunting, entanglement in fishing nets, habitat loss, and pollution.</li> <li>• Climate Change Impact threatens river dolphins, as evident in the deaths of over 150 river dolphins in the Amazon's Lake Tefé due to drought.</li> <li>• There are still only 2,000 Indus river dolphins left in Pakistan.</li> </ul>	
<b>Six surviving Species of River Dolphins</b>	
<p>River dolphins are any of six species of small, usually freshwater aquatic mammals that are related to whales (Order Cetacea). They are important indicators of the health of rivers. A seventh river dolphin species, the Chinese river dolphin, or baiji, was declared extinct in 2007.</p> <p>1. <b>Ganges River Dolphin (Endangered):</b> found in the Ganges, Brahmaputra, and Meghna River systems in</p>	

South Asia, primarily in India, Bangladesh, and Nepal.

2. **Indus River Dolphin (Endangered):** This species inhabits the Indus River in Pakistan and parts of the adjoining river systems. It is characterized by its long snout.
3. **Amazon River Dolphin (Endangered):** The largest river dolphin species. They live in the Tapajos River in Brazil. It is known for its distinctive pink coloration.
4. **Irrawaddy Dolphin (Endangered):** Found in Coastal areas in South & Southeast Asia, rivers including Ayeyarwady (Myanmar), Mahakam (Indonesian Borneo), Mekong, & Chilka Lake (India)
5. **Yangtze River Dolphin (Critically Endangered):** The world's only freshwater porpoise. They swim in the Yangtze River (the longest river in Asia) in China.
6. **Tucuxi River Dolphin (Endangered):** Tucuxis are freshwater dolphins that live in the Amazon River and its tributaries.

#### Steps Taken To Protect River Dolphin in India

- **Listing dolphins in the Wildlife (Protection) Act, 1972:** Gangetic River dolphins are listed in Schedule I of the act, which gives them the highest degree of protection. Common dolphins are listed in Schedule 2 of the act, which makes them a protected species.
- Designating the Gangetic River dolphin as India's national aquatic animal
- **Establishing the Vikramshila Ganges Dolphin Sanctuary:** This sanctuary is located in Bihar and covers a 60 kilometer stretch of the Ganges River.
- **Observing National Ganga River Dolphin Day:** The National Mission for Clean Ganga observes this day on October 5.
- The Ministry has included Gangetic River dolphin as one of the 22 critically endangered species for providing financial assistance to States under the Centrally sponsored scheme 'Development of Wildlife habitats.
- **A comprehensive action plan (2022-2047)** has been developed to ensure well-being of the river dolphin and aquatic habitats
- **Making dolphin hunting illegal:** Conviction for hunting dolphins can result in up to three years in prison or a Rs 25,000 penalty, or both.

#### UNCCD Data Dashboard on Land Degradation

The UN Convention to Combat Desertification (UNCCD) has launched its, 1<sup>st</sup>-ever Data Dashboard.

##### About Data Dashboard

- It compiles national reporting figures from 126 countries, which shows that land degradation is advancing at an astonishing rate across all regions.
- 21<sup>st</sup> session of the UNCCD will be organised in Samarkand, Uzbekistan in November. Reviewing worldwide progress towards Land Degradation Neutrality (LDN) and resolving associated concerns will be the main topics of this event.
  - ✓ Land Degradation Neutrality (LDN) is a simple idea and a powerful tool, means to secure enough healthy and productive natural resources by avoiding Degradation whenever possible and restoring land that has already been degraded.

**Key findings:** Between 2015 - 2019, at least 100 million hectares of healthy and productive land were **degraded every year**. The main causes of land degradation includes soil pollution, soil erosion, overgrazing, extraction of minerals at a repeated stage, and drought.

Worldwide	In India
<ul style="list-style-type: none"> <li>• 25% of the reported population is exposed to land degradation. 4.7% of the world's population, or 1.84 billion people, are exposed to severe or extreme drought.</li> <li>• Sub-Saharan Africa, Western and Southern Asia, Latin America, and the Caribbean have experienced land degradation rates faster than the global average, affecting at least 20% of their total land area.</li> </ul>	<ul style="list-style-type: none"> <li>• 9.5% of India's land is degraded, and 36.8% is drought prone.</li> <li>• The UNCCD's data dashboard indicates that 18.39% of India's population, were exposed to land degradation.</li> <li>• Degraded land area in India has been increased from 4.42% in 2015 to 9.45 % in 2019.</li> </ul>

### Initiatives to Combat Land Degradation

#### Worldwide

##### The United Nations Convention to Combat Desertification (UNCCD)

- The UNCCD was established in 1994 as the sole legally binding international treaty dedicated to combatting desertification, land degradation, and drought.
- This Convention focuses its efforts on arid, semi-arid, and dry sub-humid regions, collectively known as drylands. Within the framework of the UNCCD, more than 100 countries have made commitments to combat and reverse land degradation across a total of over 450 million hectares by 2030, with 250 million hectares of this land being used for agriculture.

##### Land Degradation Neutrality (LDN) Target Setting Programme:

- The UNCCD 2018-2030 Strategic Framework represents a comprehensive global commitment to realizing Land Degradation Neutrality (LDN) by endeavoring to restore the productivity of extensive areas of degraded land.

##### The Global Mechanism (GM) of the UNCCD:

- The Global Mechanism (GM) is an organisational unit established by the UNCCD in 1994 to support the implementation of the Convention.
- GM works directly with countries on LDN Target Setting, LDN Transformative Projects and programmes, and the Drought Initiative.

##### The Bonn Challenge:

- It was launched in 2011 by the International Union for Conservation of Nature (IUCN) and the German government.
- Its goal is to bring 150 million hectares of degraded and deforested lands into restoration by 2020 and 350 million hectares by 2030.

##### The Great Green Wall Initiative:

- It is an African-led initiative to restore biodiversity, rehabilitate Africa's degraded landscapes, and transform millions of lives in the Sahel, by restoring 100 million hectares of land.

#### In India

##### National Action Plan to Combat Desertification (NAPCD-Part of UNCCD):

- It is a comprehensive plan launched in 2010 to address desertification, land degradation, and drought in the country.

##### Conference of the Parties 14 (COP14, 2019) of UNCCD in India:

- India hosted the UNCCD COP for the first time. The Conference adopted the Delhi Declaration in which parties expressed commitment for Peace Forest Initiative and recovery of 26 million hectares of

degraded land in India.

### The Peace Forest initiative:

- It was established by South Korea in 2019 at the 14th COP to the UNCCD in New Delhi, India.
- The aim of this initiative is to foster collaboration among nations to restore degraded lands and forests in conflict-affected areas while also advancing peace and trust.

### Miscellaneous Efforts

- India joined voluntary Bonn Challenge pledge to bring into restoration 26 million hectares of degraded and deforested land by 2030.
- Desertification and **Land Degradation Atlas** of India (published by ISRO), for state-wise areas of degraded land.
- **Aravali Green Wall Project**, which is an ambitious plan to create a 1,400km long and 5km wide green belt buffer around the Aravali Mountain range covering states of Haryana, Rajasthan, Gujarat and Delhi.
- India set up a Centre of Excellence at the Forest Research Institute, Dehradun, for providing technical assistance to meet the challenges.

## Climate Polycrisis

### About Climate Polycrisis

1. It refers to the interconnected and compounding crises related to climate change that are affecting the planet not just in a few sectors but across several sectors and domains.
2. It encompasses the physical impacts of climate change (rising temperatures, sea-level rise, and extreme weather events) and the social, economic, and political challenges that arise from these impacts.

Factor	Causes	Effects	Mitigation
Green House Gas Emission	Deforestation, Overconsumption and Waste	Global Warming (extreme weather events-Droughts, Floods, Sea Level Rise)	Reforestation, Sustainable Agriculture, Transition to Renewable Energy
Biodiversity Loss	Anthropogenic Factors (Hunting etc)	Disrupts Food Web & Ecosystem	Conservation of Biodiversity

## Operation "Kachchhap"

The Directorate of Revenue Intelligence (DRI) conducted a successful operation called "Kachchhap,".

- This operation resulted in the recovery of the 955 live baby turtles, including species like the Indian Tent Turtle, Indian Flapshell Turtle, Crown River Turtle, Black Spotted/Pond Turtle, and Brown Roofed Turtle.
- DRI serves as India's premier anti-smuggling agency, operating under the Central Board of Indirect Taxes & Customs, Ministry of Finance.

## Wildlife Sanctuary (WLS) & Tiger Reserve (TR) in News

WLS/TR (River Aspect)	Features
<b>Kalakkad-Mundanthurai TR (In Tamilnadu) (Thamirabarani Origin)</b>	1) 1st Tiger Reserve of Tamil Nadu. known as the "River Sanctuary"(as origin of 14 rivers) 2) Part of Agasthyamala Biosphere Reserve

<b>Dandeli WLS</b> <b>(In Karnataka) (birdwatcher's paradise)</b> <b>(Kali River flows)</b>	1) lies within the Kali Tiger Reserve (KTR) along with Anshi National Park 2) Housing nearly 200 species of birds, most famous for the great Indian hornbill & Malabar pied hornbill.
<b>Kolleru WLS</b> <b>(In Andhra Pradesh)</b> <b>(Between Krishna and Godavari deltas)</b> <b>(Important Bird Area (IBA))</b>	1) Kolleru Lake (Ramsar Site): Part of Sanctuary, Asia's largest freshwater lake, serves as a breeding ground for various (estimated 20 million) migratory birds along the East Coast Flyway. 2) The Atapaka Bird Sanctuary at Kolleru Lake has become a safe breeding ground for two migratory species namely, Grey Pelicans and Painted Storks.

### Global Framework on Chemicals

The United Nations Conference in Bonn (Germany) adopted a new global framework known as the Global Framework on Chemicals to reduce environmental risks from chemicals and waste.

<b>Aim</b>	To phase out lethal agricultural pesticides by 2035
<p style="text-align: center;"><b>Features (It is based around 28 targets)</b></p> <ul style="list-style-type: none"> <li>It will be set up and managed by the United Nations Environment Programme.</li> <li><b>Commitment by National governments:</b> It was committed to formulate policies in order to reduce chemical pollution by 2030.</li> </ul>	

### Climate Tipping Points

<b>What are they?</b>	<ul style="list-style-type: none"> <li>These are critical thresholds or conditions in the Earth's climate system that, if crossed, could lead to significant and irreversible changes.</li> <li><b>Climate tipping points have the potential to disrupt ecosystems, weather patterns, and the livelihoods of communities worldwide.</b></li> </ul>
<p style="text-align: center;"><b>Key Examples of Climate Tipping Points</b></p> <ul style="list-style-type: none"> <li><b>Arctic Sea Ice:</b> The rapid loss of Arctic sea ice due to warming temperatures could have far-reaching consequences for the climate system.</li> <li><b>Amazon Rainforest:</b> Deforestation and changing climate patterns could push the Amazon rainforest toward a tipping point, resulting in a shift from a lush ecosystem to a savanna.</li> <li><b>Atlantic Meridional Overturning Circulation (AMOC):</b> Changes in the circulation of the Atlantic Ocean can impact weather patterns and sea-level rise.</li> </ul>	

### Climate Investment Trap






- It refers to the challenge of balancing the need for immediate action on climate change with long-term sustainable investments.
- It can occur when short-term economic considerations hinder the transition to a low-carbon economy.
- To avoid falling into the climate investment trap, it is crucial to prioritize and incentivize sustainable investments.







## PBKnot Technology

As part of “Project Bandhan – A Knot of PBW Protection”, the South Asia Biotechnology Centre (SABC), Jodhpur, has laid out a mega field experiment cum demonstration of novel mating disruption PBKnot technology.

- The PBKnot dispenser releases sex pheromones to prevent male moths from finding females and mating, thus disrupting the reproductive cycle.
- The mating disruption has emerged as a powerful tool to manage pests such as Pink Bollarm.

## Species In News

<p><b>Watermeal</b></p> 	<ul style="list-style-type: none"> <li>• It belongs to the genus <i>Wolffia</i>, is renowned as the smallest flowering plant on Earth.</li> <li>• It is an aquatic plant that is often found floating on the surface of still bodies of water, such as ponds, lakes, and slow-moving streams.</li> <li>• Watermeal is a prolific producer of oxygen through photosynthesis and is rich in protein.</li> </ul>
<p><b>Ruddy Shelduk</b></p> 	<ul style="list-style-type: none"> <li>• It is a member of the Anatidae family, which includes ducks, geese, and swans.</li> <li>• In India it is known as the Brahminy duck.</li> <li>• It is a migratory bird distributed across in Europe, Asia, Indian Subcontinent and a few pockets in Africa.</li> <li>• It is listed as Least Concern in the IUCN Red list.</li> </ul>
<p><b>Dancing Frog</b></p> 	<ul style="list-style-type: none"> <li>• It is endemic to the Western Ghats and can be found in High altitude shola forests, wet evergreen forests, Myristica swamps, and secondary forests.</li> <li>• It popularly known as "dancing frogs" due to their peculiar habit of waving their feet to attract females and ward off competition during the breeding season.</li> <li>• They have prominent white vocal sacs.</li> </ul>
<p><b>Eumasiavenefica</b></p> 	<ul style="list-style-type: none"> <li>• Researchers have discovered a new species of bagworm moth, named <i>Eumasiavenefica</i>.</li> <li>• The new species has been named due to the peculiar shape of its bag, which resembles a wizard's hat.</li> <li>• It is the fourth species of this genus to be discovered from India.</li> <li>• It has the clever camouflage employed to escape predators.</li> </ul>
<p><b>Egyptian Vulture</b></p> 	<ul style="list-style-type: none"> <li>• It is a native bird of Europe, Central Asia and Africa, and in winters, it travels towards Asian countries, including India.</li> <li>• It inhabits open, arid areas near humans, with plenty of food options.</li> <li>• They build a large nest and will constantly replenish it during the breeding season.</li> <li>• One of the primary threats facing this species is illegal poisoning aimed at carnivores.</li> <li>• It is listed as Endangered in the IUCN Red list.</li> </ul>
<p><b>Curcuma kakchingense</b></p>	<ul style="list-style-type: none"> <li>• It is a new flowering plant species discovered in Manipur.</li> </ul>

	<ul style="list-style-type: none"> <li>• It is a member of the angiospermic family Zingiberaceae, which includes well-known plants like Curcuma (turmeric), gingers, and cardamom.</li> <li>• It is a robust plant, as tall as eight feet, having large terminal inflorescence.</li> <li>• It has been classified as "Data Deficient" (DD) under the IUCN Red List category.</li> </ul>
<p><b>Snow crabs</b></p> 	<ul style="list-style-type: none"> <li>• It lives in the coldest parts of the North Atlantic Sea and the Northern Pacific Ocean.</li> <li>• On top they are brownish in color and underneath they are lighter.</li> <li>• Males and females can be distinguished by the shape of their abdominal flaps. On males this flap is triangular, and on females it is broadly rounded.</li> <li>• These are found off the coast of Alaska in the Bering, Beaufort, and Chukchi Seas.</li> </ul>
<p><b>Paintbrush Swift</b></p> 	<ul style="list-style-type: none"> <li>• It is a butterfly species of the Hesperidae family.</li> <li>• It is identified based on two separated spots in the upper forewing cell.</li> <li>• Its habitat is distributed in northeast, central and south India, and rare in Uttarakhand.</li> <li>• It is protected in India under Schedule IV of the Wildlife (Protection) Act, 1972.</li> </ul>
<p><b>Epithemis wayanadensis</b></p> 	<ul style="list-style-type: none"> <li>• A new dragonfly species named Red-rumped Hawklet (<i>Epithemis wayanadensis</i>) has been discovered in Wayanad.</li> <li>• This new species is profoundly seasonal, taking flight exclusively during the month of October.</li> <li>• They have distinctive colour patterns for males and females.</li> </ul>
<p><b>Armageddon Reedtail</b></p> 	<ul style="list-style-type: none"> <li>• Recently discovered a new damselfly species in Kerala and named it as 'Armageddon reedtail'.</li> <li>• Its only habitat is primary montane streams, where it thrives beneath dense canopy cover.</li> <li>• This species faces the threat of extinction due to habitat loss and changing environmental conditions.</li> </ul>
<p><b>Swamp deer</b></p> 	<ul style="list-style-type: none"> <li>• It is a deer species distributed in the Indian subcontinent.</li> <li>• It is also called as barasingha.</li> <li>• It is the state animal of the Indian states of Madhya Pradesh and Uttar Pradesh.</li> <li>• It has been locally extinct in Pakistan and Bangladesh, and its presence is uncertain in Bhutan.</li> <li>• It is listed as Critically Endangered in the IUCN Red list and in the Schedule I of the Indian Wildlife (Protection) Act, 1972.</li> </ul>

## R21/Matrix-M Malaria Vaccine

World Health Organisation (WHO) recommended 2<sup>nd</sup> new vaccine, R21/Matrix-M, for the prevention of malaria in children.

- 1<sup>st</sup> vaccine was RTS,S/AS01 vaccine, which received a WHO recommendation in 2021.

### About R21/Matrix-M

<b>What is it?</b>	1 <sup>st</sup> malaria vaccine to reach the WHO's target of 75% efficacy.
<b>Developed by:</b> University of Oxford, Serum Institute of India, European and Developing Countries Clinical Trials Partnership ('EDCTP'), Wellcome Trust and European Investment Bank ('EIB')	
<b>Features</b>	
<ul style="list-style-type: none"> <li>• R21/Matrix-M vaccine has already been approved for use in Burkina Faso, Ghana, and Nigeria.</li> <li>• The vaccine will be rolled out in those African countries in early 2024 and will be available in mid-2024 in other countries.</li> </ul>	

### Extra Mile: Malaria

<b>About</b>	<ul style="list-style-type: none"> <li>• It is a mosquito-borne blood disease caused by plasmodium protozoa.</li> <li>• The parasites spread through the bites of infected female Anopheles mosquitoes.</li> <li>• In the human body, parasites initially multiply in liver cells and then attack the Red Blood Cells (RBCs).</li> </ul>
<b>Symptoms</b>	<ul style="list-style-type: none"> <li>• Fever and flu-like illness, including chills, headache, muscle ache and fatigue.</li> </ul>
<b>Facts related to Malaria</b>	<ul style="list-style-type: none"> <li>• According to the latest World malaria report, there were 247 million cases of malaria in 2021 compared to 245 million cases in 2020.</li> <li>• In 2022 there were over 45 thousand cases of malaria reported in India.</li> <li>• Children under five years of age accounted for about 80 per cent of all malaria deaths in the WHO African Region.</li> <li>• Four African countries (Nigeria, Democratic Republic of the Congo, United Republic of Tanzania and Niger) accounted for just over half of all malaria deaths worldwide.</li> <li>• Gene Drive is a type of genetic engineering technique that modifies genes so that they don't follow the typical rules of heredity. This technology could be an effective way to eradicate nuisance species, such as malaria-causing mosquitoes.</li> </ul>
<b>Initiatives</b>	<ul style="list-style-type: none"> <li>• <b>WHO Initiatives</b> <ul style="list-style-type: none"> <li>○ E-2025 Initiative – 25 countries has been identified to eradicate malaria by 2025 under this Initiative.</li> <li>○ High Burden to High Impact (HBHI) - Initiated in 11 high malaria burden countries, including India, to reignite the pace of progress in the global malaria fight.</li> <li>○ The WHO's Global technical strategy for malaria 2016–2030 aims to reduce malaria case incidence and mortality rates by at least 40% by 2020, at least 75% by 2025 and at least 90% by 2030 against a 2015 baseline.</li> </ul> </li> <li>• <b>Indian Initiatives</b> <ul style="list-style-type: none"> <li>○ National Strategic Plan for Malaria Elimination for 5 years was launched in 2017</li> <li>○ The Government of India sets a target to eliminate malaria in India by 2027.</li> </ul> </li> </ul>



	<ul style="list-style-type: none"> <li>○ Malaria Elimination Research Alliance-India (MERA-India) was established by the Indian Council of Medical Research (ICMR)</li> <li>○ India gifted one lakh anti-malarial tablets of hydroxychloroquine and 50,000 surgical gloves to Bangladesh.</li> <li>○ Real time data monitoring through an integrated health information platform (HIP-Malaria Portal).</li> </ul>
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### Attosecond

Nobel Prize in Physics for the 2023 has been awarded to three physicists for their research related to attosecond pulses of light.

- Three physicists are Pierre Agostini, Ferenc Krausz, and Anne L'Huillier.

#### About Attosecond Pulses

- These are incredibly short bursts of light, lasting for just a billionth of a billionth of a second.
- These have allowed scientists to capture the fastest events ever recorded, with a time resolution on the order of attoseconds.
  - It is a unit of time in the International System of Units (SI), which is equal to  $1 \times 10^{-18}$  of a second (one quintillionth of a second).
- These pulses are generated by a process called high harmonic generation, where intense laser pulses interact with a gas target to produce a broad spectrum of harmonics, including attosecond pulses.

#### Applications

- **Ultrafast Electron Dynamics** - It allow scientists to study the dynamics of electrons in atoms and molecules.
- **Probing Materials** - By using it scientists can observe and understand the behavior of electrons in solids revealing insights into phenomena like conductivity, magnetism, and superconductivity.
- **Controlling Electron Behavior** - It enable researchers to manipulate and control the behavior of electrons.
- **Imaging Molecular Structure** - By inducing high-energy electron emission, researchers can create a holographic-like pattern that provides information about the molecular arrangement.

### Quantum Dots

Nobel Prize in chemistry for the 2023 has been awarded to three scientists for the discovery and synthesis of quantum dots.

- 3 scientists are MounjiBawendi, Louis E.Brus and Aleksey Ekimov.

<b>What Are Quantum Dots?</b>	
	<ul style="list-style-type: none"> <li>• The properties of any element depend on how many electrons it has. However, when matter is tiny, of nano-dimensions, its properties depend on its size.</li> <li>• The smaller a particle, the more its electrons are squeezed together, and that affects its properties. Such particles, whose size determines their behaviour, are called quantum dots.</li> <li>• They are typically made from materials like cadmium selenide, lead sulfide, or indium arsenide.</li> <li>• Quantum dots are particles that are a few nanometres wide.</li> <li>• They exhibit unique optical properties due to their small physical size.</li> </ul>
<b>Scientists And Their Individual Contributions</b>	
Dr.Ekimov	<ul style="list-style-type: none"> <li>• In the early 1980s, he succeeded in creating size-dependent quantum effects in coloured</li> </ul>

	glass. He found that different ways of preparing this glass led to it absorbing light differently. It happened because it had crystals of different sizes.
Dr. Brus	<ul style="list-style-type: none"> <li>In 1983, Dr. Brus and his colleagues went a step ahead and prepared similar crystals in a liquid solution, rather than in a glass.</li> </ul>
Dr. Bawendi	<ul style="list-style-type: none"> <li>Finally, in 1993, Dr. Bawendi developed a technique to make these peculiar crystals i.e. the quantum dots of well-defined sizes and with high optical quality.</li> </ul>

#### Applications

- Quantum Dot Televisions:**– These are used in display technologies, such as QLED (Quantum-dot Light Emitting Diode) displays, to enhance color reproduction and brightness.
- Biomedical and Biotechnology:** Quantum dots are used in biological and medical research for labeling and tracking molecules, cells, and tissues. They provide advantages in terms of brightness, photostability, and multiplexing capabilities.
- Solar Energy** - By incorporating quantum dots into solar cell designs, researchers aim to capture a broader range of light wavelengths, leading to enhanced light absorption and energy conversion.
- Medical Imaging** - These serve as valuable contrast agents in medical imaging techniques like fluorescence imaging and MRI.
- Security Markers** - Quantum dots can be used as security markers on currency and documents as an anti-counterfeit measure.

### Burevestnik Missile (Skyfall or Storm petrel)

Russia has claimed to have successfully tested its nuclear-powered, nuclear-armed cruise missile, the Burevestnik.

#### About Burevestnik Missile (ground-launched, low-flying cruise missile)

<b>About</b>	<ul style="list-style-type: none"> <li>It is a ground-launched, low-flying cruise missile.</li> <li>It is not only capable of carrying a nuclear warhead but is also nuclear-powered.</li> <li>It is designated as SSC-X-9 Skyfall by NATO.</li> </ul>
<b>Features</b>	<ul style="list-style-type: none"> <li>It is powered by a small nuclear reactor, which heats up air to propel the missile forward.</li> <li>It has the ability to bypass missile defense systems.</li> <li>It has a range of up to 14,000 miles (22000 km).</li> <li>The missile is also designed to fly at low altitudes, much lower than a conventionally powered cruise missile, which would make it harder for air-defence radar to detect.</li> </ul>

### Atmospheric Perturbations around Eclipse Path (APEP)

NASA is set to launch a mission known as APEP to study how a solar eclipse affects the upper atmosphere. During an eclipse, the sudden drop in sunlight causes changes in the ionosphere, creating waves that ripple through this atmospheric layer.

#### About APEP Mission

<b>Objective</b>	To unravel the enigma of how the upper atmosphere reacts during a solar eclipse, particularly during the pivotal moments of sudden light reduction.
<b>Features</b>	<ul style="list-style-type: none"> <li>It will launch three rockets, 1<sup>st</sup> will be launched about 35 minutes before the peak eclipse, one during the peak and the last one about 35 minutes after.</li> <li>Each rocket will deploy four small scientific instruments that will measure changes in</li> </ul>

density, temperature, and electric and magnetic fields.

### Messenger RNA (mRNA)

Nobel Prize in Physiology or Medicine for the 2023 has been awarded to two scientists for their work enabled the development of mRNA vaccines against Covid-19. Two scientists are Katalin Kariko and Drew Weissman.

<b>About mRNA</b>	<ul style="list-style-type: none"><li>• It is a vital molecule in the field of genetics and molecular biology.</li><li>• It serves as a crucial intermediary between DNA and protein synthesis, playing a pivotal role in the process of gene expression.</li></ul>
<b>Structure and Formation</b>	<ul style="list-style-type: none"><li>• It is a single-stranded molecule composed of nucleotides, similar to DNA.</li><li>• It is synthesized through a process called transcription, where an enzyme called RNA polymerase binds to a specific region of DNA and creates a complementary mRNA strand.</li><li>• This newly formed mRNA molecule carries the genetic information encoded in the DNA sequence.</li></ul>
<b>Function</b>	<ul style="list-style-type: none"><li>• Its primary function is to carry the genetic instructions from the DNA to the ribosomes, the cellular machinery responsible for protein synthesis.</li><li>• It acts as a template for protein production, providing the necessary information for the assembly of amino acids in the correct order.</li></ul>
<b>About mRNA vaccine</b>	<ul style="list-style-type: none"><li>• mRNA vaccines work by introducing a piece of mRNA that corresponds to a viral protein, usually a small piece of a protein found on the virus's outer membrane.<ul style="list-style-type: none"><li>○ By using this mRNA, cells can produce the viral protein.</li><li>○ As part of a normal immune response, the immune system recognizes that the protein is foreign and produces specialized proteins called antibodies.</li><li>○ Once produced, antibodies remain in the body, even after the body has rid itself of the pathogen, so that the immune system can quickly respond if exposed again.</li><li>○ Antibodies help protect the body against infection by recognizing individual viruses or other pathogens, attaching to them, and marking the pathogens for destruction.</li><li>○ If a person is exposed to a virus after receiving Mrna vaccination for it, antibodies can quickly recognize it, attach to it, and mark it for destruction before it can cause serious illness.</li></ul></li></ul>

### Quantum Engine

Researchers have made a groundbreaking discovery by developing a quantum engine, referred to as the Pauli engine.

<b>Quantum Engine</b>	<ul style="list-style-type: none"><li>• It is built upon the unique characteristics of bosons and fermions.</li><li>• It can convert the energy difference between two quantum states of a group of atoms into useful work.</li><li>• It comprises a gas of lithium-6 atoms confined within an optical and magnetic trap.</li><li>• The behavior of this gas can be adjusted to mimic bosonic or fermionic characteristics by manipulating the surrounding magnetic field strength.</li><li>• This adaptability arises from the atoms' capability to form pairs, giving rise to bosonic molecules or dissociating into individual fermionic atoms depending on the magnetic field's strength.</li></ul>
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	<ul style="list-style-type: none"> <li>It opens new avenues for exploring quantum thermodynamics and its potential applications in various fields of physics.</li> </ul>
<b>Quantum State</b>	<ul style="list-style-type: none"> <li>It refers to the state of a quantum system, which is described by a mathematical object called a wavefunction. <ul style="list-style-type: none"> <li>The wavefunction contains information about the probabilities of different outcomes when measurements are made on the system.</li> </ul> </li> <li>It can exhibit properties such as superposition, where a system can exist in multiple states simultaneously, and entanglement, where the states of two or more particles become correlated.</li> <li>The study of quantum states is fundamental to understanding quantum mechanics and its applications in various fields such as quantum computing and quantum communication.</li> </ul>

### Orionid Meteor Shower

- It is an incredible celestial event that occurs every October.
- It is associated with Halley's Comet, which leaves behind a trail of debris as it orbits the Sun.
- This debris creates a trail that Earth intercepts, resulting in the Orionid meteor shower.
- Orionids are particularly special because they are fast-moving meteors, traveling at a speed of about 66 kilometers per second (41 miles per second).

### What Causes Meteor Showers?

- Meteors come from leftover comet particles and bits from asteroids.
- As they enter the Earth's atmosphere at high speed, they burn up, creating a spectacular shower.

### Tilapia Parvovirus (TiPV)

India's 1<sup>st</sup> tilapia parvovirus was reported in Tamil Nadu.

### About Tilapia Parvovirus

<b>About</b>	<ul style="list-style-type: none"> <li>It is a viral pathogen that primarily affects tilapia (a freshwater fish species). <ul style="list-style-type: none"> <li>TiPV has caused high mortality rates in Tilapia</li> </ul> </li> </ul>
<b>Feature</b>	<ul style="list-style-type: none"> <li>It belongs to the Parvoviridae family, known for its small, non-enveloped, single-stranded DNA viruses.</li> <li>The discovery of TiPV in India is the 3<sup>rd</sup> known occurrence after China (2019) and Thailand (2021).</li> </ul>
<b>Effect</b>	<ul style="list-style-type: none"> <li>It can pose a threat to the biodiversity and ecology of freshwater bodies.</li> <li>It can also affect the food security and nutrition of the people who depend on tilapia as a source of protein and income.</li> </ul>
<b>Treatment</b>	<ul style="list-style-type: none"> <li>Currently no vaccine is available against TiPV.</li> </ul>
<b>Transmission</b>	<ul style="list-style-type: none"> <li>TiPV spreads through direct contact with infected fish or contaminated water sources.</li> <li>Rapid transmission is common in densely populated fish ponds within aquaculture environments.</li> <li>The introduction of infected fish or contaminated equipment accelerates the virus's dissemination.</li> </ul>

## Siena Galaxy Atlas (SGA)

<b>About SGA</b>	<ul style="list-style-type: none"> <li>It is a digital atlas, features detailed images of 400,000 galaxies in the cosmic neighbourhood of Milky Way.</li> </ul>
<b>Features</b>	<ul style="list-style-type: none"> <li>It was created to get to know our universe better through several of the known galaxies.</li> <li>It was created using data from three astronomical surveys collected between 2014 and 2017 at Cerro Tololo Inter-American Observatory (CTIO) and Kitt Peak National Observatory (KPNO).</li> <li>Together these surveys are known as the DESI Legacy Surveys.</li> </ul>
<b>Significance</b>	
<ul style="list-style-type: none"> <li>It helps astronomers spot patterns that help categorise new discoveries, such as stars that suddenly flare and then disappear (thus called 'transients').</li> <li>These atlases also allow astronomers to identify which objects are contenders for detailed follow-up studies.</li> <li>It helps in investigating everything, from the births and evolutions of galaxies to the distribution of dark matter.</li> </ul>	
<b>How is SGA different from previous cosmic atlases?</b>	<ul style="list-style-type: none"> <li>The SGA is dependent on <b>state-of-the-art digital images</b> captured by advanced technology, unlike previous atlases which relied on antiquated equipment and photographic plates.</li> <li>As it is built on the images captured with highly sensitive instruments, it boasts of having the most accurate data.</li> <li>It is also the 1<sup>st</sup> cosmic atlas to feature the light profiles of galaxies - a curve that describes how the brightness of the galaxy changes from its brightest point to its dimmest.</li> </ul>

## RISC-V Technology

Chip designer Qualcomm said that it is partnering with Alphabet's Google to make wearable devices like smartwatches using chips based on RISC-V technology.

<b>About RISC-V technology</b>	<ul style="list-style-type: none"> <li>It is an open-source (freely available for anyone to use) instruction set architecture (ISA) that allows for the design &amp; implementation of processors.</li> <li>'V' stands for the 5<sup>th</sup> generation of processors built on the concept of the reduced instruction set computer (RISC) which simplifies the instruction set for improved performance and efficiency.</li> </ul>
<b>Applications</b>	Wearables, Industrial, IoT, and Home Appliances, Smartphones, Automotive, High-Performance Computing (HPC), and Data Centers.
<b>Significance</b>	
<ul style="list-style-type: none"> <li><b>Flexibility</b> - It provides a modular approach to designing processors, allowing developers to choose the specific features and extensions they need for their applications.</li> <li><b>Scalability</b> - It can be implemented in a variety of hardware designs, ranging from small microcontrollers to large-scale server systems.</li> <li><b>Cost-effectiveness</b> - Since it is an open-source technology, there are no licensing fees associated with using the RISC-V ISA.</li> <li><b>Innovation and Research</b>: RISC-V provides a platform for innovation and experimentation in computer architecture. It has been adopted for research projects, enabling researchers to explore new ideas in processor design and architecture.</li> <li>It allows designers to generate numerous tailored processors, expediting the path to market. The shared</li> </ul>	

processor IP further reduces the time required for software development.

### Extra Mile: Digital India RISC-V (DIR-V) Program

Ministry of Electronics & IT announced the Digital India RISC-V Microprocessor (DIR-V) Program.

- Its overall aim is to enable creation of Microprocessors for the future in India, for the world and achieve industry-grade silicon. The program acknowledges the increasing demand for silicon chips in today's digitized world.
- Its primary goal is to promote indigenous innovation in the field of microprocessors, laying the foundation for self-reliance ("Atmanirbhar Bharat").
- As emerging technologies such as 5G & 6G transform the digital terrain, DIR-V envisions its applicability across diverse domains, including cloud services, Internet of Things (IoT), and sensor technologies.
- The Blueprint of the DIR-V Program with – SHAKTI Processor by IIT Madras and VEGA Processor by C-DAC is announced to catalyze the semiconductor ecosystem in the country.

### Bright Transient Survey Bot (BTSbot)

Artificial intelligence (AI) system named Bright Transient Survey Bot (BTSbot) autonomously detected (with no human intervention), identified, and classified its 1<sup>st</sup> supernova.

- It detected the newly discovered supernova named SN2023tyk in data from the Zwicky Transient Facility (ZTF)

### About BTSbot (developed by Northwestern University, USA)

- The system was trained on a massive dataset of images of supernovas and other celestial objects. This dataset included over 1.4 million images from nearly 16,000 sources.
- This innovative system not only automates the entire process of searching for new supernovae across the night sky but also eliminates the potential for human error, significantly enhancing the speed of detection.

### Significance of AI in Astronomy

- **Data Analysis** – It can analyze vast amounts of astronomical data more accurately than humans.
- **Pattern Recognition** - They can identify patterns, anomalies, and correlations that might not be immediately apparent to astronomers.
- **Image Processing** - AI techniques like deep learning can enhance the quality of astronomical images, remove noise, and improve resolution.
- **Classification** - AI algorithms can also classify objects in images, such as galaxies, stars, and asteroids, based on their unique features.

### DANGER (Deleterious and ANTicipatable Guides Evaluated by RNA-sequencing)

Researchers developed a software tool called DANGER (Deleterious and ANTicipatable Guides Evaluated by RNA-sequencing) analysis that provides a way for the safer design of genome editing in all organisms.

### About DANGER

- It is a new software tool that makes genome editing safer by overcoming limitations in current CRISPR technology. Unlike traditional methods that rely on a reference genome, it works by conducting risk-averse on- and off-target assessments using RNA-sequencing data.
- DANGER refers to a strategy or approach that uses RNA-sequencing (RNA-seq) technology to evaluate the effectiveness and potential off-target effects of guide RNAs (gRNAs) used in CRISPR-Cas9 gene editing.
  - Guide RNAs are short RNA sequences that guide the Cas9 nuclease to a specific target DNA sequence

for editing.

### Method or Technique: How DANGER works?

- 1) Selection of Candidate gRNAs:** Researchers select candidate guide RNAs for a specific gene-editing project.
- 2) RNA Sequencing:** These selected gRNAs are used in gene editing experiments, and the resulting effects on gene expression are analyzed using RNA-seq.
- 3) Evaluation of Off-Target Effects:** By comparing the RNA-seq data with the expected outcomes, researchers can evaluate the potential off-target effects of the chosen gRNAs, including unintended changes in gene expression in other parts of the genome.
- 4) Deleterious Effects Assessment:** The term "deleterious" suggests that the method assesses whether the gene editing has adverse or harmful effects on the target and off-target genes.

By applying this approach, researchers can better assess the safety and effectiveness of guide RNAs in their CRISPR-Cas9 experiments, thus minimizing the risk of unintended and potentially harmful genetic modifications.

### How DANGER is Efficient from other genome editing methods?

For about a decade, researchers have used the CRISPR technology for genome editing. However, there are some challenges in the use of CRISPR.

- The 1<sup>st</sup> challenge is that the phenotypic, or observable, effects caused by unexpected CRISPR dynamics are not quantitatively monitored.
- A 2<sup>nd</sup> challenge is that the CRISPR technology generally depends on basic genomic data, including the reference genome.

The DANGER analysis overcomes these challenges and allows researchers to perform safer on- and off-target assessments without a reference genome.

### About Genome Editing

- It is also called gene editing is a group of technologies that give scientists the ability to change an organism's DNA. It allows genetic material to be added, removed, or altered at particular
- It could potentially decrease, or even eliminate, the incidence of many serious genetic diseases, reducing human suffering worldwide.

### Most Prominent And Commonly Used Genome Editing Techniques

- **CRISPR-Cas9:** This is a revolutionary genome editing tool that uses a guide RNA (gRNA) to target specific DNA sequences for modification. CRISPR-Cas9 is highly versatile and widely adopted in research and biotechnology.
- **TALENs (Transcription Activator-Like Effector Nucleases):** TALENs are another genome editing technology that uses engineered proteins to target and modify specific DNA sequences.
- **ZFNs (Zinc Finger Nucleases):** These are designed proteins that can be used to target and edit specific DNA sequences.
- **HDR (Homology-Directed Repair):** HDR is a genome editing technique used to introduce precise changes into the genome by providing a DNA template that the cell uses for repair.
- **Prime Editing:** Prime editing is a newer genome editing method that allows for precise and versatile DNA editing without creating double-strand breaks.

### Hemoglobin Isn't Used by RBCs Alone

A new study reported that chondrocytes-cells that make cartilage (connecting tissue between bones) also make haemoglobin.

➤ Previously, it was understood that haemoglobin was used only by Red Blood Cells (RBCs).

### About Chondrocytes (Primarily Comprises Proteoglycans And Collagen)

- These are the cells making up the cartilage and surrounded by collagenous fibres. Cartilage is a type of connective tissue that is tough, flexible, and avascular (lacks blood vessels).
- Chondrocytes play a fundamental role in the formation, maintenance, and repair of cartilage.
- **Location:** Chondrocytes are primarily found within cartilage, residing in small spaces called lacunae. These spaces are dispersed throughout the cartilage matrix.
- Haemoglobin in Chondrocytes carries oxygen and is essential for their survival.

#### Extracellular Matrix Production

- Chondrocytes are responsible for synthesizing and maintaining the extracellular matrix of cartilage. This matrix is composed of collagen fibers, proteoglycans, and water.

#### Function in Cartilage

- Chondrocytes contribute to the strength and resilience of cartilage tissue.

#### Importance in Health and Disease

- Maintaining the health of chondrocytes is crucial for preventing conditions like osteoarthritis, where the cartilage tissue becomes damaged and degenerates over time. Osteoarthritis is often characterized by a loss of chondrocytes and cartilage breakdown.

### About Haemoglobin

Haemoglobin is an iron-containing protein that develops in cells in bone marrow that become RBCs.

- It plays a crucial role in the transport of oxygen from the lungs to the body's tissues and the transport of carbon dioxide from the tissues back to the lungs for exhalation.
- It is present in RBCs of vertebrates. All vertebrates except cold-water ice fish transport oxygen via haemoglobin.

A hemoglobin (Hgb) blood test measures the amount of hemoglobin in your red blood cells. Doctors use this test to check your hemoglobin. Without iron, the body can't make hemoglobin. Anemia can occur when someone isn't getting enough iron.

### Calixcoca

A team of Brazilian engineers and vaccine specialists have developed a vaccine that kills addiction and other substance abuse related issues, called calixcoca.

#### About Calixcoca

- It generates antibodies that binds to cocaine molecules in the blood stream obstructing cocaine from reaching the brain.
- The binding process results in the enlargement of cocaine molecules, rendering them too large to enter the brain's mesolimbic system.
- This area of the brain is typically stimulated by cocaine to release dopamine, the pleasure-inducing neurotransmitter.
- Consequently, individuals who receive the vaccine will not experience the desired euphoric effects of cocaine, potentially assisting them in breaking the cycle of addiction.

The vaccine is now moving into the final phase of trials, with testing on human subjects.

#### Significance

It could revolutionize addiction treatment by providing a valuable tool for individuals at critical stages of recovery, particularly when they transition from rehabilitation.



## Inverse Vaccine

<b>What?</b>	1) A vaccine that teaches the immune system not to attack a specific target. 2) It works by directing a self-antigen to the liver, which can signal the immune system to leave certain cells alone.
**Conventional vaccines work by training the immune system to combat infectious agents.	

## Hemochromatosis

<b>What is it?</b>	A hereditary or rare genetic disorder characterized by the excessive accumulation of iron in the body.
<b>Caused By</b>	Genetic mutations that affect the body's ability to regulate iron absorption from the diet.
<b>Symptoms</b>	Fatigue, joint pain, abdominal pain, diabetes, liver disease, heart problems, and skin pigmentation changes ("bronze diabetes")
<b>Effect</b>	infiltrates the vital organs, such as the liver, heart, and pancreas
<b>Treatment</b>	Therapeutic phlebotomy, which involves regular blood removal to reduce iron levels and iron-chelating medications to help manage iron overload

## Continuously Operating Reference Stations (CORS) Network

- It is capable of precise location-based services, which are capable of providing centimetre-level positioning services in real-time
- More than 1,000 CORS stations will be operated by the Survey of India.
- It will boost auto navigation and machine control-based solution in Agriculture, Mining, Construction, Transport and Civil Aviation sector.

## Glucagon-like Peptide-1 (GLP-1) Hormone

<b>What?</b>	GLP-1 plays a crucial role in regulating blood sugar levels and satiety (the feeling of fullness) by influencing various physiological processes in the body.
<b>Secretion</b>	Produced in the gastrointestinal tract, specifically in the intestinal L cells, in response to the ingestion of food.
**This hormone has become really significant in the treatment of type 2 diabetes and obesity.	

## Hycean Planets

<b>What are they?</b>	A class of exoplanets that represent a potentially habitable category in the search for extraterrestrial life. ("hycean" = "hydrogen" + "ocean").
<b>Atmospheric</b>	presence of a substantial hydrogen-rich atmosphere as part of compounds containing

<b>Composition</b>	hydrogen, such as water vapor (H <sub>2</sub> O)
<b>Habitability</b>	The combination of liquid water and a hydrogen-rich atmosphere creates conditions conducive to life. Hydrogen is an essential element for life, and the presence of water offers a potential solvent for biochemical processes.
<b>Missions</b>	James Webb Space Telescope (JWST) is expected to play a significant role in understanding of Hycean planets.

### Monoclonal Antibodies (mAbs)

<b>What are they?</b>	1) mAbs are a type of laboratory-produced molecules that are designed to mimic the immune system's ability to fight off harmful pathogens, such as viruses and bacteria. 2) These antibodies are engineered to target specific antigens or proteins on the surface of cells, pathogens, or other foreign substances.
<b>Origin</b>	Derived from an immune cell, typically a B cell, that produces a specific antibody.
<b>Applications</b>	
<ul style="list-style-type: none"> <li>• <b>Cancer Treatment:</b> to target and destroy cancer cells (e.g., trastuzumab for breast cancer).</li> <li>• <b>Immune Disorders:</b> Monoclonal antibodies can modulate the immune system and are used to treat autoimmune diseases (e.g., infliximab for rheumatoid arthritis).</li> <li>• <b>Infectious Diseases:</b> Developed to treat viral infections, such as COVID-19.</li> <li>• <b>Transplantation:</b> used to prevent rejection in organ transplant recipients (e.g., basiliximab).</li> <li>• <b>Allergies:</b> Monoclonal antibodies can treat allergic conditions (e.g., omalizumab for asthma).</li> </ul>	

### Lysergic Acid Diethylamide (LSD)

In recent years, there has been renewed interest in the use of LSD as Psychedelics in the clinical and research domain of Psychiatry.

<b>What is it?</b>	A semi-synthetic drug that combines natural and manufactured substances
<b>How is it made?</b>	From ergot, a fungus that grows on certain grains, and a non-organic chemical called diethylamide
<b>Effects</b>	LSD is a potent psychoactive substance that primarily affects the serotonin system in the brain. Its effects can include alterations in perception, mood, & consciousness.

### Germicidal UV lights (UV-C lights)

<b>What?</b>	Type of light that is capable of killing or inactivating bacteria, viruses, and fungi by disrupting their DNA and RNA, preventing them from reproducing & causing infections
<b>Uses</b>	The use of germicidal UV light has become increasingly popular in various settings, including healthcare

	facilities, laboratories, and water treatment plants.
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### Ejecta Halo

Recently, ISRO revealed that the "Chandrayaan-3 Lander Module generated a spectacular 'ejecta halo' of lunar material.

<b>What is it?</b>	It refers to a distinctive feature observed around the rim of an impact crater.
<b>Cause</b>	It is caused by the material ejected from the surface during the impact event and subsequently deposited in a circular or semi-circular pattern around the crater.

#### Features

- 1) Ejecta halos provide valuable information about the formation and dynamics of impact craters.
  - 2) During Chandrayaan-3 about 2.06 tonnes of lunar epi regolith were ejected and displaced over an area of 108.4 m<sup>2</sup> around the landing site
- \*\*Epi regolith is nothing but the top layer of the lunar surface, which is made out of lunar rocks and soil, commonly known as moon dust.

### Bortle scale

<b>What?</b>	It is a nine-level numeric classification system that quantifies the darkness of the night sky and the visibility of celestial objects, such as stars, planets, and deep-sky objects, in a particular location.
<b>Meaning</b>	The scale ranges from Class 1, (representing the darkest skies with minimal light pollution), to Class 9, (indicating the most light-polluted urban areas with very limited celestial visibility).

### Kati Bihu

- The auspicious harvest festival of Kati Bihu was recently celebrated in Assam.
- It is observed annually on the first day of the **Kati month in the Assamese calendar** and usually falls during mid-October.
- All three Bihu festivals have agricultural significance and mark different farming cycle stages. Kati Bihu, also known as **Kongali Bihu**, occurs when rice saplings are transplanted.
- The name Kongali Bihu is derived from the fact that during this period the granaries are typically empty, and there's little left to consume.
- A special lamp called Akash Banti or Sky Candle is lit in paddy fields.

### Mehrauli Archaeological Park

- Major restoration and conservation works have been completed recently at Mehrauli Archaeological Park.
- It is an archaeological area spread over 200 acre in the Mehrauli neighbourhood of South Delhi.
- Spread over 200 acres, Mehrauli Archaeological Park is adjacent to Qutub Minar (UNESCO World Heritage Site).
- It consists of over 100 historically significant monuments built by various empires including the Khaljis, Tughlaqs, Lodhis, Mughals, and the British.
- These include the Jamali Kamali Mosque, Metcalfe House, Rajon ki Baoli, as well as the tombs of Mamluk king Ghiyas-ud-din Balban and Mughal governor Shah Quli Khan.

### Edakkal Caves

- Kerala Tourism has initiated a Rs 2.9 crore project to improve civic amenities around the Edakkal Caves.
- Located at about 1200 ft above the sea level, the Edakkal Caves are among the oldest human settlements ever discovered.
- Despite their name, the Edakkal Caves are not actually caves. They are part of a pre historic rock shelter, formed naturally when one huge boulder got wedged between two bigger ones. The name Edakkal itself means "a stone in between".
- Inside the caves are pictorial drawings and engravings that indicate the presence of ancient human settlements in the region. The oldest among them date back to 6000 B.C. to the age of Stone Age.
- The diversity of the engravings suggest that the Edakkal caves were inhabited several times at different points in history.

### Bathukamma Festival

- The Bathukamma festival was recently celebrated in Telangana. **Bathukamma** is a flower-festival celebrated by the women of Telangana and some parts of Andhra Pradesh.
- Bathukamma is a beautiful flower stack, arranged with different unique seasonal flowers most of them with medicinal values, in seven concentric layers in the shape of a temple gopuram.
- Local flowers like 'gunuka,' 'tangedu,' 'banti,' and 'nandi-varadhanam' are abundantly used.

- Every year this festival is celebrated for nine days as per the Sathavahana calendar which usually coincides with the months September–October of the Gregorian calendar.
- In Telugu, 'Bathukamma' means 'Mother Goddess come Alive'.
- During the entire preceding week, women make 'boddemma' (a deity of Gowri 'mother Durga' made with earthly mud) along with Bathukamma and immerse it in the pond.
- It is a celebration of the inherent relationship human beings share with earth and water.

### Wagh Nakh

- Maharashtra's Cultural Affairs Ministry recently signed an MoU with the Victoria and Albert Museum in London to bring back Chhatrapati Shivaji Maharaj's legendary wagh lakh to the state.
- Literally meaning '**tiger claws**', the wagnakh is a mediaeval claw-like dagger which was used across the Indian subcontinent.
- Designed to either fit over the knuckles or be hidden under the palm, the weapon consisted of four or five curved blades fixed to a glove or a bar of some kind.

### Wagh Nakh and Shivaji

- The most famous use of the wagnakh in history comes from the story of Afzal Khan's killing by Shivaji. Khan was a general of Bijapur's Adil Shahi Sultanate.
- Shivaji used to be a former vassal of the Adil Shahis but by the 1650s, he had become increasingly assertive, taking forts across the Konkan, and bringing under control large parts of Adil Shahi territory.
- Given Afzal Khan's success in the south, he was sent by the Sultan, with a mighty army, to subdue the Maratha icon.
- Khan marched into the Konkan and demanded a meeting with Shivaji.
- In the meeting, Khan, while embracing Shivaji, attempted to stab the Maratha leader. But Shivaji was protected by his armour and killed Khan with the wagnakh. And in the battle that followed, Shivaji's army came out as victor.
- According to the Victoria and Albert Museum, the weapon was brought to Britain by East India Company officer James Grant Duff (1789- 1858). Duff was the Company Resident (political agent) of the Satara State from 1818-22.
- The wagnakh was given to Mr. James Grant-Duff of Eden when he was Resident at Satara by the Prime Minister of the Peshwa of the Marathas.

# PERSONALITIES IN NEWS, SPORTS & AWARDS

## India's Record Performance At The 19th Asian Games

- India finished with a record haul of 107 medals at the Hangzhou (China) Asian Games, its best ever after the previous best haul of 70 medals (16 gold) at the Jakarta 2018 Asian Games.
- India has won 28 gold, 38 silver and 41 bronze medals

## Key Takeaways From The India's Performance At The 19th Asian Games

- **Team medals in shooting indicate a new depth of talent:** Gains in compound archery is good news since the event is likely to be included in the Olympics.
- **The track-and-field domination:** It added to India's image as a growing sporting nation.
- **The badminton gold and table tennis bronze:** This has forced China to acknowledge India's existence in a discipline in which they have long taken their dominance for granted.
- **5 events where India saw a dip:** These were tennis, bridge, kurash, wushu and table tennis.
  - But in table tennis, the bronze won by Sutirtha Mukherjee and Ayhika Mukherje (after defeating the strong Chinese contenders) was actually one of the most significant among the 107 medals.
- **Doesn't translate into a medal rush at the Paris Olympics next year:** This is because a bunch of medals in Hangzhou have come in events that aren't in the Olympics and in many, the level of competition will increase several folds.

## Reason for India's Overall Performance Improvement

- **The government funding** of the Olympic disciplines, primarily under the **Target Olympic Podium Scheme**.
- With no scarcity of financial resources, **the quality of coaches, sports science experts and exposure trips abroad**, have added up to improvement.

## Analysis

- In 2018, India won medals in 18 different sporting disciplines, which went up to 22 in 2023.
- At both editions, the top two contributions came from **athletics and shooting**, but Hangzhou saw an increase from 20 to 29 in athletics while shooters brought home 22 medals in comparison to just 9 the last time around.
  - **These two events alone accounted for a combined increase of 22.**
  - **For the first time in Asiad history**, India had a women's javelin gold through Annu Rani, a men's 3000-m steeplechase winner in Avinash Sable.
  - While **badminton** accounted for just an increase of 1 medal, it was a historic showing by Indian shuttlers as they finally ended the wait for a **first ever gold**, thanks to **Satwiksairaj Rankireddy and Chirag Shetty**.

## National Games

- The Prime Minister recently inaugurated the 37th edition of the National Games at the Pandit Jawaharlal Nehru Stadium in Goa.
- The 'Infinity Flame' representing the games was presented to the Prime Minister and the games were officially inaugurated on that note.
- The National Games are being held in Goa for the very first time. More than 10,000 athletes from across the country will compete in over 43 sports.

- The 37th edition also marks the debut of several new sports disciplines including beach football, roll ball, golf, sepaktakraw, sqay martial arts, kalleripattu, and pencaksilat.

### Nobel In Literature

- Norwegian author **Jon Fosse** has been awarded the Nobel Prize in Literature for the year 2023.
- Fosse has been awarded the Nobel Prize “for his innovative plays and prose which give voice to the unsayable”.
- Fosse is an author and a dramatist who writes in Norwegian Nynorsk, the least common of the two official versions of Norwegian.
- His work includes plays, novels, poetry collections, essays, children's books, and translations.
- His unique writing style has come to be known as Fosse minimalism, because of the way his pieces are reduced to their most simplistic versions.
- His best-known works include the Septology series of novels, Aliss at the Fire, Melancholy, and A Shining.
- The Nobel Prize in Literature has been awarded 116 times to 120 Nobel laureates between 1901 and 2023. It is worth 10 million Swedish krona and is regarded widely as the world’s most prestigious literary award.
- The list of famous winners from yesteryears include: WB Yeats, GB Shaw, Herman Hesse, TS Eliot, Pablo Neruda and Gabriel García Márquez.

### Saraswati Samman

- Noted Tamil author Sivasankari has been honoured with the prestigious Saraswati Samman for the year 2022 for her memoir written in Tamil, **Surya Vamsam**.
- Sivasankari’s literary career spans over five decades. She is the author of 36 novels, 48 novellas, 150 short stories, 15 travelogues, seven collections of essays, and three biographies.
- The Saraswati Samman is given **annually**.
- The recognized works must have been published in any of the languages (22 Indian Languages) included in **Schedule VIII of the Indian Constitution** within the last 10 years.
- Instituted by the **KK Birla Foundation in 1991**, it is among the highest recognitions in the field of Indian literature. It carries a plaque, a citation, and a cash prize of ₹15 lakh.
- Besides the Saraswati Samman, the **Vyas Samman** and the **Bihari Puraskar** are other literary awards instituted by the KK Birla foundation.