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NOTE:

Dear Students,

Memorisation and recollection of information in Current Affairs is as important as understanding the articles. In order to enhance the learning outcomes from the Monthly Current Affairs Magazine, we are introducing following additions:



A thematic based colors has been used in the document in the boxes, tables etc to enable easy identification and recollection of various concepts and topics.



Questions are an important tool to assess and retain information. To enable this we are adding a Smart Quiz at the end of each section in the document for practicing the questions.



A wide variety of infographics have been added to ensure smoother learning experience and enhanced retention of the information. This will also help in effective presentation of information in the answer writing as well.



Places and persons in news are being presented in an objective manner through Maps, Tables & Pictures. This will help in easier recollection of factual information.

1. POLITY AND GOVERNANCE

1.1. CRIMINAL LAW REFORM ACTS

Why in the news?

President of India granted assent to three significant bills to overhaul the country's criminal justice system.

More on the news

- The **three Acts include:**
 - **Bharatiya Nyaya Sanhita 2023** replacing the **Indian Penal Code (IPC), 1860.**
 - **Bharatiya Nagarik Suraksha Sanhita 2023** replacing the **Code of Criminal Procedure (CrPC), 1973.**
 - **Bharatiya Sakshya Adhinyam 2023** replacing the **Indian Evidence Act, 1872.**
- The passage of the **act was preceded by three bills** to reform criminal laws.
 - The bills were **first introduced in the house in August 2023** during the monsoon session of the Parliament, and thereafter referred to the Standing Committee on Home Affairs.
 - However, **earlier Bills were withdrawn** and the **new bills were introduced in December 2023**, incorporating some of the suggestions of the standing committee.

Need for reforms in criminal laws

- **Modernising the criminal justice system:** The IPC, IEA, and a large section of the CrPC are older than independent India and do not properly reflect current norms of criminal jurisprudence.
 - Societal changes require an evolving and adaptable criminal justice system. E.g. integrating modern technology in evidence gathering, storage etc.
- **Addressing large pendency and timely justice:** Complex legal procedures and a lack of resources have led to **almost 4.7 crore pending cases** in various courts and many **undertrials** languishing in jails.
- **Increasing conviction rates:** The criminal justice system's inefficiencies, including inadequate forensic investigation, policing deficiencies, and the influence of powerful individuals on law enforcement, contribute to **low conviction rates.**
- **Incorporating recommendations of various high-level Committees:** These include the recommendations of Law Commission, Malimath Committee (2003), and Justice Verma Committee (2013) on aspects related to arrest, confessions, bail, death penalty etc.

1.1.1. BHARATIYA NYAYA SANHITA 2023

Objective

Bharatiya Nyaya Sanhita 2023 **replaces Indian Penal Code (IPC), 1860**, the principal law on criminal offences in India.

Background

- **Prior to IPC 1860:** Indian criminal law consisted of a complex array of Parliamentary Charters and Acts, East India Company Regulations, Hindu law, Muslim law, customary law etc.
- **First Law Commission (1834):** It was created under **Thomas Babington Macaulay** to “modernise laws and the colonial governance of civil society.”
 - It produced **draft of Penal Code in 1837**, which completely ignored existing Indian laws and instead was founded on British common law.
- **Effect of 1857 Rebellion:** Formation of IPC was delayed for years as it was undergoing multiple revisions.
 - However, with the **Rebellion of 1857** and the **British Crown taking over direct control** in 1858, **IPC was finally enacted in 1860, and came into force in 1862.**
- **Post enactment of IPC 1860:** Over the years, the IPC has been amended to add new offences, amend existing ones and change the quantum of punishment.
 - Several Law Commission reports have **recommended amendments to the IPC** on subjects including **offences against women, food adulteration, death penalty** etc.

Key provisions of Bharatiya Nyaya Sanhita 2023

- **Community service:** It is proposed to provide (for the first time) community service as one of the punishments for petty offences.
- **Sexual offences against women:** It increases **the threshold for gangrape victim to be classified as a major**, from 16 to 18 years of age.
 - It also **criminalizes sexual intercourse with a woman by deceitful means** or making false promises.
- **Sedition:** It **removes the offence of sedition**. It instead penalizes the following:
 - Exciting or attempting to **excite secession, armed rebellion, or subversive activities**
 - Encouraging feelings of **separatist activities**, or
 - Endangering the **sovereignty or unity and integrity of India**.These offences may involve exchange of words or signs, electronic communication, or use of financial means.
- **Terrorism:** It defines terrorism an act that intends to **threaten the unity, integrity, security or economic security** of the country, or **strike terror in the people** or any section of **people in India or in any foreign country**.
- **Organised crime:** It defines organised crime as **any continuing unlawful activity** including kidnapping, extortion, contract killing, land grabbing, cybercrime etc. **carried by an individual or a group**, either as **a member or on behalf of an organised crime syndicate**.
- **Murder or grievous hurt by a group on certain grounds:** When a group of five or more persons acting in concert commits murder or causes grievous hurt on the **ground of race, caste or community, sex, place of birth, language, personal belief or any other similar ground** each member of such group shall be punished with,
 - Death or life imprisonment, and a fine, in case of murder.
 - Imprisonment for a term up to seven years, and a fine, in case of grievous hurt.

Do you know ?

- > Sedition was introduced under **Section 124A of IPC in 1870**.
- > Large number of freedom fighters have been charged with sedition including **Bal Gangadhar Tilak (in 1897 and 1908), Mahatma Gandhi (in 1922), and Jawaharlal Nehru (in 1930)**.

Conclusion

The new law has been drafted by a democratically elected Government, 160 years after IPC 1860, purportedly with a focus on delivering Nyaya (Justice) as opposed to the earlier Penal code that focused on punishments.

1.1.2. BHARATIYA NAGARIK SURAKSHA SANHITA 2023

Objective

The Bharatiya Nagarik Suraksha Sanhita 2023 **replaces the Criminal Procedure Code, 1973 (CrPC)**, which provided for the procedure for arrest, prosecution, and bail under various Acts, including the IPC 1860.

Background

- **Genesis:** CrPC was first enacted in 1861 under British rule and later substituted by fresh Codes successively enacted in 1872 and 1882.
 - It had **undergone several amendments**, most importantly in 1898, 1923 and 1955.
- **CrPC 1973:** The **Law Commission of India**, in its 41st report, **recommended a significant revision of the code**, which led to the **creation of CrPC 1973**.

Key provisions of Bharatiya Nagarik Suraksha Sanhita 2023

- **Detention of undertrials:** **First-time offender who have completed one-third** of the maximum period of imprisonment specified for such offence shall be **released on bond**.
 - If an **accused has spent half of maximum period** of imprisonment specified for an offence, he shall be released by the Court **on bail**.

Do you know ?

As per **Prison Statistics in India (2022) Report-**

- > Total number of **undertrial inmates** were reported as **4.34 lakhs**.
- > **This is 75.8% of total prisoners**, an increase of 1.7% since 2021.
- > **More than 11 thousand** undertrial prisoners were confined for more than 5 years.

- ✓ **This does not apply to offences** punishable by **death, life imprisonment**, and persons against whom proceedings are pending in **more than one offence**.
- **Medical examination:** Any police officer can request medical examination of the accused in certain cases, including rape cases.
- **Forensic investigation:** It mandates forensic investigation for offences punishable with at least seven years of imprisonment.
 - If a state does not have forensics facility, it shall utilise such facility in another state.
- **Signatures and finger impressions:** It empowers a Magistrate to order any person, whether arrested or not, to provide specimen signatures, handwriting, finger impressions and voice samples.
- **Timelines for procedures:** It prescribes timelines for various procedures. For instance, submission of medical reports to investigating officer, giving judgment, informing the victim of progress of investigation and framing of charges.

Conclusion

Incorporation of forensic science, prescribed time limits for the police, lawyers and judges is expected to expedite justice delivery.

1.1.3. BHARATIYA SAKSHYA ADHINIYAM 2023

Objective

The Bharatiya Sakshya Adhiniyam 2023 **replaces the Indian Evidence Act, 1872 (IEA)**, which governed the admissibility of evidence in Indian Courts in all civil and criminal proceedings.

Background

- **Genesis:** The Evidence Act was enacted in 1872 with a view to **consolidate the laws relating to evidence** on which the court could come to a conclusion and pronounce the judgment.
 - Over the years, the IEA has been amended several times, most recently in 2000 to provide for the admissibility of electronic records as secondary evidence and in 2013, to add provisions related to consent in cases of rape.
- **Primary issue:** The IEA **did not address the technological advancement** undergone in the country during the last few decades.

Key Provisions of Bharatiya Sakshya Adhiniyam 2023

- **Admissibility of electronic or digital records as evidence:** It provides that the electronic or digital records will have the same legal effect as paper records.
 - It expands electronic records to include information stored in semiconductor memory or any communication devices (smartphones, laptops), emails, server logs etc.
- **Documentary evidence:** It adds that electronic records will also be considered as documents apart from writings, maps, and caricatures.
- **Oral evidence:** Oral evidence includes statements made before Courts by witnesses in relation to a fact under inquiry. The Act allows oral evidence to be given electronically.
- **Joint trials:** A joint trial refers to the trial of more than one person for the same offence.
 - The Act adds that a trial of multiple persons, where an accused has absconded or has not responded to an arrest warrant, will be treated as a joint trial.

Conclusion

The three laws present an opportunity to truly decolonise the criminal justice system and uphold constitutional values in criminal processes. A framework for regular monitoring and periodic review of new criminal laws will also go a long way in modernising the criminal justice system.

1.2. CRIME IN INDIA 2022 REPORT

Why in the news?

The National Crime Records Bureau (NCRB) released its annual report on crime in India for the year 2022.

About the Report

- It is a **compilation of data** on reported crime from across the country, and provides the big picture of **broad trends** in crime registration.
- As per the **International Standard, the Bureau follows 'Principal Offence Rule'** for counting of crime.
 - If many offences are registered in a single FIR case, only the most heinous crime i.e. the one that attracts maximum punishment will be considered as counting unit.



National Crime Records Bureau (NCRB)

New Delhi, India



About: It is an organization responsible for collecting and analysing **crime data** as defined by the Indian Penal Code (IPC) and Special and Local Laws (SLL).

Genesis: It was established in **1986** under the Ministry of Home Affairs on the recommendations of the **Tandon Committee** and the **National Police Commission (1977-1981)**.

Functions and Responsibilities: It maintains **National Database of Sexual Offenders (NDSO)**.

- It is the Central Nodal Agency to manage the technical and operational functions of the **'Online Cyber-Crime Reporting Portal'**.
- It is the **National repository of all fingerprints** in the country.
- Monitoring, coordination, and implementing the **Crime and Criminal Tracking Network and System (CCTNS)** project.

Publications:

- Crime in India Report
- Accidental Deaths & Suicides in India (ADSI)
- Prison Statistics India
- Report on Missing Women and Children

Key-Findings of Report

Category	Findings of 2022 report	Trend compared to 2021	Other Key Information
Overall Crime	Over 58.24 lakhs cognizable crimes were registered in 2022	Declined by 4.5%	Crime rate: registered per lakh population has declined from 445.9 in 2021 to 422.2 in 2022
Crime against Women	Over 4.45 lakh crimes against women in 2022.	Increased by 4.0%	Dominant Categories: Cruelty by husband or his relatives (31.4 per cent) followed by kidnapping and abduction of women, assault with intent to outrage her modesty and Rape. Registered FIRs: Highest in Uttar Pradesh followed by Maharashtra
Crime Against Child	Over 1.6 lakhs cases in 2022	Increased by 8.7%	39.7% cases were filed under the Protection of Children from Sexual Offences Act
Crime Against Senior Citizens	Around 28,000 cases were registered in 2022 against Senior Citizens	Increased by 9.3%	Dominant Categories: Simple Hurt (27.3%) followed by Theft (3,944) and FCF (Forgery, Cheating & Fraud)
Crime Against SCs and STs	Crimes against SCs went up 13% and against STs by 14.3%	Increased	8.2% cases against SCs registered under SC/ST (Prevention of Atrocities) Act

Cyber Crime	Over 65,000 cases were registered in 2022 under Cyber Crimes	Increased by 24.4%	Categories: Cyber fraud constituted the majority of cases (64.8%) of registered cases, followed by extortion (5.5%), and sexual exploitation (5.2%). Among States: The highest number of cybercrime cases recorded was in Telangana (15,297) , followed by Karnataka and Maharashtra.
Environment-related Crime	Total 52,920 cases were registered under Environment Related Offences	Decrease by 17.9%	Majority of cases (80%) registered under The Cigarette and Other Tobacco Products Act (COTPA) followed by Noise Pollution. However, the cases registered under Environment, Air, Water and the NGT Act has increased.
Offences against State	A total of 5,610 cases have been registered	Increased by 8.6%	78.5% of cases were registered under The Prevention of Damage to Public Property Act followed by 17.9% cases under The Unlawful Activities Prevention Act

1.3. CHIEF ELECTION COMMISSIONER AND OTHER ELECTION COMMISSIONERS ACT, 2023

Why in the news?

The President gave her assent to the **Chief Election Commissioner and other Election Commissioners (Appointment, Conditions of Service and Term of Office) Bill, 2023**.

Key provisions of the Act

The Act replaces the **Election Commission (Conditions of Service of Election Commissioners and Transaction of Business) Act, 1991**.

- **Aim:** The act seeks to regulate:
 - the appointment, conditions of service and term of office of the Chief Election Commissioner (CEC) and other Election Commissioners (ECs), and
 - the procedure for transaction of business by the Election Commission.
- **Selection committee:** The CEC and other ECs shall be appointed by the President on the recommendation of a **Selection Committee** consisting of:
 - **Prime Minister** as Chairperson.
 - **Leader of Opposition/leader of the largest opposition party** in the Lok Sabha.
 - **Union Cabinet Minister** to be nominated by the Prime Minister.
- **Search Committee:** A Search Committee shall prepare a panel of five persons for consideration of the Selection Committee, for appointment as the CEC and other ECs.
 - It is to be **headed by the Minister of Law and Justice** and comprising **two other members not below the rank of Secretary** to the Government of India.
- **Eligibility:** The act specifies following eligibility criteria for appointment as CEC and ECs,
 - Persons who are holding or have held a **post equivalent to the rank of Secretary** to the Government of India and
 - Should be **persons of integrity, who have knowledge of and experience in management and conduct of elections**.
- **Salary, term of office and reappointment:**
 - **Salary:** The CEC and other ECs shall be paid a salary which is **equal to the salary of a Judge of the Supreme Court**.
 - **Term of office:** The CEC and other ECs shall **hold office for a term of six years** from the date on which he assumes his office or **till he attains the age of sixty-five years**, whichever is earlier.
 - **Reappointment:** The CEC and other ECs shall not be eligible for re-appointment.

Do you know ?

- > In **Anoop Baranwal vs. Union of India case, 2023**, the SC ruled that the CEC and ECs will be chosen by a committee comprising the **Prime Minister, the Leader of the Opposition in Parliament, and the Chief Justice of India**.
- > The judgement stated that – “This committee would make recommendations and advise the President on Election Commission appointments **until Parliament enacted a separate law on the subject.**”

- **Removal and resignation:** CEC can only be removed from his office in a manner and on grounds similar to that of a Supreme Court judge. An EC can be removed from office upon the recommendation of the CEC.
 - The CEC or any EC may **resign at any time by writing to the President.**

About Election Commission of India (ECI)

- **Under Article 324,** Election Commission of India (ECI) is an autonomous constitutional authority **responsible for administering Union and State election processes in India.**
 - It administers **elections to the Lok Sabha, Rajya Sabha, State Legislative Assemblies in India, and the offices of the President and Vice President** in the country.
- **Constitutional provisions for appointments**
 - Under **Article 324(2),** the President of India is empowered to appoint the CEC and the ECs.
 - Article 324(2) **empowers the President** of India to fix from time to time the **number of Election Commissioners other than the CEC.**

Concerns highlighted with the Act

- **Independence of the Election Commission:** Selection Committee has a majority of members from the government of the day, which may undermine the independence of the ECI.
 - The act drops the Chief Justice of India from the selection committee, as was ruled by SC in Anoop Baranwal case.
- **Vacancy in selection Committee:** The act upholds the validity of the Selection Committee even if there is a vacancy or defect in constituting the Committee.
 - The post of the Leader of Opposition in Lok Sabha may be vacant, if Lok Sabha is dissolved. In such a case, the Selection Committee will consist exclusively of the Prime Minister and a Union Cabinet Minister.
- **Undermining the role of search committee:** The act provides that Selection Committee may go beyond the names suggested by the Search Committee.
 - This may undermine the role of the Search Committee which is specifically constituted to look for capable and qualified candidates.
- **Limiting eligibility criteria:** By limiting the eligibility criteria of the CEC and ECs to civil servants, the act may exclude other qualified individuals for the post.
- **Lack of parity in removal of the CEC and ECs:** The act retains the existing lack of parity in removal of CEC and ECs.
- **Silence over post-retirement jobs:** Similar to 1991 Act, this act too is silent with regards to the further appointment of the CEC and ECs to any post or office under the government after their retirement.

Way forward

- **Balanced composition of the Selection Committee:** Goswami Committee on Electoral Reforms (1990) and 255th Law Commission Report had recommended that,
 - Select committee for choosing CEC and ECs, should consist of the Prime Minister, the Leader of the Opposition of the Lok Sabha and the Chief Justice of India.
- **Post retirement:** Goswami Committee (1990) had recommended that the CEC and ECs should not be eligible for any further office under the government, including the office of Governor.
- **Administrative Independence:** Goswami Committee and the ECI have recommended an independent secretariat for the functioning of the ECI.
- **Equal constitutional protection to all members of the ECI:** As per 255th Law Commission Report, Article 324(5) of the Constitution should be amended to equate the removal procedures of the ECs with that of the CEC.

Scan the QR code to know more about **Election Commission.**

Weekly Focus #58: Electoral Reform: An Approach to Effective Democracy



1.4. PRESS AND REGISTRATION OF PERIODICALS ACT, 2023

Why in the news?

The President has **granted assent to the Press and Registration of Periodicals Bill, 2023** repealing the colonial era law of the Press and Registration of Books Act, 1867.

Brief history of The Press and Registration of Books Act 1867

- **Censorship of Press Act of 1799 (under Lord Wellesley):** The Act was to silence the press before a potential French invasion of India. However, it was retracted in 1818 by Lord Hastings.
- **Licensing Regulations (ordinance), 1823 (under Acting Governor General John Adams):** The Ordinance had a draconian provision that no one could start or continue to use a press without registration. Rammohan Roy's, Mirat-ul-Akbar had to cease publication due to this act.
- **Press Act of 1835 (under Governor General Metcalfe):** This Act was seen as a ray of liberation and thus earned Metcalfe the respectable title of "Liberator of the Indian Press."
 - As a consequence, the Indian vernacular press saw rapid growth across India between 1835 and 1857.
- **The Licensing Act of 1857:** Due to the "Revolt of 1857", this Act emerged, which imposed "licensing restrictions" in addition to the pre-existing "registration procedure".
- **Press and Registration of Books (PRB) Act 1867 (under viceroy Lord John Lawrence):** The Act made it mandatory for every article of print to have the names of the printers, publishers, and the places of publication, printed.
 - The primary motive of this Act was to **exercise complete control over the press, printers and publishers of books and newspapers.**
- **Further Amendments:** The Act was **amended many times between 1870 and 1983** but it remained procedurally cumbersome and complex, especially for small and medium publishers.



Key changes between the PRB Act, 1867 and the PRP Act, 2023

Key provisions	Press and Registration of Books Act, 1867	Press and Registration of Periodicals Act, 2023
Registration of periodicals	The 1867 Act provided for the registration of newspapers, periodicals, and books.	Periodicals do not include books or scientific and academic journals. Books are outside the purview of the act.
Foreign periodicals	There was no provision for registration of foreign periodicals.	A facsimile* of a foreign periodical may be printed in India only with the prior approval of the central government. * "facsimile" means an exact reproduction of the original.
Declaration for printing presses	The Act provided that a declaration specifying the printer/publisher be made to the District Magistrate (DM). The DM sent the declaration to the Press Registrar, who then issued a certificate of registration.	Act allows the publisher of a periodical to obtain a registration certificate by filing an online application with the Press Registrar General (PRG) and specified local authority.
Registration of a printing press	The 1867 Act required a printing press to be declared before the DM.	The PRP act, 2023 allows for information regarding printing presses to be submitted through an online portal.
Penalties	PRB Act 1867 had severe penalties leading to conviction and imprisonment up to 6 months for various violations of the Act.	The 2023 Act seeks to decriminalize the colonial-era statute by replacing jail terms with fines.

Cancelling Registration	In the 1867 Act, only the DM could cancel the declaration of a periodical.	The PRP Act 2023 empowers the Press Registrar General to suspend/cancel the Certificate of Registration. Also, a person who has been convicted of a terrorist act or unlawful activity or has acted against the security of the State will not be allowed to publish a periodical.
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Benefits of PRP Act 2023

- **Digitalization:** The Act makes the **process of allotment of title and registration of periodicals simple and simultaneous.**
- **Fast-tracking the process:** Act **enables the Press Registrar General to fast-track the process**, thereby ensuring that publishers face little difficulty in starting a publication.
 - The applications for title verification and registration have been combined to form a single step.
- **Decriminalization:** The new act substantially decriminalizes all violations under the old one, thus **shedding the colonial legacy.**
- **Provides clarity:** The act adds clarity on various procedures/cases such as facsimile editions of a foreign publication, Circulation Verification of newspapers, Ownership Transfer, and others.

Conclusion

The 2023 act is in sync with the present age of free press and upholding media freedom. It provides for digital governance with an emphasis on faster and more efficient service delivery through a troika of trust, transparency, and technology.

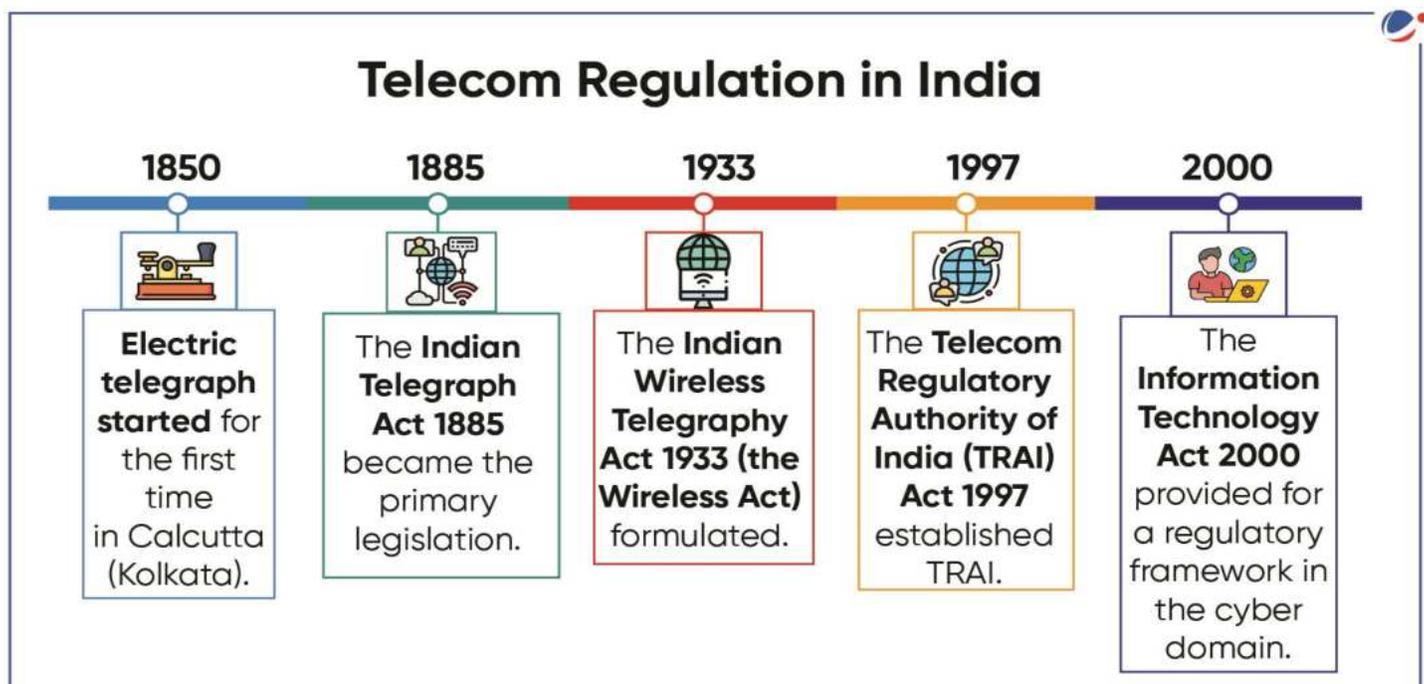
1.5. TELECOMMUNICATIONS ACT 2023

Why in the news?

The President gave his assent to Telecom Bill 2023, **to replace the 138-year-old Indian Telegraph Act.**

More about the news:

- The new act seeks to **regulate activities related to telecommunication and provide a new legal framework for the Telecom Sector.**
- The act **replaces the Indian Telegraph Act, 1885, the Indian Wireless Telegraphy Act, 1933 and Telegraph Wires (Unlawful Possession) Act, 1950.**
 - It also amends the **Telecom Regulatory Authority of India (TRAI) Act, 1997.**



Key Provisions of the Act

Key provisions	Telecommunications Act 2023
Assignment of spectrum	<ul style="list-style-type: none"> Spectrum allocation will be through auction and for specified uses on an administrative basis. <div style="text-align: center;"> <p>Specified purposes include</p> <ul style="list-style-type: none"> National security and defense Disaster management Weather forecasting Transport Satellite services BSNL, MTNL and public broadcasting services </div> <ul style="list-style-type: none"> For the first time, administrative allocation will be done of spectrum for the satellite broadband services, in line with global norms.
Appointments to TRAI	<ul style="list-style-type: none"> TRAI Act has been amended to allow individuals with: <ul style="list-style-type: none"> at least 30 years of professional experience to serve as the Chairperson, and at least 25 years of professional experience to serve as members.
Adjudication process	<ul style="list-style-type: none"> Appointment of an adjudicating officer to conduct inquiries against civil offences. Appeals against the orders of the Committee, in connection to breach of terms and conditions, may be filed with (Telecom dispute settlement and appellate tribunal) TDSAT within 30 days.
Protection of users	<ul style="list-style-type: none"> Central government may provide for measures to protect users e.g. prior consent to receive specified messages, creation of Do Not Disturb registers, and allowing users to report malware or specified messages.
Right of way	<ul style="list-style-type: none"> Entities building infrastructure can seek right of way (facilitating the use of property) over public or private property.
Powers of interception and search	<ul style="list-style-type: none"> Messages can be intercepted, monitored, or blocked on certain grounds including Security of the state, public order and prevention of incitement of offences.
Authorization for telecom-related activities	<ul style="list-style-type: none"> Prior authorization of central government needed to provide, operate, maintain or expand new telecommunication services and to possess radio equipment.
Regulation of OTTs	<ul style="list-style-type: none"> OTT platform will not be regulated under the Telecommunications Act 2023.
Other Provisions	<ul style="list-style-type: none"> Digital Bharat Nidhi: The Bill renames the Universal Service Obligation fund as Digital Bharat Nidhi and allows its use for research and development in telecom sector. Trusted sources regime: Which came into being after the 2020 Indo–Chinese border skirmishes, to stop imports of telecom equipment from hostile nations is now part of the law.

Some concerns highlighted with the Act

- Privacy concerns:** The provision of allowing interception and monitoring of the messages can be misused, leading to issues like data leakages.
 - Also, the requirement of biometric verification for users may not be proportionate and hence, may infringe upon the fundamental right to privacy.
- Lack of clarity in definitions:** Definition of telecommunication services provided is broad and open to interpretation. This may take its ambit online platforms like WhatsApp as well.
- Delegated legislation:** The government may add, modify, or remove offences in the Third Schedule to the Act by a notification. It has been debated that such changes should only be through an Act of Parliament.

Conclusion

The Act straightens out several issues in the Telecom Sector such as the issue of Spectrum allocation. To further restore the health of the telecom sector and address the apprehensions, **a multi-stakeholder approach should be taken towards its implementation.**

1.6. ABROGATION OF ARTICLE 370

Why in the news?

A Constitution Bench of the Supreme Court recently upheld the validity of the Union Government's 2019 decision to repeal the special status of Jammu and Kashmir (J&K) under Article 370 of the Constitution.

More on the news

- On August 5th 2019, the President of India promulgated an order- '**Constitution (Application to Jammu and Kashmir) Order, 2019**', which stated that provisions of the Indian Constitution are applicable in the State.
 - This effectively meant that all the provisions that formed the basis of a separate Constitution for Jammu and Kashmir were abrogated.
 - ✓ With this, **Article 35A too was automatically scrapped.**
 - Parliament also enacted the **Jammu and Kashmir Reorganization Act 2019** which bifurcated the State into two Union Territories (UTs).
- The **petitioners had challenged the constitutionality of these actions of the Union**, against which the recent judgment was given by the Supreme Court.

Article 370: A Historical Context

- **Instrument of Accession (IoA):** In October 1947, Maharaja Hari Singh, the last ruler of J&K signed the IoA through which he agreed to accede his state to the Dominion of India.
- **Temporary provisions for J&K:** Constitution of India came into force on 26th January 1950. Under the Constitution, **Article 370 was placed in Part XXI, titled "Temporary and Transitional provisions"**.
- **Article 370:** Except for defence, foreign affairs, finance and communications, Parliament needed the state government's concurrence for applying all other laws.
 - Further, it stated **that except Article 1**, which declared India as a 'Union of States', and **Article 370 itself, no part of the Constitution would apply to Jammu & Kashmir.**
 - **The President of India could make any provisions of the Constitution to apply to this State** with 'modifications' or 'exceptions' but required that such application can be done only in 'consultation with the Government of the State'.
 - **Article 370 itself could not be amended or repealed—unless the Constituent Assembly of Jammu & Kashmir consented to it.**
- **Article 35A of the Indian Constitution:** It **stemmed out of Article 370** and gave powers to the J&K Assembly to define permanent residents of the state, their special rights, and privileges.

Judgment and its rationale

- **No Internal sovereignty:** The SC held **that J&K did not retain any element of sovereignty** after its accession to India in 1947.
 - Court relied on **Yuvraj Karan Singh's (successor to Maharaja Hari Singh) proclamation** which stated that the provisions of the Indian Constitution would govern the relationship between the J&K and India.
 - Apart from **Article 1 and 370 of the Indian Constitution**, the court cited **Section 3 of the J&K Constitution** which stated that J&K is and shall be an integral part of the Union of India.
- **Nature of Article 370:** The SC held that **Article 370 is a temporary, transitional provision.**
 - Court relied on **historical context for the inclusion of Article 370** and the **placement of Article 370 in Part XXI** of the Constitution to conclude that it is a temporary provision.
 - Court held that the dissolution of the Constituent Assembly of J&K **could not limit the powers of the President to abrogate Article 370.**
- **Constitutionality of Presidential proclamations:** The Supreme Court **upheld the presidential proclamations of August 2019.**
 - The Presidential order of 2019 amended Article 367 and declared that the expression '**Constituent Assembly of the State...**' in Article 370 (3) **shall be read to mean 'Legislative Assembly of the State'**.
 - ✓ Central issue was whether these actions could be taken by the Union assuming powers of the state when it is under President's rule.
 - Court held the consultation of the state government was not essential under 370(3) as the **President had "unilateral" power to declare that Article 370 ceases to exist.**

- **Power of President during State Emergency:** SC held that declaration of State emergency and subsequent actions of the President should have reasonable nexus.
 - Relying on judgement in **S R Bommai case**, it also held that **'actions of President during a State emergency were open to judicial scrutiny'**.
- **Elections to Legislative assembly:** Court directed the Election Commission of India to conduct elections to the Legislative Assembly of Jammu and Kashmir by 30th September 2024.
 - Court stated that **restoration of statehood should take place at the earliest**.
- **Truth and reconciliation commission:** The Court **recommended that the Centre set up a "truth and reconciliation Commission"**, just like South Africa did in its post-apartheid era.
 - The Commission would **investigate and report on the violation of human rights both by State and non-State actors** in J&K and recommend measures for reconciliation.

Impacts of Abrogation of Article 370

- **Extension of rights:** All the rights enshrined in the Constitution of India and benefits of all the Central Laws are now available to the people of J&K and Ladakh.
- **No separate symbols/laws:** J&K no longer has its own flag, constitution, and its own penal code (called the Ranbir Penal Code).
- **Ending exclusive property rights:** Abrogation enabled Centre to notify new land laws for the J&K ending the exclusive rights of permanent residents over the land.
- **Social Justice:** Provision given for the SCs and STs in the rest of the country is also now available to the community in J&K.
- **Local Government:** Constitutional status to local government through application of 73rd and 74th Amendments of Constitution to J&K.
- **Rights of women married to non-locals:** Abrogation allowed the issue of domicile certificates to the husbands of local women married to non-locals.

Conclusion

With the judiciary upholding the abrogation of Article 370, it is important to foster economic development in J&K and ensure early elections for realization of democratic aspirations of people of J&K.

1.7. EXPULSION OF LAWMAKERS

Why in the news?

Recently, **Lok Sabha in India has expelled one of its members accused of accepting gifts and illegal gratification**. Similarly, **the US House of Representatives has also expelled one of its members over criminal corruption charges**.

More on the news

- **Expulsion in Lok Sabha:**
 - Lok Sabha had **constituted an ethics committee** to probe into the matter of corruption and breach of privilege/contempt of the house.
 - **Ethics Committee** report of LS found the **member guilty of "unethical conduct"** and contempt of the House.
 - The House accepted the conclusions of the Committee and **later passed a motion** that supported her expulsion as a Member of Parliament.
- **Expulsion in the US:** An **ethics committee report in the USA** found the US lawmaker guilty of 'corruption' and 'mispending campaign money', after which the house expelled him by adopting a motion.

To know more about the Ethics Committee of Lok Sabha and Ethics of Lawmakers, kindly refer to Article 9.1 Ethics of Lawmakers in the October 2023 edition of VisionIAS Monthly Current Affairs Magazine.

Expulsion of Lawmakers in India

The expulsion of an MP in India can be on a constitutional as well as legal (Rules of the house) basis. While the **rules of the house** provide for the **suspension of MPs**, members **can also be expelled through these rules**.

- **Constitutional basis of expulsion:** An MP found guilty of **breach of privileges** or **contempt of the house** can be suspended from the house or face expulsion.

- **Parliamentary privileges** are **legal immunities enjoyed by members of legislatures**, in which legislators are granted protection against civil or criminal liability for certain actions done or statements made in the course of their legislative duties.

- ✓ **Article 105** deals with the powers and privileges of both Houses of Parliament and its members and committees.

- ✓ **Article 194** outlines the corresponding powers, privileges, and immunities of State legislatures and their members and committees.

- **Contempt of the house** is defined as **any act or omission**

- ✓ which obstructs or **impedes either House of Parliament** in the performance of its functions, or

- ✓ which obstructs or **impedes any member or officer of such House** in the discharge of his duty, or

- ✓ which has a tendency directly or indirectly, to produce such results”

- **Parliament** is the **sole authority to ascertain** if there has been a **breach or contempt of the House**, no court is entrusted with this power.

- **Article 122 of the Indian Constitution** says parliamentary proceedings can't be questioned by the judiciary, although the courts have intervened in some cases.

- ✓ In the **Raja Rampal case (2007)**, the Court upheld the expulsion of Raja Ram Pal but noted that proceedings tainted by substantial illegality are open to judicial scrutiny.

- **Legal basis of suspension and expulsions of MPs:**

- To ensure smooth proceedings and maintain order, the **Presiding Officer of the House** has the **power to force a Member to withdraw** from the House.

- In **cases of extreme misconduct**, the House may expel a member “to rid the House of persons who are unfit for membership.”

Comparison of Indian and US forms of expulsion		
 Basis	 Indian process of expulsion	 US process of expulsion
Conduct that warrants expulsion	Breach of Privileges and contempt of the House/Disregarding Rules of Procedure and Conduct of Business	No limitation on Congressional power to determine what conduct warrants expulsion.
Majority required	Simple majority is needed for passing a motion in each house.	A two-thirds majority of the House is required.
Ethics Committee	Involvement of the ethics committee is not always necessary for expulsion.	Recommendation from the ethics committee is required.
Disqualifications	A total of 17 MPs have been expelled (indicating a relatively simple procedure).	Only 6 House of Representatives have been expelled (indicating relatively a complex process).

Rules of Procedure and Conduct of Business related to Suspension in LS and RS	
Rules in LS	Rules in RS
Rule 373: It empowers a presiding officer to order an MP to withdraw during the remainder of the day's sitting.	Rule 255: It allows the Chairman to direct any Member to withdraw immediately from the House for disorderly conduct.
Rule 374: It allows the presiding officers to name the legislators, and then a motion can be moved to suspend the MP for a period not exceeding the remainder of the session.*	Rule 256: It allows chairman to name the members, disregarding their authority or abusing the rules. The House may then adopt a motion suspending the Member for a period not exceeding the remainder of the session.
*Rule 374A brought in 2001 allows the Speaker to name an MP, who will then automatically stand suspended for five days or the remaining part of the session, whichever is less.	Unlike the Lok Sabha (under rule 374A), the Rajya Sabha cannot suspend its members without passing a motion.

Please note that expulsion and disqualification are not the same. The Constitution provides for both expulsion and disqualification. Under disqualification member of the parliament cannot contest the elections further while under expulsion he/she can.

Disqualification of Members of Either House of Parliament

- **Constitutional Provisions**
 - **Article 102 of the Constitution of India** provides for the disqualification of members under certain conditions-
 - ✓ If he holds **any office of profit** under the Union or state government
 - ✓ If he is of **unsound mind** and stands so declared by a court.
 - ✓ If he is an **undischarged insolvent**
 - ✓ If he is not a citizen of India or has **voluntarily acquired the citizenship of a foreign state** or is under any acknowledgement of allegiance to a foreign state.
 - ✓ If he is so **disqualified under any law made by Parliament**.
- **Criteria for disqualification under Representation of the People Act, 1951**
 - A person will be disqualified if **convicted and sentenced to imprisonment** for two years or more.
 - If an MP is found guilty of **certain election offences or corrupt practices** in the elections.
 - If an MP has failed to **lodge an account of his/her election expenses** within the time.
- **Tenth Schedule (Introduced in Constitution by 52nd Amendment Act 1985)**
 - The Constitution also lays down that a person shall be disqualified from being a member of Parliament if he is so **disqualified on the ground of defection** under the provisions of **the Tenth Schedule**.

1.8. NATIONAL CADET CORPS (NCC)

Why in the News?

National Cadet Corps (NCC), the largest uniformed youth organization in the world, celebrated its **75th Anniversary in 2023**.

About NCC

- NCC came into existence under the **National Cadet Corps Act XXXI of 1948**.
 - Earlier a committee headed by **Pandit H.N. Kunzru** recommended a cadet organization to be established in schools and colleges at a national level.
- **Aims of NCC:**
 - To create **organized, trained and motivated youth** to provide leadership in all walks of life and always available for the service of the nation.
 - To **motivate the youth to take up a career in the Armed Forces**.
 - To develop **character, commandership, discipline, leadership, secular outlook, spirit of adventure and the ideals of selfless** service amongst the youth of the country.
- It's a **Tri-Services Organization** comprising the Army, the Navy, and the Air Wing.
- **Headquarter:** New Delhi
- **NCC Directorate:** NCC at the state level is divided into 17 Directorates, in which each state or group of states or UTs forms a Directorate.
- **Nature of the NCC Programme:** Voluntary
 - The students have no liability for active military service.
- NCC offers **three types of certificates based on duration**.

Contributions of the NCC

- **Assistance during wartime:** During the **Indo China War (1962), Indo-Pak wars (1965 and 1971) and Kargil War (1999)**, NCC cadets provided instrumental help.
 - They assisted various organizations in the States, like hospitals, Post and Telegraph department, traffic control police, communication systems, refugee camps, and families of soldiers.
- **Social Service:** The NCC has been actively participating in social service activities like the Blood donation drives, anti-polio drive, plantation drives, etc.
 - NCC cadets recently led weeks-long '**Swachhata Hi Sewa**' a pan India cleanliness and awareness drive encompassing various impactful events aimed at fostering a garbage-free India.
- **Rescue and relief work:** NCC cadets are the first to reach the affected location and provide selfless assistance to the victims during calamities like earthquakes, cyclones, floods, train accidents etc.

- E.g., during the **Bhopal Gas Tragedy (1984)**, NCC cadets immediately engaged themselves in evacuation of casualties, administering medicine etc.
- **Other contributions:**
 - Developing **leadership** and **Officer-like qualities among the youth**.
 - Increasing **mutual understanding, trust, friendship** and peace among the **countrymen**.

NCC vs National Service Scheme (NSS)

- While **both are voluntary** in nature, there are certain differences.

Difference between NCC and NSS		
Parameters	 NCC	 NSS
Ministry	Ministry of Defence	Ministry of Youth Affairs & Sports
Year of establishment	1948	1969
Aim	To foster disciplined, selfless youth leadership for national service and military careers.	Development of Student's personality through community service.
Established through	National Cadet Corps Act XXXI of 1948	A Central Sector Scheme
Uniform	Compulsory uniform for NCC cadets	No uniform prescribed for NSS volunteers
Who can join?	<ul style="list-style-type: none"> ● Junior Division/Wing: Students from schools (of 13 Years or more of age) ● Senior Division/Wing: Students from Colleges and XI and XII classes 	<ul style="list-style-type: none"> ● 11th & 12th Class students ● Students of Technical Institution, Graduate & Post Graduate at colleges and University level of India

Conclusion

Empowered youth are pivotal for a nation's success. The NCC, by fostering character and selfless service, can significantly contribute to shaping this empowered youth, driving India towards a NEW INDIA.

1.9. NEWS IN SHORTS

1.10.1. LOKAYUKTA

- The Maharashtra legislative council recently passed the **Maharashtra Lokayukta Bill, 2022** replacing the Maharashtra Lokayukta and Upa-Lokayuktas Act, 1971.
 - **Maharashtra** was the **first state to establish Lokayukta** in 1971 followed by Odisha.
- **Lokayukta** is an **anti-corruption authority** constituted at the state level to look into cases of corruption against certain categories of public servants at state level.
 - Its origin can be traced to the **Ombudsmen in Scandinavian countries**.

- In **1966**, first **Administrative Reform Committee (ARC)** recommended the establishment a Lokpal at the Centre and Lokayukta at the State level.
- The **Lokpal and Lokayuktas Act, 2013** provides for establishment of the office of lokayukta through State Legislation.

To know more about Lokpal and Lokayuktas, kindly refer to Article 1.5 Office of Lokpal in March 2023 edition of VisionIAS Monthly Current Affairs Magazine.

- **Issues faced by lokayuktas**
 - **Non uniformity:** The structure of the Lokayukta and their capabilities are variable throughout the states.

- ✓ E.g. Rajasthan, Maharashtra, established **both the Lokayukta and the Up-Lokayukta**, but Uttar Pradesh, Himachal Pradesh, established **just the Lokayukta**.
- **Some Lokayuktas not in line with the 2013 Act:** Few states/UTs have not amended their Lokayukta Acts to bring them in line with the Lokpal and Lokayuktas Act, 2013.
- **Limited authority:** It can suggest punishment against the offender, but it is up to the state to accept or modify the suggestions.

Way Forward



Model state Lokayuktas on Lokpal and Lokayuktas Act, 2013



Promote digitization through initiatives like 'Lokpal Online: Digital Platform for Management of Complaints'



Structural reforms such as adequate budget, infrastructure and manpower.

	<ul style="list-style-type: none"> • Voting - Simple majority of the House of Representatives. • Presiding Officer for trials: Chief Justice of US. 	<p>needs to be passed by not less than 2/3rd of total membership of each House.</p> <ul style="list-style-type: none"> ○ Once passed in one House, it is sent to other House, where an investigation into the charges precedes vote on resolution. • Presiding Officer: Presiding Officer of respective Houses.
Consequence	<ul style="list-style-type: none"> • Impeachment serves as an indictment, not removal. • After impeachment, Senate (upper house) is convened like a court. President can only be removed if at least 2/3rd of Senate votes for it after the hearings. • Andrew Johnson, Bill Clinton, and Donald Trump were impeached but none were removed. 	<ul style="list-style-type: none"> • Impeachment results in the removal of the President from office. • No President has been impeached so far.

1.10.2. IMPEACHMENT IN US AND INDIA

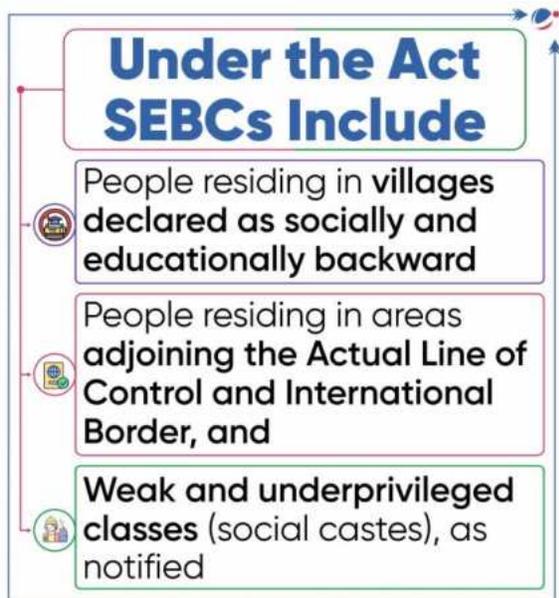
- US House of Representatives voted to formally open an impeachment inquiry into the President.
- **Impeachment in US and India**

Specification	USA	India
Applicability	President, Vice President, and all civil officers of the Federal Government are subject to impeachment.	Only President (under Article 61 of constitution).
Grounds of Impeachment	Treason, Bribery, or other high crimes and misdemeanors.	Violation of the Constitution
Process	<ul style="list-style-type: none"> • Charges: Any member of the House of Representatives can bring charges of impeachment. 	<ul style="list-style-type: none"> • Charges preferred by: Either House of Parliament provided such charges are signed by at least 1/4th of members of the House. • Voting: Resolution

1.10.3. TWO BILLS ON JAMMU AND KASHMIR (J&K) RECEIVE PRESIDENT'S ASSENT

- **J&K Reservation (Amendment) Act, 2023**
 - It amends the J&K Reservation Act, of 2004 which provides reservation in jobs and admission in professional institutions to members of **Scheduled Castes, Scheduled Tribes, and other socially and educationally backward classes (SEBC)**.
 - Amendment **substitutes weak and underprivileged classes** with other backward classes as declared by the UT of J&K.
 - ✓ The definition of weak and underprivileged classes is **deleted** from the Act.
- **J&K Reorganisation (Amendment) Act, 2023**
 - It amends the **J&K Reorganisation Act, of 2019**.

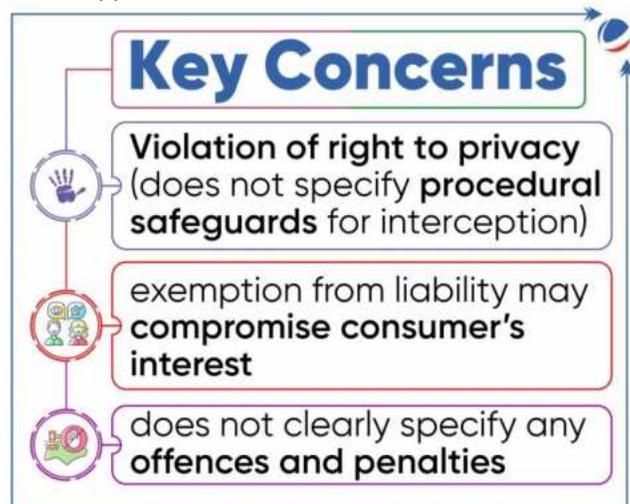
- **Key highlights of the Act**
 - ✓ **Act increases the total number of seats to 114 from 107**
 - As per the J&K Reorganization Act, 24 seats of the Assembly will remain vacant until the occupation in Pakistan-occupied Kashmir ceases.
 - Therefore, the effective strength of the Assembly is 83, which the amendment seeks to increase to 90.
 - ✓ **Reserves seven seats** for Scheduled Castes and nine seats for Scheduled Tribes.
 - ✓ **Nomination by Lieutenant Governor in Legislative Assembly**
 - **Up to two members from the Kashmiri migrant** community (one must be a woman)
 - **One member** representing **displaced persons from Pakistan-occupied Jammu and Kashmir.**



1.10.4. POST OFFICE ACT, 2023

- President gave assent to Post Office Bill, 2023 to revitalise Post Offices
- Post Office Act, 2023 will replace **Indian Post Office Act (IPOA), 1898.**
 - **IPOA, 1898** was enacted during the tenure of Viceroy **Lord Elgin-II (1894-1899).**
- There was **need** of a new Act as **IPOA, 1898** addressed mainly **mail services** provided through the Post Office.
 - Also to **ensure better governance** for Post offices as their services have **diversified** beyond mails such as **India Post Payments Bank**, insurance schemes etc.

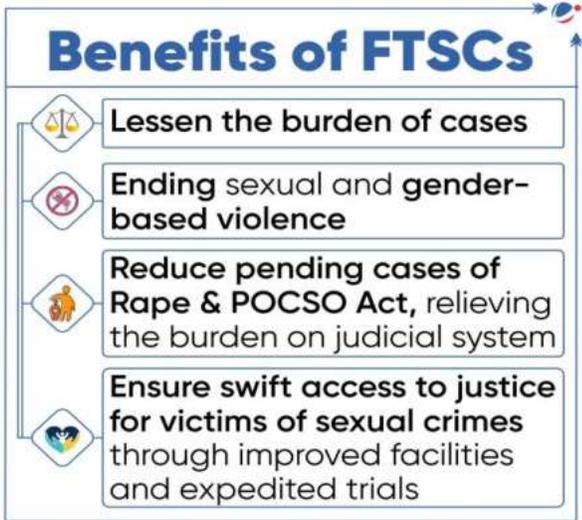
- ✓ With time, they have emerged as a vehicle for **delivery** of a variety of **citizen centric services.**
- **Key Highlights of the Act:**
 - **Powers to intercept postal articles:** It empowers officers to **intercept, open** or **detain** an article which is being transmitted through **post** on **certain grounds.**
 - ✓ **Grounds** include **security** of the **State, friendly relations** with **foreign states, public order, emergency,** public safety etc.
 - **Exemptions from liability:** PO will not **incur any liability** with regard to its **services,** except any liability prescribed through Rules.
 - **Other: Director General** of **Postal Services** will be appointed to head India Post.



1.10.5. FAST TRACK SPECIAL COURTS (FTSCS) SCHEME

- Union Cabinet approves continuation of Fast Track Special Courts (FTSCs) Scheme until March 31, 2026
- Launched in 2019, FTSCs is a **Centrally Sponsored Scheme** and **implemented by Department of Justice, Ministry of Law & Justice.**
 - Central Share is to be funded from **Nirbhaya Fund**, aimed at **enhancing the safety and security for women** in country.
- FTSCs, designed as **dedicated courts**, were established for hearing rape and Protection of Children from Sexual Offences Act (POCSO Act) cases.
 - **Enactment of Criminal Law (Amendment) Act 2018**, which included stringent punishment, including death penalty for rape offenders, **leading to the creation of FTSCs.**
 - FTSCs are **linked to National Judicial Data Grid.**
 - **761 FTSCs including 414 exclusive POCSO Courts are operationalised** in 30 States and Union Territories which have resolved over 1.95 lakh cases.

- Concerns associated with FTSCs: Lack of IT infrastructure and special training provided to judges; Inadequate number of judges etc.



- About Gram Manchitra:
 - It is a **Geographic Information System (GIS) Application**, launched by MoPR in 2019.
 - It has been developed by **National Informatics Centre (NIC)**.
 - It helps to perform **spatial planning** at Gram Panchayat level with use of **geo-spatial technology**.
 - It provides single **Geo Spatial platform** to better visualize various developmental works and provide a decision support system for **Gram Panchayat Development Plan**.

1.10.7. ERRATA

- In **October 2023 Monthly Magazine, Article 1.2** Criminalization of Politics had mentioned Lifetime ban for convicts from polls: Election Commission of India had mentioned it in the electoral reforms proposals published by it in 2004 and 2016.
 - It is clarified that **such ban was proposed by the Election Commission for convicts for serious offences**.

1.10.6. GRAM MANCHITRA

- Ministry of Panchayati Raj (MoPR) is promoting **Gram Manchitra** to facilitate **Spatial Planning** by the Gram Panchayat.

 SMART QUIZ	<p>You can scan this QR code to practice the Smart Quiz of Polity at our open test online platform for testing your understanding and recalling of the concepts.</p>	
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फाउंडेशन कोर्स

सामान्य अध्ययन

प्रारंभिक एवं मुख्य परीक्षा

2025, 2026 & 2027

इनोवेटिव क्लासरूम प्रोग्राम

- प्रारंभिक परीक्षा, मुख्य परीक्षा और निबंध के लिए महत्वपूर्ण सभी टॉपिक का विस्तृत कवरेज
- मौलिक अवधारणाओं की समझ के विकास एवं विश्लेषणात्मक क्षमता निर्माण पर विशेष ध्यान
- एनीमेशन, पॉवर प्वाइंट, वीडियो जैसी तकनीकी सुविधाओं का प्रयोग
- अंतर - विषयक समझ विकसित करने का प्रयास
- योजनाबद्ध तैयारी हेतु करेंट ओरिएंटेड अप्रोच
- नियमित क्लास टेस्ट एवं व्यक्तिगत मूल्यांकन
- 70 प्री फाउंडेशन कक्षाएं

- सीसेट कक्षाएं
- PT 365 कक्षाएं
- MAINS 365 कक्षाएं
- PT टेस्ट सीरीज
- मुख्य परीक्षा टेस्ट सीरीज
- निबंध टेस्ट सीरीज
- सीसेट टेस्ट सीरीज
- निबंध लेखन - शैली की कक्षाएं
- करेंट अफेयर्स मैगजीन

नोट: ऑनलाइन छात्र हमारे पाठ्यक्रम की लाइव वीडियो कक्षाएं अपने घर पर ऑनलाइन प्लेटफॉर्म पर देख सकते हैं। छात्र लाइव चैट विकल्प के माध्यम से कक्षा के दौरान अपने संदेह और विषय संबंधी प्रश्न पूछ सकते हैं। वे अपने संदेह और प्रश्न नोट भी कर सकते हैं और दिल्ली केंद्र में हमारे कक्षा सलाहकार को बता सकते हैं और हम फोन/वेल के माध्यम से प्रश्नों का उत्तर देंगे।

DELHI: 17 जनवरी, 9 AM | 27 दिसंबर, 9 AM

BHOPAL: 21 फरवरी

LUCKNOW: 21 फरवरी

JODHPUR: 23 जनवरी

JAIPUR: 23 जनवरी

2. INTERNATIONAL RELATIONS

2.1. INDIA-GCC RELATIONS

Why in the news?

The Parliamentary Standing Committee on External Affairs recommended legal assistance to Indian nationals imprisoned in Gulf Cooperation Council (GCC) countries.

Background

- Over 8,000 Indians are currently imprisoned in foreign jails and out of these, more than 4600 Indian prisoners, including undertrials, are currently lodged in jails of Gulf countries.
- Recently, **eight former Indian Navy personnel were** sentenced to death by a court in Qatar, charged with allegedly spying for Israel.

About India's Legal Assistance Abroad

- Indian Missions provide initial legal assistance to distressed Indians, if he/she is unable to afford such legal help on his/her own. Such initial legal assistance may include:
 - Financial assistance provided to file or to fight a case
 - Interpreter facilities may be provided where language is a barrier.
 - Indian Mission may suggest empanelled NGOs, which provide assistance/consultation in litigation process.
- Only legal assistance is provided, **Indian Mission does not fight Court cases by itself.**
- Expenditure on lawyers' fees is paid from **Indian Community Welfare Fund (ICWF)**.
 - ICWF is used to provide legal assistance, boarding & lodging assistance, emergency medical care, air passage to stranded Indians and transportation of mortal remains of Indian nationals, Legal/financial assistance to Indian women deserted by Overseas Indians/foreign nationals, etc.
 - Persons of Indian Origin and Overseas Citizens of India Card Holders are **not eligible** for individual financial assistance from ICWF.

India-GCC Relations

- **Geostrategic:** India has strategic interests with GCC countries due to its **proximity to important maritime trade routes** and its role in countering terrorism and extremism.
- **Diaspora:** The Gulf has the largest number of Indians abroad (about half of Indian NRIs).
 - GCC countries are the second most prominent **contributors to India's remittance inflow.**
- **Economic:** GCC is currently **India's largest trading partner bloc** (about **one-sixth of India's total trade**). **UAE is India's third largest trade partner** while Saudi Arabia is at the fourth place.
- **Energy security:** GCC countries contribute almost 35% of India's oil imports and 70% of gas imports.
- **Defense:** India has strong bilateral agreements in the region, such as the defense agreement with Qatar, and intelligence sharing with UAE, Saudi Arabia and Oman.
- **Support at international forums:** India's firm stand against terrorism has been acknowledged by GCC countries. **UAE, Oman and Bahrain** have conveyed support to India's claim for a permanent seat at a reformed UN Security Council.
- **Space:** India also has space cooperation with Saudi Arabia, Oman and other GCC countries. PSLV launched the UAE's first nano-satellite, **Nayif-I**, to collect environmental space data.

About GCC



- GCC is a political and economic **alliance of 6 countries** in the Gulf region - **Saudi Arabia, UAE, Qatar, Kuwait, Oman, and Bahrain.**
- **Iran and Iraq are not members.**
- GCC was established in **Riyadh, Saudi Arabia** in 1981.
- The official language is Arabic.

Challenges

- **Regional crisis:** Geopolitical rivalries and conflicts in the region, such as the Iran-Saudi Arabia rivalry (recently improving), the Yemen civil war, Syrian civil war etc. can have spill-over effects and pose security concerns for Indian citizens residing in the region.
- **Geopolitical Constraints:** Pakistan's strong political constituency in 'West Asia', fueled by its Islamic identity and military ties, gives it a favourable political balance in the region compared to India.
- **Chinese influence:** China's global influence, substantial investments in the Gulf's oil and gas sector, and successful market penetration have created a power disparity, making Gulf Arabs more inclined to seek Chinese protection.
- **Geo-economic issues:** The oil and gas prices, along with the rising cost of "war conditions" led to economic slowdown in Arab Gulf economies, salary cuts, layoffs, and nationalization of workforces at the cost of the expatriate community.

Way Forward

- **Diversify Economic Ties:** Expand beyond oil and gas trade by fostering collaborations in diverse sectors such as technology, healthcare, and renewable energy.
- **Collaborate on Regional Security Issues:** Address shared security concerns by working together on maritime security (such as Piracy), and disaster response.
- **Cultural Exchanges and People-to-People Contacts:** Enhancing cultural exchanges, encouraging tourism, and facilitating people-to-people contacts will nurture deeper mutual understanding, fortifying the bonds between India and the Gulf nations.

Steps taken to strengthen India-GCC relations

- **High-level Visits:** Regular high-level visits between leaders of India and GCC countries to enhance diplomatic ties and discuss bilateral issues.
- **Trade:**
 - Recently, GCC has proposed to **restart Free Trade Agreement talks (FTA)** with India. Earlier in 2006 and 2008, both sides had negotiated a trade pact, however, it was later discontinued.
 - The **proposed India-Middle East-Europe Economic Corridor (IMEC) Project** will have a huge impact on trade between India and GCC countries.
- **Culture:** India regularly signs **Cultural Exchange Programmes** for enhancing cultural cooperation with various Gulf countries.
- **Measures for Diaspora:** **e-Migrate** for more transparent and orderly migration of Indian workers to the Gulf, **MADAD portal for addressing consular grievances.**

2.2. INTERNATIONAL MARITIME ORGANISATION (IMO)

Why in the news?

India was re-elected to the International Maritime Organisation (IMO) Council, with the highest tally at elections held for the 2024–25 biennium.

About IMO Council

- **Executive organ of IMO** and responsible for **supervising the work of the Organization.**
- Made up of **40 Member States**, elected by the Assembly for **2-years terms.**
- Members are **divided into 3 categories**,
 - **Category (a):** States with interest in **providing international shipping services.**
 - **Category (b):** States with interest in **international seaborne trade.**
 - ✓ **India was re-elected in this category.**
 - **Category (c):** States with Special interests in **maritime transport or navigation** and whose election will **ensure the representation of all major geographic areas** of the world.

The infographic provides a comprehensive overview of the IMO. It features the IMO logo and the text 'International Maritime Organisation (IMO) London, United Kingdom'. Key information includes: **Genesis:** Established in 1948 as a UN specialized agency. **Purpose:** Promote safe, secure, and sustainable shipping. **Structure:** Consists of an Assembly, a Council, and five main committees: Maritime Safety, Marine Environment Protection, Legal, Technical Cooperation, and Facilitation. **Members:** 175 Member States and 3 Associate Members. A checkmark icon indicates that India is a member.

Significance of IMO

- **Environment protection:**
 - **Prevention of pollution from ships:** IMO's **MARPOL Convention** is a key treaty to prevent and minimise pollution from shipping.
 - ✓ It addresses **oil and chemical pollution** from ships, **sewage discharges** and disposal of **ship-generated garbage**.
 - **Protecting marine biodiversity:** By preventing the spread of potentially invasive aquatic organisms.
 - **Address noise pollution:** IMO **Guidelines on reducing underwater noise from commercial shipping**.
 - **Climate change mitigation:** IMO was the **first international regulator for a transport sector to adopt mandatory energy-efficiency measures** for international shipping.
 - **Addresses dumping of wastes at sea:** IMO adopted **London Dumping Convention and Protocol** on the dumping of wastes and other matter at sea.
 - ✓ The convention also **regulates carbon capture and sequestration** in subsea geological formations.
- **Maritime Safety and Security:**
 - **Safety and security of merchant ships:** IMO adopted The International Convention for the Safety of Life (**SOLAS Convention**), 1974.
 - It specifies **minimum standards for the construction, equipment and operation of ships, for their safety**.
 - **Prevent piracy and armed robbery against ships:** Provides assistance to Member States to develop their national or regional measures to address piracy.
 - ✓ E.g. **Djibouti Code of Conduct around the western Indian Ocean**.
 - **Suppression of Unlawful activities (SUA) Treaties:** International legal framework enabling action on unlawful acts committed against ships.
 - **Checking drug smuggling:** IMO's **Maritime Safety Committee (MSC)** and **Facilitation Committee (FAL)** cooperate to prevent drug smuggling on international ships.

About Biofouling

- It is **accumulation of various aquatic organisms** on ships' hulls, acting as a vector **for the transfer of invasive aquatic species**.
- **IMO's initiatives on Biofouling**
 - **IMO's Biofouling Guidelines**.
 - **GloFouling Partnership project:** GEF-UNDP-IMO collaboration to address biofouling.

Challenges faced by IMO

- **Unequal influence of member states:** IMO's finance mechanism requires states with greater tonnages to contribute a greater level of funding.
 - Unequal financing leads to unequal influence of few member states.
- **Disproportionate influence of industry:** Results in IMO taking positions that disproportionately favours industry concerns over other issues e.g. climate change mitigation.
 - As per Transparency International, Industry groups made up 57 per cent of all consultative members at the committee level within IMO.
- **Limited capacity to regulate emerging technologies:** due to small organizational strength of IMO.
- **Lack of political consensus during negotiations.**
 - E.g. Argentina, Brazil, India, etc. quote the Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC) principle to block GHG regulation.
- **Very narrow regulatory focus:** **Policy mix of IMO contains lack economic instruments, and innovative instruments**, like, alternative propulsion technologies.

Conclusion

The above challenges set the tone for India as a council member to play an active role in facilitating organizational and governance reforms in IMO to ensure safe and sustainable shipping along with conservation and sustainable use the oceans and seas (SDG 14).

2.3. NEWS IN SHORTS

2.3.1. INDIA-KENYA RELATIONS

- **President of Kenya** paid **State visit to India** to boost bilateral relationship.
- **Key highlights:**
 - **Joint vision document** was unveiled to scale up **maritime engagement** in the **Indian Ocean region (IOR)** to address issues such as **piracy, drug trafficking, and terrorism**.
 - India also announced a **US \$250 million line of credit (LoC)** to Kenya for **modernisation** of the **agricultural sector**.
 - ✓ LoC is a **soft loan** (not a grant) provided at **concessional interest rates** to developing countries.
- **Key Aspects of Bilateral Relation:**
 - **Diplomatic:** Kenya is a strong **partner** in the **East African Community or EAC** (Burundi, DR Congo, Rwanda, Uganda, South Sudan, and Tanzania are other members of EAC) with which India has signed cooperation agreement in 2003.
 - ✓ Also, Kenya is part of India's approach to emerge as the '**Voice of global south**'.
 - **Trade:** Bilateral trade currently is around of **3.39 billion USD**. Under India-Kenya Trade Agreement of 1981 both countries accorded **Most Favored Nation (MFN) status** to each other.
 - ✓ Under the **WTO** agreements, MFN principle emphasises that **countries cannot normally discriminate** between **their trading partners**.
 - ✓ The **Double Taxation Avoidance Agreement (DTAA) signed in 1989** was revised in 2016 and came into force in 2017.
 - **Maritime cooperation:** Both are members of **Indian Ocean Rim Association (IORA)**.
 - **People to people contacts**
 - ✓ Approximately **80,000 people of Indian origin** are present in Kenya and **India is one of the third largest source** of inbound tourists to Kenya.
 - ✓ Kenyan nationals availed training and scholarships programmes in various fields under the:
 - **Indian Technical & Economic Cooperation (ITEC) Programme,**
 - **India-Africa Forum Summit and Aid to Africa Programme.**



2.3.2. INDIA, OMAN ADOPT A VISION DOCUMENT TO EXPAND TIES

- A Joint Vision document titled '**A Partnership For the Future**' was adopted during the **visit of the Sultan of Oman**.
 - It acknowledges the remarkable **synergy between Oman Vision 2040** and India's development objectives, under '**Amrit Kaal**'.
 - Digital connectivity, medical tourism, maritime security, hospitality, space, agriculture, and food security are some of the areas that the vision document has focused on.
- **India-Oman relations**
 - Oman is a crucial pillar of **India's West Asia policy**.
 - ✓ Oman is a **strategic partner of India (2008)** and **an important interlocutor** at Gulf Cooperation Council (GCC), Arab League and Indian Ocean Rim Association (IORA) fora.
 - Oman has a **large Indian Diaspora** of 7 lakh people.
 - **Bilateral trade** more than **doubled** from USD 5.4 billion in 2020-21 to USD 12.3 billion in 2022-23.
 - ✓ India was the **second largest market for Oman's crude oil exports** for the year 2022 after China.

- In October 2022, India and Oman launched the **Rupay debit card in Oman**.
- Oman will play an important role in the proposed **India-Middle-East-Europe Economic Corridor (IMEC)** infrastructure project.

- It has **permanent secretariat based in Colombo**, to coordinate activities and implement decisions.
- **Significance of CSC**
 - In line with vision of **Security and Growth for All in the Region (SAGAR)** and **Neighbourhood First Policy**.
 - Provides **cooperative environment and collaborative mechanism** in maritime neighbourhood of IOR.



- Other Regional Cooperation Mechanism in IOR**
- **Indian Ocean Rim Association for Regional Cooperation (IOR-ARC).**
 - **Indian Ocean Naval Symposium (IONS)** seeks to increase maritime co-operation among navies of the littoral states of IOR.
 - **Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC).**
 - **Indian Ocean Commission (India is not a member but observer to it).**



2.3.3. INDIA AT COLOMBO SECURITY CONCLAVE

- **India attended 6th National Security Adviser level meeting** of Colombo Security Conclave held in Mauritius.
- **Key Developments**
 - Agreed on a **Roadmap of Activities for 2024** in the face of **traditional, non-traditional and emerging hybrid challenges** in Indian Ocean region (IOR).
 - ✓ **Non-traditional security issues** are challenges that arise primarily out of **non-military sources**, such as climate change, infectious diseases, natural disasters, etc.
 - Announced launch of **Ocean Information Services portal**.
 - ✓ Portal aims to facilitate **exchange of oceanographic information**.
- **About Colombo Security Conclave (CSC)**
 - **Formed in 2011** as **trilateral maritime security** grouping of **India, Sri Lanka and Maldives**.
 - Later **Mauritius joined as 4th member** and **Bangladesh & Seychelles** as observer countries.

2.3.4. UN COMMISSION FOR SOCIAL DEVELOPMENT (UN COSD)

- **Ruchira Kamboj India's permanent representative to the United Nations (UN) chaired** member-state briefing in preparation for the 62nd UN COSD (to be held in February 2024).
- **About the UN CoSD**
 - **Genesis:** CSocD was established by **Economic and Social Council (ECOSOC) in 1946** as the Social Commission and **renamed as CSocD in 1966**.
 - ✓ ECOSOC, under the overall authority of the UN General Assembly, coordinates the **economic and social work of the UN**.

- **Membership: 46** Members who are **elected by ECOSOC** based on **equitable geographical distribution**.
- **Bureau:** Bureau members are **elected by the Commission** and comprises **a chair and four vice-chairs** (elected officers serve for a term of office of two years).
- **Key Roles:**
 - ✓ Promotes **social policies** that support the overall development goals of the UN, particularly in relation to:
 - **eradicating poverty,**
 - **advancing social integration,** and
 - **ensuring full employment and decent work** for everyone.
 - ✓ It is in charge of **implementation** of the **Copenhagen Declaration and Programme of Action** adopted in the **World Summit for Social Development (WSSD)** in 1995.
 - ✓ Each year, the CSocD adopts a **priority theme and an emerging issue** to guide its work and discussions.
 - Theme for the 62nd session is "**Fostering Social Development and Social Justice** through Social Policies to **accelerate progress** on the Implementation of the **2030 Agenda for Sustainable Development** and to achieve the overarching goal of **poverty eradication**".
- **India's membership:** In **February 2023**, India took on the Chair of the 62nd session of the CoSD for the first time since 1975.

About WSSD

- The WSSD was held in **1995 in Copenhagen, Canada**.
- Governments reached a new **consensus on the need to put people at the centre of UN's development efforts**.
- The Social Summit pledged to **make the conquest of poverty, the goal of full employment and the fostering of social integration** overriding objectives of development.
- The **Copenhagen Declaration**, and a **Programme of Action** was adopted which represents the new consensus among Government.

2.3.5. IOM LAUNCHES PROJECT PRAYAS

- International Organisation for Migration (IOM) launched Project PRAYAS (Project Promoting Regular Assisted Migration for Youth and Skilled Professionals).
- The **Project** was launched in **partnership with Ministry of External Affairs (MEA)** for the year **2023-24**.
 - **Objective:** To facilitating **safe, orderly, and regular migration** for aspiring Indian migrant workers and

students in collaboration with MEA, NITI Aayog, and State Governments.

- Project will **promote dissemination of communication materials** on safe and orderly migration pathways.
 - ✓ India has a large diaspora with **over 32 million** spread across the globe (2021 Dec).
 - ✓ Also, India is the **world's largest recipient of remittances**.
- **Problems faced by Indian diaspora abroad**
 - **Wage insecurity, casual work arrangements, lack of social protection and skills gap.**
 - Poor working conditions, absence of a proper **grievance redress mechanisms**, and access to a **transparent judicial system etc.**
- **International Organisation for Migration (IOM)**
 - **About:** Intergovernmental organization within United Nations system in the field of migration.
 - **Mandate:** Promoting humane and orderly migration for the benefit of all.
 - **Member states:** 175 (including India)
 - **Major Reports:** World Migration Report
 - **Established:** 1951.
 - **HQ:** Geneva.



2.3.6. ARTICLE 99 OF U.N. CHARTER

- **U.N. Secretary-General invoked Article 99 of UN Charter** to warn UN Security Council of impending Humanitarian crisis in Gaza.

- **Article 99** states that the **Secretary-General may bring to the attention of Security Council any matter** which in his opinion may **threaten the maintenance of international peace and security**.
 - Article 99 has been **invoked on only four occasions in the past**.
- UN Charter is **founding document of United Nations**, signed in **1945 in San Francisco**.
- It **codifies major principles of international relations** like sovereignty equality of States etc.

2.3.7. 75TH ANNIVERSARY OF UDHR

- **Motivated by past world wars**, Universal Declaration of Human Rights (UDHR) was approved by the **U.N. General Assembly (UNGA)** on **Dec. 10, 1948**.
- **Key features**
 - It recognises that 'the **inherent dignity of all members of the human family** is the **foundation of freedom, justice and peace** in the world'.
 - It declares that **human rights are universal** – to be enjoyed by all people, no matter who they are or where they live.
 - **UDHR**, together with the following **International Covenants** make up **International Bill of Human Rights**:
 - ✓ **International Covenant on Civil and Political Rights (ICCPR)**
 - ✓ **International Covenant on Economic, Social and Cultural Rights (ICESCR)**
 - It outlines **30 fundamental rights** encompassing:
 - ✓ Civil and political rights, such as the **rights to life, liberty and privacy**.
 - ✓ Economic, social and cultural rights, such as the **rights to social security, health and adequate housing**.
 - While **not a legally binding treaty itself**, its principles are part of **legally binding international agreements**.
- **India and UDHR**: **Hansa Mehta**, a member of India's Constituent Assembly, is credited with altering "**All men are born free and equal**" to "**All human beings are born free and equal**" in Article 1 of the UDHR.

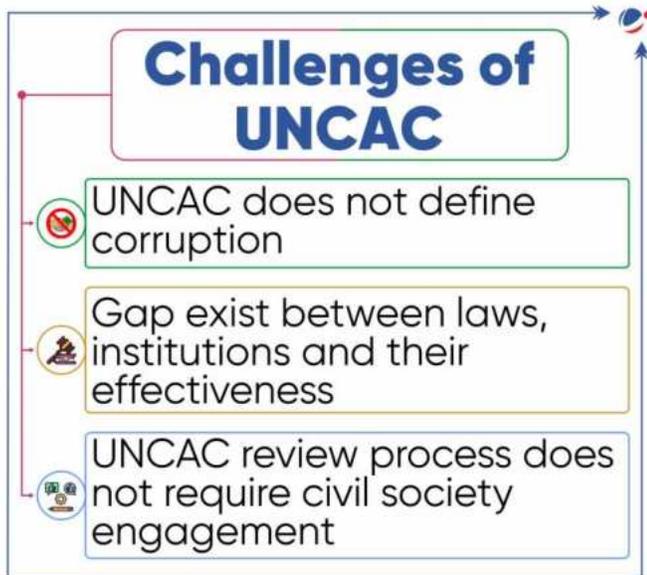
2.3.8. GLOBAL COOPERATION AND TRAINING FRAMEWORK (GCTF)

- **U.S, India, and Taiwan** convene a cybersecurity workshop, to **foster operational expertise and sharing best practices under GCTF**.
- GCTF was **launched by US and Taiwan in 2015** as a platform to utilize Taiwan's strengths and expertise to address global issues.

- GCTF allows practitioners from around the world to **strengthen connections among experts on topics like public health, supply chains, humanitarian assistance, digital health and other regional issues**.
- **Taiwan, United States, Japan, and Australia** are its **full members**.
- **India not a member** of GCTF.

2.3.9. 20 YEARS OF UN CONVENTION AGAINST CORRUPTION (UNCAC)

- On December 9, 2003, UNCAC was signed in Mexico. It entered into **force in 2005**.
- **Key features**
 - Only **legally binding** universal anti-corruption instrument.
 - Parties: 190 (including **India**)
 - Covers different **forms of corruption**, such as bribery, trading in influence, abuse of functions, and various acts of corruption in the **private sector**.
 - It covers **five main areas**:
 - ✓ **Preventive measures** (establishment of anticorruption bodies etc),
 - ✓ **Criminalization and law enforcement** (States are obliged to establish some offences).
 - ✓ **International cooperation** (States bound to render mutual legal assistance)
 - ✓ **Asset recovery**, and
 - ✓ **Technical assistance** and information exchange.
 - The **United Nations Office on Drugs and Crime (UNODC)** serves as the custodian of the Convention and as the Secretariat of its Conference of States Parties.
 - ✓ **Conference of the States Parties** is the main policymaking body of the Convention.
 - ✓ It **meets every two years** and adopts resolutions and decisions to further its mandate.
- **Successes of UNCAC**
 - Providing a **comprehensive framework** to combat corruption.
 - **Near-universal ratification**
 - Its **Review Mechanism** is triggering concrete anti-corruption measures.
 - Contributed to establishing **new institutions and anti-corruption policies**.



2.3.10. TAX INSPECTORS WITHOUT BORDERS (TIWB)

- TIWB launched a programme in Saint Lucia and India has been chosen as the Partner Administration.
 - India will provide Tax Experts for this program
- About TIWB programme:
 - It is a joint initiative of the Organisation for Economic Co-operation and Development (OECD) and the United Nations Development Programme (UNDP).
 - It facilitates the transfer of tax audit knowledge and skills to developing country tax administrations using a practical, "learning by doing" approach.



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3. ECONOMY

3.1. STATE FINANCES

Why in the News?

Recently, the Reserve Bank of India published an annual report titled “**State Finances: A Study of Budget of 2023-24**”. The theme of the Report is ‘**Revenue Dynamics and Fiscal Capacity of Indian States**’.

Key Findings of the Report

- **Prudent Fiscal Management:** States consolidated **gross fiscal deficit to gross domestic product (GFD-GDP) ratio declined from 4.1 per cent in 2020-21 to 2.8 per cent in 2021-22**, led by a moderation in revenue expenditure, coupled with an increase in revenue collection.
- **Increased Capital Outlay:** Capital outlay is budgeted to **increase by 42.6 % in 2023-24 to 2.9 per cent of GDP**.
 - **Capital outlay** involves expenditure towards the **creation of assets** and has a **multiplier effect on economic output**.
- **States’ Total Outstanding Liabilities:** The debt-GDP ratio of states **declined from 31 % at end-March 2021, to 27.5 % by end-March 2023**, supported by fiscal consolidation.
 - However, outstanding liabilities may remain higher than 30 per cent of gross state domestic product (GSDP) for many States.
 - The support received from the Centre in the form of **50-year interest-free capex loans** has helped in reducing the States’ interest burden.
- **Net Market Borrowings:** States’ dependence on net market borrowings, which had risen significantly in the past, **declined to 76 % in the budgeted GFD for 2023-24**.
 - States’ dependency on net market borrowing has declined as their loans from the Centre have increased.
- **Increased Tax Buoyancy:** The implementation of goods and services tax (GST) has led to increased tax buoyancy for the States.
 - GST implementation has led to **greater formalization of the economy** which is important from the perspective of **expanding the tax base**.
- **Committed Expenditure:** That includes **interest payments, administrative services, and pension**, is expected to remain at **4.5 % of GDP**.

Concerns with State Finances

- **Low Non-Tax Revenues Collection:** Non-Tax Revenues remained **around 1 per cent of GDP** in the last 10 years compared to a ratio of **10 % or more in countries like Singapore, Egypt and Iran**.
- **Reduced Development Expenditure:** The allocations for education, sports, art and culture, relief on account of natural calamities, urban development, agriculture and allied activities, and rural development were reduced.
- **Old Pension Scheme (OPS):** Return to the **OPS would exert a huge burden on State finances** and restrict their capacity to undertake growth-enhancing capital expenditures.

Know the term

- **Gross fiscal deficit** = Total expenditure – (Revenue receipts + Non-debt creating capital receipts)
- Non-debt-creating capital receipts are those receipts which are not borrowings and, therefore, do not give rise to debt. Examples are recovery of loans and the proceeds from the sale of PSUs.
- **Net fiscal deficit:** It is the gross fiscal deficit less the net lending of the Central government.
- **Tax Buoyancy:** A tax is buoyant when revenues increase by more than 1 per cent for a 1 per cent increase in GDP.

N K Singh Committee Recommendations

- The combined **debt-to-GDP ratio of the centre and states** should be brought down to 60 per cent by 2023 (comprising of 40 per cent for the Centre and **20% for states**).
- The committee suggested incorporating **"escape clauses"** that allow deviation from the fiscal targets under specific circumstances, such as national security, acts of war, national calamities etc.

Important non-tax revenue sources

- **Lease/sale** of natural resources, like minerals.
- **User charges** on economic/social services provided by the government such as irrigation, electricity, health, education, forestry and wildlife.
- **Lotteries**.
- **Interest receipts** from loans extended to entities like public sector undertakings (PSUs) and local bodies.

- If all the State governments revert to OPS from the National Pension System (NPS), the **cumulative fiscal burden could be as high as 4.5 times that of NPS.**
- **Precarious Fiscal Situation:** Any further provision of **non-merit goods and services, subsidies, transfers and guarantees** will render their fiscal situation precarious and **disrupt the overall fiscal consolidation** achieved in the last two years.

Ways to Improve State Finances

- **Increase Non-non-tax revenue:** Through **revisions of user charges on electricity, water** and other public services, royalties and premiums from mining, asset monetization etc.
- **Prevent Revenue Loss due to Illegal Mining:** Utilize **modern technologies** such as Geographic Information Systems (GIS) and Drone Surveys to identify and **curb illegal mining activities.**
- **Performance-Based Transfers:** Finance Commissions could consider **recommending an increased share of conditional transfers based on reforms, quality of expenditure and fiscal sustainability.** This will harness healthy competition across States towards improving their economic performance.
 - Currently, revenue deficit grants are disbursed to those States which are assessed to have high revenue deficits post-tax devolution.
- **Increase Fiscal Capacity:** Need for scaling up fiscal capacity for uninterrupted and efficient delivery of social, economic and general services to the people and for upgrading the quality of physical and human capital.
- **Streamlining Fund Transfers for Efficient Governance:** Efficient banking arrangements and cash management practices are essential for the effective utilization of the government's financial resources and the timely execution of payment obligations.
 - Fragmented banking arrangements - multiple accounts maintained by numerous revenue-collecting and spending agencies (including autonomous and statutory bodies) - can result in inefficient cash management practices.
- **Climate finance:** The Centre can introduce performance-based incentives for States that achieve significant progress towards climate goals.

Fiscal Capacity of States

- Fiscal Capacity reflects the **State government's ability to meet its expenditures through its own revenue receipts.**
 - Currently, the States finance **only 58 per cent of their revenue expenditure from their own revenue sources.**
- **Factors contributing to Fiscal Capacity:** Lower share of agriculture GSDP, High per capita income, high education levels, Low inflation, Low corruption, and Lower size of the shadow economy.

3.2. SPECIAL ECONOMIC ZONES

Why in the news?

Recently, the Ministry of Commerce and Industry has notified **Special Economic Zones (SEZ) (Fifth Amendment) Rules, 2023** in the exercise of powers conferred by Section 55 of the SEZ Act, 2005.

More on news

- The SEZs (Fifth Amendment) Rules, 2023 **amended the SEZ Rules 2006.**
- The amended rules allow the **demarcation of a portion of the built-up area in an Information Technology (IT) or Information Technology Enabled Services (ITES) SEZ as a non-processing area,** subject to conditions including repayment of tax concessions attributable to the area.
 - The processing area in an SEZ is **for the manufacture of goods or rendering of services.** The non-processing area is for **supporting infrastructure.**



- Demarcation of a non-processing area **shall not be allowed if it results in decreasing the processing area to less than fifty per cent of the total area** or less than the area specified.
- The businesses engaged in IT/ITES SEZ in a non-processing area shall not avail any rights or facilities available to SEZ Units.
- **Significance of amendments**
 - **Increases flexibility** in carrying out business in SEZs.
 - **Protect the interests** of both developers as well as occupiers of SEZ.
 - Freed-up space will lead to **better utilization** for a diversified set of occupiers.

About Special Economic Zones (SEZs)

- SEZ is a specifically **delineated duty-free enclave, deemed to be foreign territory** for trade operations, duties and tariffs.
- **Any private/public/joint sector or State Government** or its agencies can set up SEZ.
 - SEZs have been **established in several countries**, including China, India, Jordan, Poland, Kazakhstan, Philippines and Russia.
- **SEZ Act 2005** has been enacted followed by **SEZ Rules** which came into effect in 2006.
 - The Act and Rules provided the basic framework for the establishment and management of SEZs in India. They seek **simplification of procedures and for single window clearance on matters** relating to central as well as state governments.
- The area under 'SEZ' covers a broad range of zone types, including Export Processing Zones (EPZ), Free Zones (FZ), Industrial Estates (IE), Free Trade Zones (FTZ), Free Ports, Urban Enterprise Zones and others.
- Presently, **276 SEZs** are operational in India.
 - **Total exports from SEZs stood at \$155.8 billion in 2022-23.** These included \$61.6 billion of goods and \$94.2 billion of service exports.

Incentives offered to SEZs

- Duty-free import/domestic procurement** of goods for the development, operation and maintenance of SEZ units
- Exemption from Central Sales Tax, Service Tax and State sales tax.** These have now subsumed into GST and supplies to SEZs are zero rated under IGST Act, 2017.
- Other levies, if exempted by the respective State Governments.
- Supplies to SEZ are zero-rated** under the IGST Act, 2017.
- Single window clearance** for Central and State level approvals.

Challenges associated with SEZ in India

- **Policy Reversals:** The initial rise in the number of SEZs after 2005 was neutralised due to the lack of sustained incentives for the units.
 - The withdrawal of incentives such as exemption from minimum alternate tax, and dividend distribution tax in 2011-12 has led to a weakening of the SEZ concept in India.
- **Unutilised lands:** The Public Accounts committee in 2021-22 found that 52 per cent of the land allotted for SEZs was lying idle.
 - The Committee had observed developers obtaining large land parcels for SEZs but utilizing only a fraction for the designated purpose, profiting by mortgaging the remaining land acquired for public use.
- **Absence of Single Window Clearances:** Although fast-track approvals have been put in place, in terms of implementation, many exporters across SEZs have reported that documentation and procedural issues are still prevalent.

SEZs in China vs India

- **Size:** In China, **size of SEZ is big and accumulates itself in hundreds of hectares** of the land, whereas SEZs in India are not allotted as much land as those in China.
- **Location:** SEZ of China are **mostly located on coast and trade-friendly locations** such as Hong Kong for **better facilitation of import and export**, whereas no such restriction is there in India.
- **Labour laws:** Foreign companies in Chinese SEZs enjoy flexibility in terms of labour laws as compared to India.
- **Infrastructure:** SEZs of China are well connected with latest telecommunication network and latest means of transport, which is lacking in India.

- **Domestic sales:** Companies operating within SEZs can sell products in the Indian domestic market only on payment of applicable duties which further deters their growth in the domestic market.
- **Inconsistent with World Trade Organization (WTO) norms:** A dispute settlement panel of WTO in its report in 2019, has ruled that India's export-related schemes (including the SEZ scheme) are like prohibited subsidies under the Agreement on Subsidies and Countervailing Measures and are inconsistent with WTO norms.
 - India has appealed to the WTO's appellate body against this ruling.
- **Other issues**
 - Several protests resisted land acquisition.
 - Several business units migrated to other ASEAN nations that provided better fiscal benefits and trade environment.
 - The concentration of SEZs in developed States and near urban centres.

Way ahead

- **Recommendations of Baba Kalyani committee**
 - **Enhance competitiveness** by enabling ecosystem development by funding high-speed multi-modal connectivity, business services, and utility infrastructure.
 - **Migration from export focus in SEZs** to focus on broad-based Employment and Economic Growth
 - **Formulation of separate rules and procedures for manufacturing and service SEZs.**
 - **Granted infrastructure status to SEZs** to improve access to finance and to enable long-term borrowing.
 - **Dispute resolution** through arbitration and commercial courts.
 - **Procedural relaxations** for developers and tenants to improve operational and exit issues.
- **Providing incentives** such as removal of export obligation for units to operate in SEZs, allowing sales to Domestic Tariff Areas (DTAs)
 - It is reported that the government prepared a **draft SEZ Amendment Bill which is considering several measures such as a flexible framework for the sale of products manufactured in SEZs in the domestic market**, streamlining approval processes for units etc.
 - Any area that lies outside of SEZ or any other custom bonded zone in India is known as the DTA.
- **Optimal utilisation of vacant land** in SEZ by allowing flexible land use and removing sector-specific constraints to develop industrial enclaves.
- **Rationalisation of existing models** of economic zones such as SEZ, coastal economic zone, Delhi-Mumbai Industrial Corridor etc. and develop master plan for industrial clusters.
- **Integration of production-linked incentive schemes with the SEZ policy** can accelerate the industrialisation process of the Indian economy.

3.3. LEVERAGING DIASPORA FINANCES

Why in the News?

The World Bank recently released an annual report “**Migration and Development Brief: Leveraging Diaspora Finances for Private Capital Mobilization**”.

Key Findings:

- **Global Remittance:** Global remittance flows are estimated at **\$860 billion in 2023**; this is an increase of 3 per cent from the previous year.
- **Remittances to Low and Middle-income Countries (LMICs):** Estimated to reach **\$669 billion at 3.8% growth** in 2023.
 - Remittances continued to be the **premier source of external finance for LMICs** during 2023, relative to FDI and official development assistance.



Data Bank

- **Largest Source of remittance:** United States followed by Saudi Arabia.
- **Remittance recipient countries:** India (\$125 billion), Mexico (\$67 billion), China (\$50 billion)
- **Highest Growth:** Latin America and the Caribbean countries.

- **Remittances' growth in South Asia is projected to be the highest** (\$89 billion) among LMICs in 2024, attributable entirely to remittance flows to India.

Significance of Remittance for Developing Countries

- **Economic Growth:** The remittances received by households **enable increased savings, and demand in the economy, resulting in increased revenues** for the government that can be channeled for the development.
- **Funding Fiscal Deficit:** Developing countries lacking access to international capital markets tend to depend on **remittances as a major source of external financing and provide critical support to Balance of Payment.**
 - In countries like Tajikistan, Tonga remittance inflows represent 48% and 41% of gross domestic product (GDP) respectively.
- **International Borrowing:** Future inflows of remittances can be used **as collateral to lower the costs of international borrowings** by developing countries.
- **Sustainable Source of Finance:** Remittances tend to be **stable and even countercyclical during economic downturns** in the recipient country.
 - In times of an economic downturn or natural disaster or political crisis back home, migrants send a bit more to help their families.
- **Improve Country Creditworthiness:** Due to their **large size relative to other sources of foreign exchange, counter-cyclical nature** and indirect contribution to public finances, remittances can also help **improve a country's sovereign ratings and its ability to repay debt.**

Remittances Flow in India

- **Largest Recipient of the Remittance in the World:** India received an estimated **\$125 billion** in remittances in 2023 but the **share of remittances in the economy was only 3.4 %.**
- **Source Countries:** Remittances from the **US, UK, and Singapore (High-skilled migrants)** collectively account for **36 % of total remittances.**
 - **UAE is the second-largest source** of remittances to India after the US, accounting for 18% of the total.
- **Key Driving Factors for Growth in Remittance:**
 - The historically tight labor market in the United States
 - High employment growth in Europe reflects extensive leveraging of worker retention programs.
 - Dampening of inflation in high-income countries



Concerns associated with Remittance

- **Restrictive Measures:** In response to the increase in migration flows, several countries started imposing pecuniary or restrictive measures.
 - **Internal checks at the border in the European Union** have been adopted by Italy, Germany, Norway, Sweden etc.
- **High Remittance Cost:** **Banks continue to be the costliest channel for sending remittances** (with an **average cost of 12%**), followed by post offices (7%), money transfer operators (5.3%), and mobile operators (4.1%).
- **Remittance flows through Informal Channels:** In countries with exchange controls that drive a significant difference between official and parallel exchange rates, migrants will tend to send a portion of remittances through informal channels.
- **High Inflation and low growth:** Decline in real income for migrants in 2024 in the face of global inflation and low growth prospects.
- **Volatile nature of Non-Resident Deposits:** Unlike remittances, they can be **volatile and highly sensitive to international interest rate movements**, thus not considered appropriate for financing long-term development projects.
- **Other concerns**
 - **Human costs**—Migrants separation from family
 - Emigrating workers departure creates **skilled labor shortages**
 - **Money can be laundered** for illegal & unethical activities
 - **This can create dependency**, undercutting recipients' incentives to work

Ways of directly mobilize diaspora finances.

- **Nonresident deposits:** NRI deposits are foreign currency deposits made in an Indian bank by a non-resident Indian. These deposits can be repatriated by the NRI on maturity along with the interest earned.
 - As of September **2023, non-resident Indian deposits in India amounted to \$143 billion.**
- **Diaspora bonds** can be structured to directly tap diaspora savings held in foreign destinations.

Way Forward

- **Encouraging Remittance Flows through Formal Channels:** Offering incentives to diaspora members to transmit remittances via official channels can bolster reserves and increase the foreign exchange available to the banking system.
- **Labour markets and social protection policies** in host countries should be inclusive of migrants, whose remittances serve as a vital lifeline for developing countries.
- **Reducing migration costs** can be even more effective in improving migrants' earnings and savings thereby increasing remittances and diaspora investments.

3.4. ROAD INFRASTRUCTURE IN INDIA

Why in the news?

Recently, the Parliamentary Standing Committee on Transport, Tourism and Culture has submitted a report in the Parliament which raised concerns about delays in road projects.

Issues Associated with Road Projects

- **Delayed projects:** Several projects are delayed due to various issues such as **delay in land acquisition**, tree cutting, utility shifting, unseasonal rainfall, local agitation, forest clearance and subsequently Pandemic COVID—19 etc.
- **The shortfall of Finance:** Insufficient budgetary allocation led **private contractors to use low-quality materials** to reduce costs.
- **Low Budget for Maintenance:** The budgetary allocation made for the Maintenance and Repair of National Highways remains less than even 4 per cent of the annual budget.
 - NITI Aayog advocates that **India should begin by earmarking 10 per cent of its annual budget for roads and Highways for maintenance**, to move towards the developed country norm of earmarking 40 per cent to 50 per cent of the budget for roads and highways for maintenance.
- **Damage Environment:** Road construction, especially in mountains and Himalayas, frequently **alters drainage networks, induces deforestation**, increases vehicular traffic contributes to **air and noise pollution, disrupts wildlife habitat**, affects the fertility of soil etc.
 - For instance, the **Char-Dham Road Project** resulted in **forest loss** i.e. about 508.66 hectares of forest area would be diverted for non-forestry purposes and 33,000-43,000 trees would be cut down to build roads.



Do you know ?

- The National Highways Authority of India (NHA) was set up through the **National Highways Authority of India Act, of 1988**.
- The NHA is **responsible for the development, maintenance and management of the National Highways** entrusted to it and for matters related or incidental thereto.



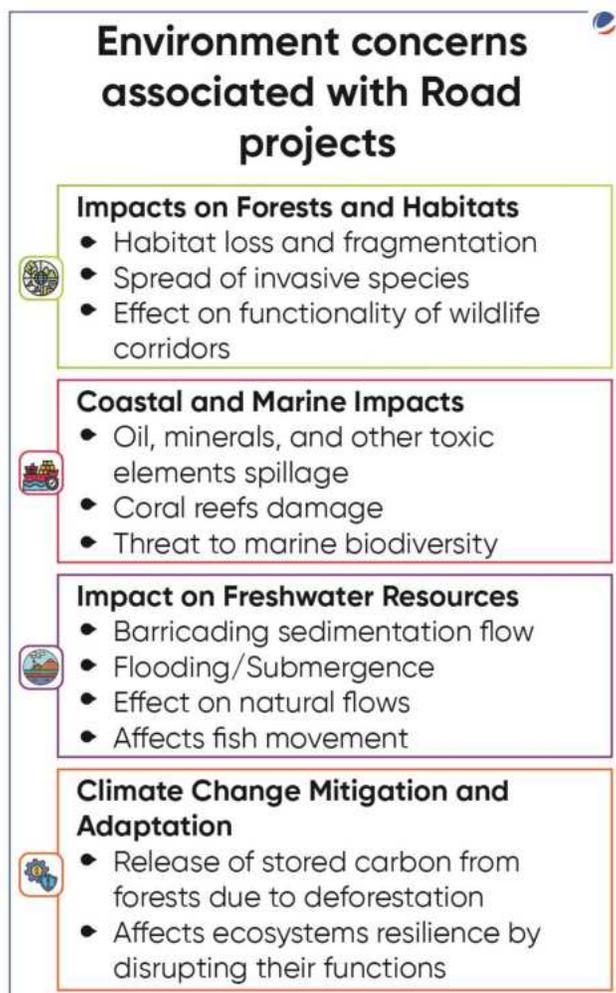
Data Bank

- **66.71 lakh km of road network** in India, which is the second largest in the world.
- **2% of the total road network is NH** which carries over 40% of total traffic.
- **29Km/Day Pace of NH Construction** in FY 2021-22

- **Safety:** Most road accidents occur due to **bad road engineering, lack of service roads** alongside National Highways, **poor road infrastructure with inadequate lighting, potholes, lack of awareness** about traffic rules, road safety measures, presence of **stray cattle and animals on National Highways** etc.
 - As per the **Road Accidents in India 2022** report, there is an increase of 11.9 per cent in accidents, 9.4 per cent in fatalities, and 15.3 per cent in injuries compared to 2021.
- **Other issues**
 - **Lack of service roads alongside NHs** causes inconvenience to residents and is, at times, the cause of road accidents.
 - **Disputes between authority and road contractors** often arise due to disagreements regarding project specifications, timelines, payment issues, and unforeseen site conditions, leading to delays and cost overruns.
 - **Shortage of manpower** at the NHA is adversely affecting the efficiency of the organisation.

Way ahead

- **Utilization of recycled materials**, fly ash, and plastic waste for highway construction, leading to **reduced direct emissions** has made road transport more efficient and sustainable.
- **Dispute resolution:** There is a need to speedily resolve pending cases and unlock stuck capital that can be used to expedite the construction of more highways through initiatives like Vivad Se Vishwas.
- **Toll-based on weight instead of axle:** It would help to curb the menace of overloading.
- **Prevent wildlife/ cattle on roads:** Necessary action should be taken to **coordinate with local law enforcement** to impose a penalty on cattle/animal-rearers for letting out their animals on National Highways.
- **Reduce environmental impact:** Collaborate with stakeholders to reduce road construction's environmental impact on biodiversity and natural habitats.
- **Service road:** Special budgetary allocation may be made to ensure the provision of service roads alongside NHs.
 - **Also**, creation of an effective policy to curb encroachment of service roads by local markets is needed.
- **Ensure road safety:** To improve road safety, it is **required to test defects in the quality of construction material, rectify black spots, make arrangements for an adequate number of ambulances, patrol vehicles, and tow-away cranes** to respond to accidents and establish a mobile phone-based Emergency Response System.



- Initiatives taken to improve Road Infrastructure in India**
- **Bharatmala Pariyojana:** Launched under MoRTH, with focus on enhanced effectiveness of already built infrastructure, multi-modal integration, **bridging infrastructure gaps for seamless movement** and **integrating National and Economic Corridors**.
 - **Special Accelerated Road Development Programme for North-East region (SARDP-NE):** It provides **road connectivity to backward and remote areas**, areas of strategic importance and neighbouring countries, and **all district headquarters in NE region** by minimum 2 lane highway.
 - **Green Highways (Plantation, Transplantation, Beautification & Maintenance) Policy, 2015:** It aims to promote greening of Highway corridors with the participation of the community, farmers, private sector, NGOs, and government institutions.
 - **Bhoomi Rashi - Land Acquisition Portal:** To digitize the Land Acquisition notification process.
 - **100% Foreign Direct Investment (FDI)** is allowed under the automatic route in the road and highways sector.

Different models to develop road projects.

Build, Operate, Transfer (BOT) Toll Model	BOT Annuity Model	Hybrid Annuity Model	Engineering, Procurement and Construction (EPC) Model
<ul style="list-style-type: none"> A private player (road developer) is granted a concession to finance, build, and operate a project for specified period (20- or 25-year concession period). The developer recoups their investments by way of user charges or tolls charged from customers using the facility 	<ul style="list-style-type: none"> A developer builds highway, operates it for a specified duration (15- 25 years) and transfers it back to the government. Road developers are paid pre-fixed amount as an annuity and government bears the risk of toll revenue. 	<ul style="list-style-type: none"> 40 percent of project cost is paid by government as construction support to private developer, and remaining 60 percent is to be arranged by developer. 	<ul style="list-style-type: none"> The government pays entire cost to private parties to build roads, thereby insulating the contractor entirely from financial risk. Government remains responsible for road maintenance or toll collection.

3.5. LEADS REPORT 2023

Why in the News?

Recently, the Ministry of Commerce and Industry unveiled the Logistics Ease Across Different States (LEADS), Report 2023.

About LEADS

- It was launched by the **Ministry of Commerce and Industry** on the lines of the **Logistics Performance Index (LPI)** of the World Bank in **2018**.
 - LPI relies entirely on perception-based surveys, **LEADS incorporates both perception as well as objectivity**.
 - India ranks 38th/139** countries in LPI 2023.
- LEAD ranks **States and UTs** on the **efficiency of their logistics ecosystem**.
- Pillars for measuring logistics performance.
 - Objective assessment**
 - ✓ **Support provided by State / UTs** for policy & process improvement of Logistics eco-system.
 - ✓ Enablers of Logistics – stock of **physical infrastructure**.
 - Perception Assessment**
 - ✓ Logistics Infrastructure
 - ✓ Logistics Services
 - ✓ Operating and Regulatory Environment
- Other Key Findings of 2023 Report**
 - Initiatives undertaken by States and UTs**
 - ✓ 21 States and 2 UTs have notified their respective **State Logistics policies**.



- ✓ 15 States and 1 UT have given **Industry status to the logistics sector**.
- **The total length of roads and railway tracks** grew by about **21% and 9%** since 2014-15.
- **The total number of Container Freight Stations (CFS) increased by 18% and Inland Container Depots (ICDs) increased by 26%** growth between FY18 to FY22.

3.6. SELF HELP GROUP BANK LINKAGES (SHG-BL) PROJECT

Why in News?

As per the Ministry of Rural Development, the Bank loans about **Rs. 7.68 lakh Crore** have been accessed by SHGs as of November 2023 since FY 2013-14 under the SHG-BL Project.

About SHG Bank Linkages Project

- It is **savings led microfinance model**, launched by **NABARD** in **1992**.
 - Under this program, banks were allowed to **open savings accounts, accessing credit at subsidized rates of interest** for Self-Help Groups (SHGs)
 - ✓ SHGs are registered/unregistered entities which usually has a membership of 15 to 20 members from very low-income families, usually women.
 - ✓ They mobilize savings from members and uses the **pooled funds to give loans** to the needy members
- **Components of SHG-BL**
 - Training and sensitization of Bank Branch Managers.
 - Training and positioning of Bank Sakhis at Rural Bank Branches.
 - Initiate Community Based Repayment Mechanism (CBRM) at Rural Bank Branches.
 - Credit Linkage of SHGs.

Key factors that have played a role in success of the SHG-BL are:

- **Annual issuance of a Master Circular by RBI and NABARD:** With provisions being modified as needed to meet the scheme's requirements.
- **Regular training of staff and community cadres:** Under State Rural Livelihoods Missions (SRLMs) to enhance their capacity.

Significance of SHG-BL Project

- **Financial Inclusion:** Covering 100 million households
- **Women Empowerment:** 84% are exclusively women group
- **Capacity Building:** Training in financial literacy
- **Poverty Alleviation:** Income from Secondary activities
- **Increase in income and savings** by 19% and 28% resp.
- **Decline in share of informal loans** by 20%

Phases of SHG-BL Project

PHASE 1 (1990-2005)	PHASE 2 (2006-2012)	PHASE 3 (2012-TILL DATE)
 NABARD acted as the catalyst for the SHG- Bank Linkage programme  RBI circular allowing banks to lend to SHGs  However, lending was primarily subsidy driven	 Strategic shift away from targeting individuals to group oriented lending approach (e.g. Integrated Rural Development Program to Swarnajayanti Gram Swarozgar Yojana)  Quantum jump in direct lending SHG centric model firmly established in southern states  However, growth was adversely affected due to the high rates of NPA under SGSY and the Andhra Pradesh ordinance	 Launch of DAY-NRLM  Dedicated architecture with professional manpower support established from the block level up to the national level  Removal of capital subsidy and introduction of interest subsidy  Substantial growth in disbursement of credit. Poorer States such as Bihar, Chhattisgarh, Madhya Pradesh etc. have shown impressive growth

- **Financial education:** for Self Help Group (SHG) members through **trained Financial Literacy Community Resource Persons (FLCRPs)** at the village level.
- **Bank Sakhis:** Currently, **45,746 Bank Sakhis** are positioned in rural Bank branches, facilitating smoother interactions between the Banks and SHGs.
- **Web portal:** It was created to overcome **information asymmetry** in SHG-Bank Linkage, incorporating data directly from Banks' Core Banking Solution (CBS) database.

Challenges

- **Lack of Capacity Building:** It has been observed that in case there is withdrawal of promoting institutions, there is a tendency for a slip in performance.
- **Low bank loan per SHG member:** Although the total amount of loan disbursed is high, the amount per SHG members remains low.
- **Low Frequency:** Amount and **frequency of SHG loans are far less** than their need which drives villagers go for other loan sources including usurious money lenders and relentless micro finance.
- **Loan Repayment Challenges:** Ensuring timely repayment of loans can be a challenge, especially when SHG members face economic hardships or natural disasters.
- **Regional Imbalances:** The regional spread of the SHG – Bank Linkage Programme is uneven as about 52% of the credit-linked SHGs are located in the southern States of the country.

Way forward

- **Community-Based Monitoring and Support Systems:** To track the progress of SHG activities and loan repayments.
- **Risk Mitigation Strategies:** Implement risk mitigation strategies, such as insurance products or contingency funds, to address unexpected challenges faced by SHG members.
- **Innovative Collateral Solutions:** Explore alternative collateral solutions like use of group guarantees, **social collateral, or government-backed schemes** to mitigate the collateral challenge.
- **Long-Term Sustainability Planning:** This includes **building the capacity of SHG members** to independently manage their financial affairs, reducing dependence on external support, and fostering a culture of **self-reliance**.



National Bank for Agriculture and Rural Development (NABARD)



Mumbai, India

- About:** It is the apex **development bank** for Fostering Rural Prosperity.
- Genesis:** It formed as a **statutory body** established in **1982** under **National Bank for Agriculture and Rural Development Act, 1981**.
- Purpose:** To Promote sustainable and equitable agriculture and rural development.
- Composition: Governed by Board of Director:**
 - The Chairman
 - 3 directors (experts in rural development)
 - 3 directors from RBI.
 - 3 directors from Central Government.
 - 4 Directors from state government.
- Function and Responsibilities**
 - **Financial:** Short- and Long-term finance to financial institutions.
 - **Developmental:** Assist in policy formulation of RBI, Central and state govt. and State Govt. on matters related to agricultural credit and rural development.
 - **Supervisory:** To conduct inspection of Cooperatives and Regional Rural Banks (RRBs).

Scan the QR code to know more about **Cooperatives**.

Weekly Focus #48: Cooperatives: Prosperity through Cooperation



3.7. PRADHAN MANTRI AWAS YOJANA (PMAY-URBAN)

Why in the news?

As per the Standing Committee on Housing and Urban Affairs, the union government should not consider housing units built under PMAY (Urban) as completed when basic amenities are not provided.

For more details of the scheme, refer Appendix at the end of the document.

Concerns associated with Pradhan Mantri Awas Yojana-Urban

- **Delay in completion:** Financial strain on States/UTs due to Covid pandemic, **lack of coordination** between government agencies and **suitable land** for constructing houses, **difficult terrain**, **availability of construction materials**, **labour**, and **climate hazards** (floods), **focus on innovative technologies** (e.g. disaster resilient construction technologies) etc. affecting the pace of completion of houses.
 - For instance, in Meghalaya out of 4,554 sanctioned houses, only 898 houses were completed by October 2022.
- **Lack of basic amenities in completed houses:** Emphasis on **output is limited to mere completion of the physical structure** of houses without provision for basic amenities like sewerage, water supply, electricity, transport, education of children etc. which renders such houses uninhabitable.
 - Around **5.62 lakh houses could not be delivered to beneficiaries due to a lack of basic amenities** as of December 2022.
- **Lack of finance:** Financial Assistance of Rs. 1.2 lakh per unit for plain areas and Rs. 1.3 lakh per unit for hilly areas, and difficult areas is **insufficient for building a new house**.
- **Low sanctioning of houses under the In-situ Slum Redevelopment (ISSR) vertical:** It is due **non-availability of encumbrance-free land**, **unwillingness of slum dwellers**, **delay in getting statutory clearances**, issues about clearing slums for redevelopment etc.
 - Under the ISSR vertical, slum dwellers are rehabilitated.
 - Against the demand received of 14.35 lakh, only 4.33 lakh houses were sanctioned.
- **Corruption:** Several instances related to **funds irregularities** and **corruption in beneficiaries' selection**, **poor quality bricks** and **construction materials** etc. for the construction of houses were reported in Madhya Pradesh West Bengal, Jharkhand.
- **Lack of awareness:** Many eligible beneficiaries are not aware of the scheme or the procedures to apply for it, which has resulted in low demand for the scheme.

PMAY- Urban: Quick Facts			
Type	Purpose	Beneficiaries	Tenure
Both Centrally Sponsored and Central Sector Scheme	Provides pucca houses to all	<ul style="list-style-type: none"> • Economically Weaker Section • Low Income Group • Middle Income Group 	2015-2024

Other initiatives taken for affordable housing

- **Affordable Housing Fund (AHF):** Created in National Housing Bank to boost demand and supply of low-cost homes.
- **Real Estate (Regulation and Development) Act, 2016:** It aims to **protect the interest of home buyers**, while ensuring that the sale/purchase of real estate project is carried in an efficient and transparent manner.
- **Model Tenancy Act, 2021:** Model Act requires the landlord and tenant to sign a written agreement which specifies the rent, period of tenancy and other related terms.

Way forward

- **Shift focus on Outcome rather than output:** The government needs to consistently **follow up with respective State/UT governments to expedite the completion of infrastructure and ensure basic amenities** and speedy occupancy of houses in Affordable Housing in Partnership (AHP) projects to achieve outcome.
- **Monitoring:** States/UTs have also been directed to **constitute a District Level Advisory and Monitoring Committee (DLAMC)** for Urban Development under the chairpersonship of an elected representative to oversee, review and monitor projects under PMAY-Urban.
- **Set timelines:** MoHUA should examine the reasons for the non-initiation of projects and **set timelines for grounding and completion of pending houses, and promotion of innovative technologies** used for construction of projects, particularly for Northeastern States.
- **Social Audit:** Conduct a Social Audit of pending/ongoing projects under PMAY-U at the earliest to avoid any delay in the release of funds and completion of projects.
- **Ensuring quality construction:** The government should constitute a **Third-Party Quality Assessment team** to assess the quality of houses constructed under AHP and ISSR verticals, **set up quality control mechanisms** and ensure compliance with building codes and standards.

- **Identification of beneficiaries** for whom the houses are constructed should be a prior construction exercise.
 - **Involving beneficiaries as stakeholders** from project initiation and acknowledging and incorporating their feedback is vital to avoid later unoccupancy.
- **Public awareness campaigns** should be conducted to educate people about the benefits of the PMAY scheme and eligibility criteria.

3.8. INLAND FISHERIES

Why in the News?

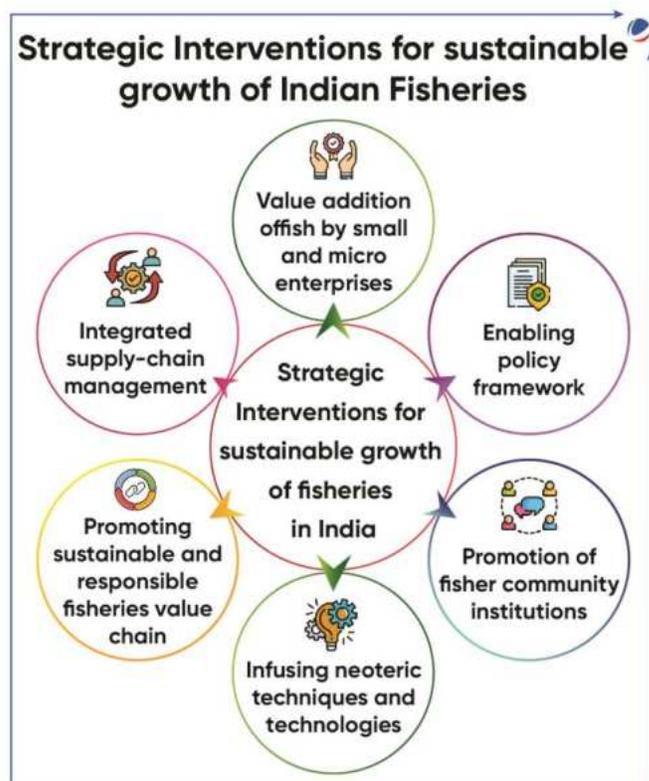
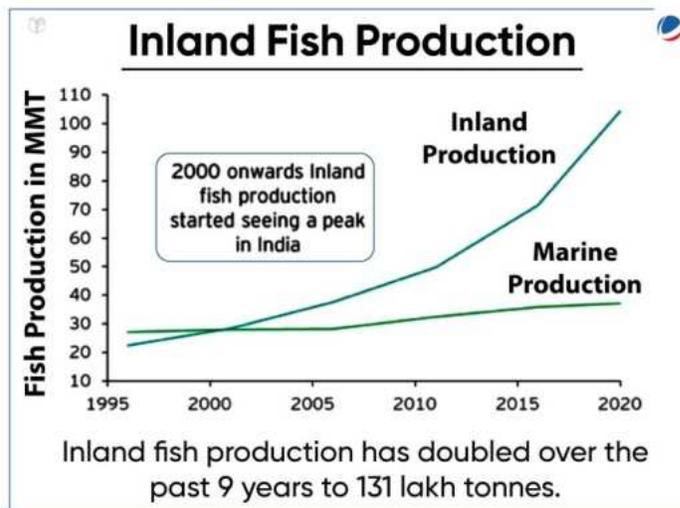
India has recently overtaken China to become the largest contributor of inland capture water fisheries, thereby emerging as one of the top three fish-producing countries in the world.

About Inland Fisheries

- Inland fisheries refers to the **harvesting, management, and conservation of fishes generally** in freshwater bodies such as rivers, lakes, reservoirs, ponds etc.
- It is mainly done by **two methods**:-
 - **Capture fisheries:** Method of obtaining fish directly from lakes, rivers or ponds with the help of fishing gears or nets etc
 - **Culture fisheries:** Method of obtaining fish by raising and harvesting them in controlled environments with tools of breeding or feed management etc.
- **Types of Inland Fisheries:**
 - **Tanks and Ponds**- culture-based fishery is predominant and offers huge potential as India has 2.36 million Hectares of Tanks & Ponds area)
 - **Brackish & Saline Aquaculture**- mainly used in shrimp aquaculture and also to transform 'Waste land to Wet-lands'
 - **Cold Water Fisheries**- Himalayan states offers an unique opportunity for promotion of omega-packed trouts
 - **Ornamental Fisheries**- India having diverse (>195) varieties of fishes, they can be reared and marketed for their beauty and exotic characteristics
 - **Cage Culture in Reservoirs** can help in promoting culture-based fisheries in small and medium reservoirs
 - **Riverine Fisheries**- With numerous rivers, river ranching can be used for conservation of indigenous fisheries resources and restoration of natural productivity

Benefits of inland fisheries

- **Nutritional and Food Security:** Rich in protein, omega-3 fatty acids, and Vitamin D, they act as cheap alternatives and help in dietary diversity and nutritional requirements
- **Economic benefits** like Employment opportunities, Development of rural infrastructure, Diverse supply chain, exports of processed products increasing foreign exchange earnings etc.



- **Environmental**
 - **Maintenance of Healthy ecosystems** by controlling invasive species, supporting biodiversity.
 - **Bioremediation helps in habitat restoration** removal of excess nutrients from urban or agricultural runoff and reduces the likelihood of toxic algal blooms.
 - **Ecological balance** is sustained as fishes being an important component of aquatic food webs benefit other species as well.
- **Social and cultural significance:**
 - **Traditional knowledge systems** of the community and their strong cultural ties contribute to cultural heritage.
 - **Recreational fishing** also promotes physical and mental well-being.

Challenges associated with Indian Inland fisheries

- **Production Challenges: Slow adoption of cutting-edge technologies such as** innovative hatchery technologies, water-efficient aquaculture practices etc.
 - **Limited extension services** such as lack of standardised prices, shortage of soil and water testing facilities limits scope of development of the sector.
- **Economic Challenges:** Like lack of timely credit, inadequate price discovery mechanism due to lack of efficient electronic trading platform, post-harvest losses etc.
- **Infrastructure Challenges:** Like inadequate cold chain facilities, inadequate Post-Harvest Infrastructure, etc.
- **Environmental Challenges**
 - **Inadequate Mechanisation** and use of traditional boats often results in Water pollution and improper aquaculture management
 - **Sustainability** issues due to rising demand for animal protein, fish stocks are often being fully exploited, overfished, or severely depleted at various places.

Way Forward

- **Adoption of emerging technologies such as big data, blockchain and IoT-based supply chain systems** can help in minimising losses, improving traceability etc.
- **Multi Stakeholder approach** in decision making process, from fishermen to boat owners and government organisations.
- **Adoption of FAO's Code of Conduct for Responsible Fisheries** for sustainable and responsible fish farming practices.
- **Fish farmer producer organisations (FFPOs)** can help in collectivisation of fish farmers and serve as an institutional platform for delivery of products and services, market linkages etc.
 - **FFPO** is an association of fishers and their stakeholders organised with the primary objective of carrying out sustainable fisheries value chain business activities and are registered under law.
- **Infrastructure development** such as food parks, **cold storage units, chiller boxes, ice factories** so as to improve the logistical support as well as improve the shelf life of the product.

Measures Taken

- **Pradhan Mantri Matsya Sampada Yojana (PMMSY):** Under Ministry of Fisheries, Animal Husbandry and Dairying aims to bring overall development in the Fisheries sector of India.
 - It includes activities such as **developing aquaculture infrastructure, cold storage, fish tourism** with an aim to increase fish production, aquaculture productivity, exports etc.
- **National Genetic Improvement Facility:** It has been established under the PMMSY scheme for shrimp breeding to reduce reliance on a single species and to favour indigenous species over invasive prawn species.
- **National Fisheries Development Board (NFDB):** To increase fish production and coordinate fishery development in an integrated manner under the Ministry of Agriculture.
- **National Surveillance Programme for Aquatic Animal Diseases (NSPAAD):** In disease surveillance in aquaculture.
- **Fisheries and Aquaculture Infrastructure Development Fund (FIDF):** To provide concessional finance for the creation of infrastructure facilities.
- **Kisan Credit Card (KCC) facility:** Extended to fishermen to assist them in meeting their working capital needs.
- **e-Gopala app:** Aims to assist farmers involved in aquaculture by providing market information and do away with the role of middlemen.

3.9. NEWS IN SHORTS

3.9.1. NATIONAL STARTUP ADVISORY COUNCIL (NSAC)

NSAC National startup Advisory Council (NSAC)
NATIONAL IN- STUDENT ADVERTISING COMPETITION

Genesis: NSAC was notified in 2020 by Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry

Mandate: To advise Government on fostering innovation and startups for sustainable economic growth and widespread employment.

Composition: Headed by Union Minister of Commerce & Industry and also consists of members from relevant line Ministries, Departments, and Organizations, as well as non-official members with a term of two years or until further orders (whichever is earlier)

Key functions: NSAC meets on a regular basis to suggest measures to:

- Foster a culture of innovation amongst citizens and students.
- Mobilize global capital for investments in Indian startups.
- Keep control of startups with original promoters.
- Provide access to global markets for Indian startups

- **Achievements:** Programs such as **MAARG, National Mentorship Program, Adoption of NavIC Grand Challenge, Startup Champions 2.0** etc. are some of the programs ideated and incubated by NSAC.

Other initiatives for Startups promotion

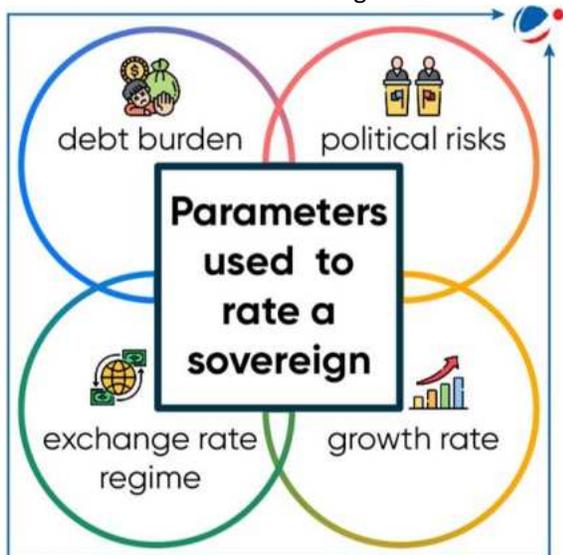
- **Startup India** to catalyse startup culture in India.
- **Fund of Funds for Startups Scheme** with corpus of Rs. 10,000 crore to meet funding needs of startups.
- **Scheme for Facilitating Start-Ups Intellectual Property Protection (SIPP)** to protect and promote Intellectual Property Rights (IPR) of Startups
- **Mentorship, Advisory, Assistance, Resilience, and Growth (MAARG)** programme, virtual platform to mentor startups.

3.9.2. REFORMING SOVEREIGN CREDIT RATING PROCESS

- **Office of CEA in its recent publication** has addressed critical issue of **opaque methodologies** employed by **credit rating agencies (CRAs)** to determine sovereign ratings.
- Currently, India is rated investment grade by **3 major CRAs - Standard & Poor's(S&P), Moody's and Fitch.**
 - **Rating agencies use various parameters** to rate a sovereign.
- **Key Concerns Raised**
 - **Rating method** put developing countries at disadvantage.
 - ✓ **Fitch's methodology**, gives greater weight to **foreign ownership of banks**, which ignored development role played by **state-run entities.**
 - **Experts consulted by agencies** were selected in a **non-transparent manner.**
 - **Lack of clarity on the weights assigned** for each parameter.
 - ✓ **Rating of India remained static at BBB-** during the last 15 years.
- **Despite India** climbing the ladders from **12th largest economy in 2008 to 5th largest in 2023 in the world.**
 - **Subjective assessments tilt** in favour of the advanced economies.
 - **Heavy reliance of CRAs on World Bank's Worldwide Governance Indicators** for inferring governance and institutional quality of countries.
- In India, **Securities and Exchange Board of India (SEBI)** has implemented a regulatory framework for credit rating firms under **SEBI (Credit Rating Agencies) Regulations, 1999.**
- **Prominent credit rating agencies in India,**

- Upon completion of the two-year term of the NSAC, the Central Government nominated **non-official members.**

- CRISIL; CARE; ICRA; Acuité Ratings; Brickwork Rating; India Rating and Research Pvt. Ltd and Infomermics Valuation and Rating Pvt. Ltd.



Unsecured retail loans	Could stretch debt service capacity and pose balance sheet risks.	Digitalization is enabling credit growth, while mitigating credit risk.
Inflation	High inflation or structural reforms may risk social discontent.	No such evidence
Financial Sector	External or domestic shock could lead to credit stress	Banking systems are in their best shape in over a decade.

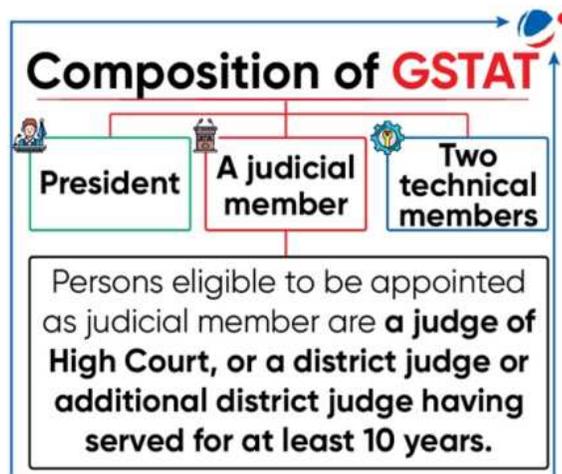
3.9.4. CGST BILL, 2023

- Parliament passed **Central Goods and Services Tax (Second Amendment) (CGST) Bill, 2023**.
- It amends **CGST Act, 2017** to change **qualification for members of GST Appellate Tribunal (GSTAT)** and raise **age limit of President and Members of GSTAT**.
- **CGST Act 2017** provides for **levy and collection of CGST on intra-state supply of goods and services**.
 - Act also **allows central government to set up GSTAT** on recommendation of GST Council.
- **GSTAT is the second appellate authority within GST framework** for hearing appeals against orders passed by Appellate Authority under **CGST Act, 2017** and **State GST Acts**.
- **Key changes introduced by Bill**
 - **Change in qualification for members of GSTAT:** Allows **advocates with at least 10 years of experience** to be appointed as **judicial member**. They must have **substantial experience in matters relating to indirect taxation**.
 - ✓ **Minimum age** to be appointed as a **member or president of GSTAT** will be **50 years**.
 - **Increases age limit** for **president of GSTAT** from **67 to 70 years**, and for **members** from **65 to 67 years**.

3.9.3. INDIAN GOVERNMENT DEBT VULNERABILITIES

- The International Monetary Fund (IMF) cautioned India on government debt vulnerabilities in its **annual Article IV consultation report**.
 - The report is part of the Fund’s surveillance function under the **Articles of Agreement with member countries**.
- **IMF reclassified India’s de facto exchange rate** regime from “floating” to “stabilized arrangement” for the period from December 2022 to October 2023.
 - **Stabilized arrangement:** when the **exchange rate has not moved beyond a 2% band in 6 months as a result of official action**.
- IMF reported that **India’s General Government Debt (GGD) could exceed 100 percent of gross domestic product (GDP)** in the medium term.
 - The GGD comprises the **debts of the center and states together**.
 - India’s GGD was **80.9% of the GDP** last year.
 - ✓ **Fiscal Responsibility and Budget Management (Amendment) Rules, 2018** endeavors to limit GGD at **60 percent of the GDP by 2024-25**.
- The **arguments and Counter-arguments** by the **IMF** and **Indian Government**, respectively:

Issue	IMF	INDIA
Govt. securities	Sudden increase in sovereign risk premium may burden balance sheets and reduce bank lending appetite.	Concern is far-fetched.



3.9.5. POLICY MEASURES TAKEN BY RBI

- These developmental and regulatory policy measures include
 - **Enhancing Unified Payments Interface (UPI) Transaction Limit for Specified Categories:**
 - ✓ It is proposed to enhance UPI limit for payments to **hospitals and educational institutions** from ₹1 lakh to ₹5 lakh per transaction.
 - ✓ **Transaction limit for UPI is capped at ₹1 lakh**, except a few categories like Capital Markets, Collections, Insurance etc. **where the transaction limit is ₹2 lakh.**
 - **Setting up of Fintech Repository**
 - ✓ Repository will be operationalised by **Reserve Bank Innovation Hub in April 2024 or earlier.**
 - **Regulatory Framework for Web-Aggregation of loan products (WALP)**
 - ✓ To increase **transparency** in their operations.
 - ✓ **WALP entails aggregation of loan offers from multiple lenders** on an electronic platform, which enables **borrowers to compare and choose** the best available option to avail loan from one of the available lenders.
- **About UPI**
 - **UPI was launched in 2016**, it is an instant payment system developed by **National Payments Corporation of India.**
 - UPI has a **2 Factor Authentication.**
 - UPI accounts for **over 40% of India's digital transactions.**
 - In recent past, **India made UPI Payment Deal with France, UAE and Sri Lanka.**

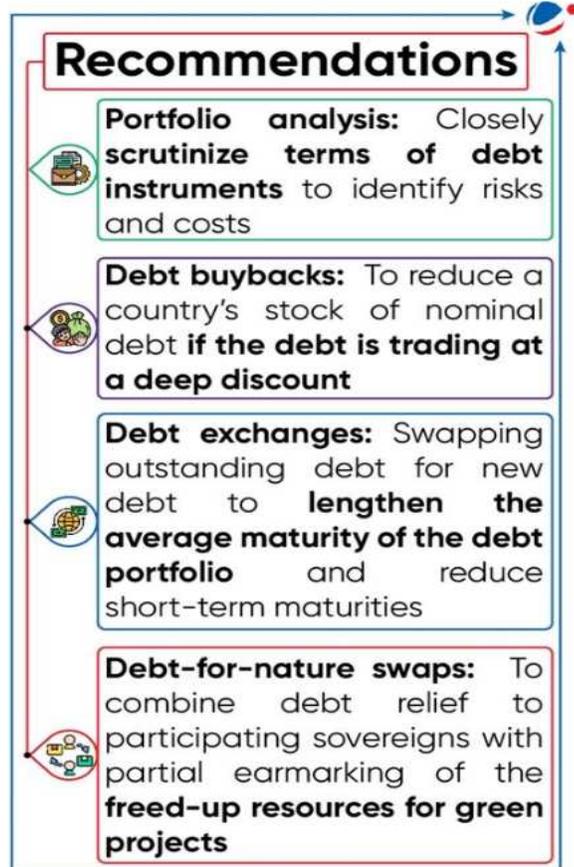
3.9.6. WORLD BANK'S REPORT ON EXTERNAL DEBT

- World Bank releases its annual **International Debt Report (IDR), 2023.**
- The report analyses **external debt** statistics for **122 low- and middle-income countries (LMICs).**
- **Key highlights**
 - **Historic rise in debt:** Public and publicly guaranteed (PPG) debt service payments by **LMICs** totaled **US\$443.5 billion in 2022.**
 - ✓ Over 1/3rd of such debt carries **variable interest rates, posing risk of sudden increases.**
 - **Debt Service cost:** Due to **rising interest rates and unfavourable exchange rate** movement servicing external debt could become burdensome.
 - ✓ **India's debt service was 2% of the GNI** in 2022.

- **Crowding out of priorities:** Debt servicing could crowd out spending on other development priorities (**health, education, etc.**).
- **Outflow of money:** Due to a **tighter monetary policy** in advanced economies investors found **attractive returns in US and European bond markets.**
 - ✓ This led to a net outflow of **US\$127.1 billion from LMICs.**

About external debt

- **External debt** refers to **money borrowed from a source outside the country.**
- It is a vital source to **supplement the local revenue for development.**
 - However, it has to be **paid back in the currency in which it is borrowed** which enhances the debt vulnerability due to exchange rate fluctuations.



3.9.7. CRYPTO-ASSET INTERMEDIARIES (MCI)

- Financial stability implications of multifunction Crypto-asset Intermediaries (MCI) report released by Financial Stability Board (FSB).
- MCIs are **integral** part of the **crypto-asset ecosystem** (consists of **cryptocurrencies, non-fungible tokens, etc.**)

- A **crypto-asset** is a **digital representation** of value or a right that can be transferred or stored electronically using **distributed ledger technology** such as **blockchain**.



**Financial
Stability
Board (FSB)**



Basel,
Switzerland



Genesis: established in 2009 (endorsed by G-20) as the successor to the Financial Stability Forum.



Membership: It consists of 71 member (as of Dec 2023) institutions, comprising ministries of finance, central banks, and supervisory and regulatory authorities from 25 jurisdictions and 10 international organisations.

Is India a member 



Functions:

- To assess vulnerabilities affecting the global financial system
- Promote coordination and information exchange among authorities for financial stability
- Monitor and advise on market developments and best practices
- Support contingency planning for cross-border crisis management

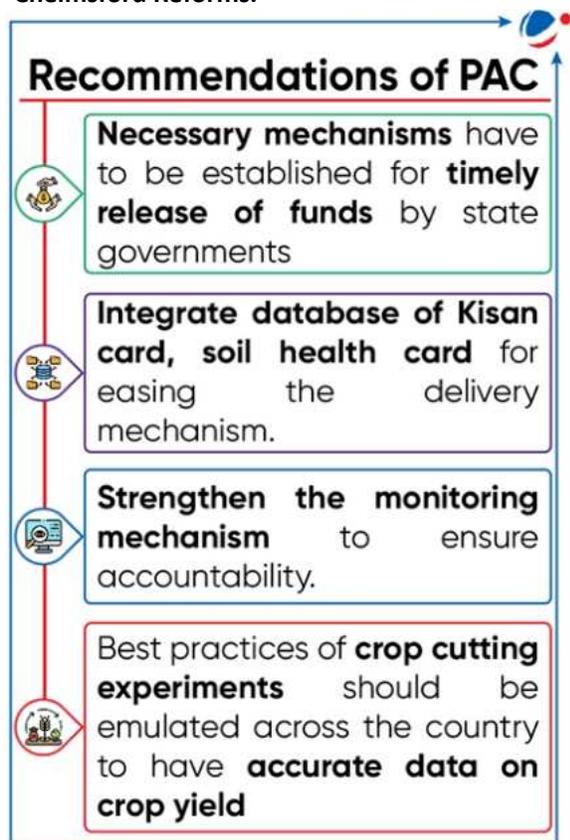
- Examples include Binance, Bitfinex and Coinbase.
- **MCI**s have created new **opportunities** such as **lower costs of access** to crypto-asset markets, diversifying **investment programmes**; Lending and borrowing, etc.
- **Concerns related with MCI:**
 - **Market related Vulnerabilities:** **Market dominance** and **concentration of one particular MCI**, **liquidity mismatch**, etc.
 - **Technology and operational vulnerabilities:** such as **Cyber-attacks**.
 - ✓ MCI vulnerabilities could spill over to the **traditional financial system** and the economy.
 - ✓ They lack **effective governance** and **risk management frameworks** to manage the **forementioned vulnerabilities**.
 - **Opaqueness:** **Revenue sources** are unclear because of the **limited publicly disclosed information**.
- **Recommendations:**
 - Adopting **global regulatory framework** for crypto-asset activities.
 - Enhance **cross-border cooperation** and **information sharing**.
 - **Mandatory disclosure** and **reporting** of assets and other aspects to bring transparency.

3.9.8. REPORT ON AGRICULTURE CROP INSURANCE SCHEMES

- Public Account Committee (PAC) Report on Agriculture Crop Insurance Schemes was released.
- **Report focuses on various crop insurance schemes** like Pradhan Mantri Fasal Bima Yojana (PMFBY) and Restructured Weather Based Crop Insurance Scheme (RWBCIS) etc.
 - **Report is based on the CAG report of 2017** relating to the Ministry of Agriculture and Farmers' Welfare.
- **Key Findings of Report**
 - **Delayed release of funds** by state governments towards share in premium subsidy were observed.
 - **Low Coverage of farmers** under the schemes compared to **population of farmers as per census 2011**, further coverage of non-loanee farmers was negligible.
 - **Delay in issue of notification** by state governments to notify crop, area and insurance companies.
 - **Delay in settlement of claims** due to reasons like **delayed transmission of yield data**, **NEFT related issues** etc.
- **About Public Account Committee**
 - **One of the three Financial Parliamentary committees**, other two are Estimates Committee and Committee on Public Undertakings.

- MCI's are **individual firms**, or **groups of affiliated firms** that offer a range of **crypto-based services, products** and **functions** which primarily revolve around **operating the trading platform**.

- It comprises **22 members** (15 members elected by the Lok Sabha Speaker, and 7 members elected by the Rajya Sabha Chairman) **with a term of one year only.**
- **Chairperson** is appointed by Lok Sabha speaker.
- **First set up in 1921** in the wake of **Montague-Chelmsford Reforms.**



- **Meat Production (Pink Revolution):** Registered a **growth of 20.39 %** i.e. 9.77 MT during 2022-23 from 8.11 MT in 2018-19.
 - ✓ **Major contribution: Uttar Pradesh** (12.20%) followed by West Bengal (11.93 %).
- **Wool Production: Decreased by 16.84%** i.e. 33.61 million kg from 40.42 million kg.
 - ✓ **Major contribution: Rajasthan** (47.98%) followed by Jammu & Kashmir (22.55%).

Do you know?

- > **Father of White Revolution** in India is Padma Vibhushan **Dr Verghese Kurien.**
- > He led **Operation Flood** to make India the **biggest milk producing nation** in the world.

3.9.10. NATIONAL GEOSCIENCE DATA REPOSITORY PORTAL (NGDRP)

Union Minister of Mines launched the NGDRP.

- **About NGDRP**
 - It has been created, as a part of the **National Mineral Exploration Policy (NMEP), 2016.**
 - It will make available all **geological, geochemical, geophysical, and mineral exploration data** in the public domain on a digital geospatial platform.
 - ✓ It will include **baseline geoscience data and all mineral exploration information** generated by various central and state government agencies.
 - **The Geological Survey of India (GSI)** was given the responsibility to establish it.
- **Significances of the portal**
 - **Democratizes critical geoscience data** by encouraging transparency and knowledge sharing by offering open access.
 - Will **expedite, enhance, and facilitate** the exploration coverage of the country.
 - Increases the **investment attractiveness** of the mining sector.
- **About NMEP, 2016**
 - It aims at accelerating the **exploration activity in the country** through enhanced participation of the private sector.
 - **Key features**
 - ✓ Auctioning of identified exploration blocks for exploration by the private sector on a **revenue-sharing basis.**
 - ✓ Creation of **baseline geoscientific data** as a public good.
 - ✓ To map the **entire country with low altitude and close space flight** to precisely locate the

3.9.9. BASIC ANIMAL HUSBANDRY STATISTICS 2023

Recently, the **Ministry for Fisheries, Animal Husbandry & Dairying** released the **Basic Animal Husbandry Statistics 2023** based on the Animal Integrated Sample Survey (March 2022- February 2023).

- **Basic Animal Husbandry Statistics 2023** brought out the estimates of Milk, Egg, Meat and Wool production for 2022-23.
- Over the past 5 years from **2018-19 to 2022-23**
 - **Milk Production (White Revolution): Increased by 22.81%** i.e. **230.58 million Tonnes (MT)** from 187.75 MT.
 - ✓ **Major Contribution: Uttar Pradesh** (15.72 %) followed by Rajasthan ((14.44%)
 - **Egg Production (Silver Revolution): 33.31% growth** i.e. 138.38 billion numbers from 103.80 billion numbers.
 - ✓ **Major contribution: Andhra Pradesh** (20.13%) followed by Tamil Nadu (15.58 %).

deep-seated minerals such as gold, silver, copper, etc.



Geological Survey of India

Kolkata





Genesis: It was established in 1851.



Ministry: Ministry of Mines



Function: Creation and updation of **national geoscientific data, mineral resource assessment, and air-borne and marine surveys.**



Regional Offices: Lucknow, Jaipur, Nagpur, Hyderabad, Shillong and Kolkata.

3.9.11. INDUSTRIAL CORRIDOR DEVELOPMENT IN INDIA

- Government of India and **Asian Development Bank (ADB) signed \$250 million loan** for Industrial Corridor Development in India.
- \$250 million policy-based loan will **support industrial corridor development (Subprogramme 2)** to-
 - **Develop alternative financing solutions**, such as green finance for industrial cluster development;
 - **Improve industrial workplace safety** and integrate environment and climate change practices.
- This loan builds on **Subprogramme 1 loan of \$250 million approved by ADB in October 2021** to strengthen policy frameworks for **National Industrial Corridor Programme (NICP)**.
 - ADB (HQ: Manila, Philippines) is a **multilateral financial institution** that is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and Pacific.
- **Industrial corridors** offer effective **integration between industry and infrastructure**, leading to overall economic and social development.
- **Significance of Industrial Corridors**
 - Position India as a **strong player in Global Value Chain** and **enhance India's competitiveness in manufacturing** by creation of quality infrastructure.

- Create **better jobs** and contribute to **alleviation of poverty in corridor states**.
- NICP is aimed to **development of futuristic industrial cities in India** which can **compete with best manufacturing and investment destinations** in world.
 - Government has approved **development of 11 Industrial Corridors with 32 Projects** in four phases as part of NICP.
 - These Corridors will be **implemented through National Industrial Corridor Development and Implementation Trust**.

National Industrial Corridor Programme



1	Delhi Mumbai Industrial Corridor (DMIC);
2	Amritsar Kolkata Industrial Corridor (AKIC);
3	Chennai Bengaluru Industrial Corridor (CBIC);
4	Vizag Chennai Industrial Corridor (VCIC);
5	East Coast Industrial Corridor (ECIC);
6	Hyderabad Nagpur Industrial Corridor (HNIC);
7	Hyderabad Warangal Industrial Corridor (HWIC);
8	Hyderabad Bengaluru Industrial Corridor (HBIC);
9	Bengaluru Mumbai Industrial Corridor (BMIC);
10	Extension of CBIC to Kochi via Coimbatore;
11	Delhi Nagpur Industrial Corridor (DNIC).

3.9.12. AMPLIFI 2.0

- Ministry of Housing and Urban Affairs launched Amplifi 2.0 (Assessment and Monitoring Platform for Liveable, Inclusive, and Future-Ready Urban India).
- About Portal:
 - The portal aims to provide raw data from Indian cities available on a single platform for academics, researchers, and stakeholders to help data-driven policymaking.
 - Currently, 225 urban local bodies have been onboarded, and data of 150 cities is available on the portal.
 - The initiative provides the opportunity to create new frameworks for Urban development based on open data obtained

3.9.13. ANARCHO-CAPITALISM

- Anarcho-Capitalism refers to a political philosophy which calls for the abolition of the state and for the provision of law and order to be controlled by private companies in a free market.
 - Traditionally, free market advocates have supported the private provision of most goods and services, except police and courts.
 - Anarcho-capitalists believe that private companies competing in a free market can provide policing and legal services better than the state.
- Anarcho-capitalism term was coined by Murray Rothbard.



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- Philosophy (हिन्दी माध्यम में भी उपलब्ध)
- Sociology
- Political Science & IR
- Anthropology
- Geography



ENGLISH MEDIUM 2024: 14 JANUARY
हिन्दी माध्यम 2024: 14 जनवरी

ENGLISH MEDIUM 2025: 21 JANUARY
हिन्दी माध्यम 2025: 4 फरवरी



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4. SECURITY

4.1. 15TH ANNIVERSARY OF 26/11 MUMBAI ATTACKS

Why in the News?

Israel has listed Lashkar-e-Taiba (LeT) as a terror organisation to symbolise the marking of 15th year of commemoration of the 26/11 Mumbai attacks.

Lapses that led to 26/11

- **Police related issues:**
 - **Lack of simulated training** in facing terrorist attacks and rescuing of hostages were given.
 - **Availability of arms and ammunition** for Police.
 - **India's maritime security vulnerabilities**, like absence of deep-sea surveillance and malfunctioning coastal policing.
- **Intelligence Failure & security lapses**
 - **Lack of specific intelligence from the central intelligence agencies** related to sea-borne terrorists.
 - **Mechanical forwarding of intelligence alerts** leading to confusion in the processing of intelligence alerts at the level of State Government.
 - **Highly sophisticated state of the art communications** was used including Voice-Over-Internet-Protocol (VoIP), which Indian intelligence agencies were unable to intercept.
- **Post attack issues**
 - **Access to the CCTV cameras** mounted in private premises including hotels were not available to the city police.
 - **Majority of the flying squads** trained for immediate response to terrorist strikes were not available for emergency duty.
 - **Trained NSG & marine commandos took long to arrive**, as there was no NSG hub near Mumbai.

Improvements made after 26/11

- **Maritime security enhancements:**
 - **3-layered protection of Indian coastal areas** has been strengthened and responsibilities have been clearly delineated.
 - ✓ **Indian Navy:** Beyond 200 Nautical Miles (NM)
 - ✓ **Indian Coast Guard:** 12 to 200 NM
 - ✓ **Marine Police:** Up to 12NM from shore
 - **Indian Navy was given the overall charge of maritime security** while the Indian Coast Guard was tasked with monitoring territorial waters and coordinating with new marine police stations.
 - **Sagar Prahari Bal (SPB)** as a separate division within the navy was formed.
 - **Fast Interceptor Crafts (FIC)** have been inducted by the government for patrol and rescue operations in India's EEZ.
 - **Sea Vigil**, a coastal defence exercise is being carried out by the Indian Navy and Indian Coast Guard annually.
- **Better coordination and response**
 - **Creation of National Investigation Agency (NIA)** as a premier agency to investigate and prosecute terrorism-related cases affecting the sovereignty, security and integrity of the country.
 - **National Security Guard (NSG)** hubs have been set up at Kolkata, Chennai, Gandhinagar, Delhi, and Mumbai to ensure a rapid response to terror attacks.
 - **Intelligence Bureau's Multi Agency Centre (MAC)** as a common counter terrorism grid has been strengthened
- **Cooperation from West**
 - Sharing of intelligence with Western agencies like the FBI (USA) and MI6(UK) has improved since 2008.
 - India's effort at global level, led Pakistan being designated in grey list of FATF which forced it to take action against the terror finance architecture of the LeT etc.
- **Modernisation of police:** Centre is helping the States to gradually reduce the dependence on the Army and the CAPF to control internal security and law and order situations.

- This is being done by **construction of secure police stations**, providing them with **modern weaponry, communication equipment and forensic set-up** etc.

About National Investigative Agency (NIA)

- NIA is a **central counter terrorism** specialised agency formed in the backdrop of 26/11.
- **Powers:**
 - Can investigate terror crimes **without special permission from the states**.
 - **Special Courts** can be constituted.
 - **Power to investigate scheduled offences committed outside India** subject to international treaties and domestic laws of other countries.
- **Offences under NIA jurisdiction**
 - Atomic Energy Act, 1962,
 - Unlawful Activities Prevention Act, 1967
- **2019 Amendment added scheduled offences related to**
 - Human trafficking (Sections 370, 370A of IPC)
 - Offences related to counterfeit currency (Sections 489A to 489E of IPC)
 - Manufacture or sale of prohibited arms (Section 25(1AA) of Arms Act, 1959)
 - Cyber crimes (Section 66F IT Act 2000)
 - Explosives Substances Act 1908

Steps to be taken further

- **Global efforts:** India should keep pressing for Universal definition of Terrorism and establishment of a permanent secretariat to fight terror at the international level



- **No Money for Terror Focus** should be on curbing terror financing by bringing together banks and government at global level, using the FATF, UNCAC, UNODC route etc.
- **Actions for deradicalization and safe usage of internet, social media** through flagging content should be taken by countries.
- **Indian Ocean Region Security** should be done in a collaborative approach with member countries and an arc of surveillance involving countries such as Sri Lanka, Maldives and India can be explored.

4.2. PEACE AND STABILITY IN NORTHEAST REGION

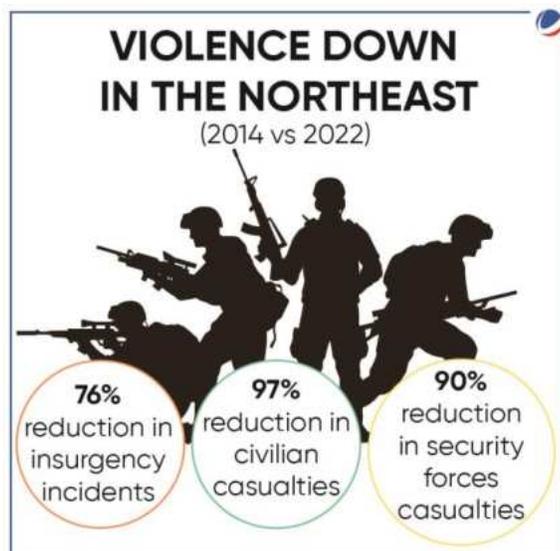
Why in the news?

The Government of India **has signed a peace agreement with two groups** to bring stability to the Northeastern Region (NER).

More about the news

- Government of India and Government of Manipur signed a Peace Agreement with **United National Liberation Front (UNLF)**.
 - **Formed in 1964** UNLF is the **oldest valley-based insurgent group in Manipur**.
 - Its armed wing is known as the **Manipur People's Army**.
 - The UNLF was divided into two factions and the **faction under Koireng continues to be opposed to talks**.

- Memorandum of Settlement was signed between Government of India, Government of Assam and representatives of **United Liberation Front of Assam (ULFA)**.
 - ULFA was **formed in 1979** with the demand for a “**sovereign Assam**” for the indigenous people of the state.
 - Since then, it has been **involved in subversive activities** that led to the central government declaring it a **banned outfit in 1990**.
 - In 2011, ULFA split into two groups.**
 - Pro talk faction of ULFA** joined peace talks with the government in 2011 after an agreement for **Suspension of Operations** was signed.
 - Other faction** known as **ULFA (Independent)** has not joined the peace process.
- In last 5 years, **9 peace and border related agreements** have been signed with different states in the Northeast.



Other agreements

- Assam-Arunachal border agreement (2023):** Completely resolved pending border dispute between Assam and Arunachal Pradesh.
- Assam-Meghalaya Inter-State Boundary Agreement (2022):** To settle the dispute over 6 areas out of a total of 12 areas of the interstate boundary dispute between the states of Assam and Meghalaya.
- Adivasi Peace Accord (2022):** A Memorandum of Settlement (MoS) was signed with representatives of 8 Adivasi Groups to end the decades-old crisis of Adivasis and tea garden workers in Assam.
- Karbi Anglong Agreement (2021):** MoS with Karbi Groups to end the decades-old crisis in the Karbi Anglong area of Assam.
- Bodo Accord (2020):** MoS with Bodo Groups of Assam to solve the long pending Bodo issue (violence and insurgency due to demand for a separate state- Bodoland).
- Bru-Reang Agreement (2020):** To resolve the 23-year-old Bru-Reang refugee crisis by which more than 37,000 internally displaced people are being settled in Tripura.
- NLFT (SD) Agreement (2019):** A Memorandum of Settlement (MoS) with the National Liberation Front of Tripura (NLFT/SD).

Challenges for the peace and stability in NER

- Cultural difference:** It is estimated that there are more than **247 ethnic communities and tribes in NER** with their own language, customs, traditions, etc.
 - It leads to **exclusion**

Significance of bringing peace in the NER						
Open new avenues of development of NER like tourism, trade etc.	Providing a better future to the youths in Northeast India	End hostilities between armed groups and security forces	Limiting civilian casualties, extortion, kidnappings and other violent incidents	Encourage other insurgent groups to join peace process and pursue demands in a democratic manner	Facilitate cordial relations with the neighbouring countries	Easier to tackle threats to national security like terrorism, drug trafficking etc.

and alienation among the tribes, between the tribals and indigenous non-tribals, and between the indigenous people and the outsiders from the rest of the country.

- Insurgency:** Since Independence, the region has remained a hotspot of insurgency with a large number of different armed groups and factions functioning in the region.

- **Porous border:** NER is vulnerable to **illegal infiltration** of the population, which adds pressure on their economic and environmental resources for example infiltration from Bangladesh to Assam.
 - Porous border also enables easy **cross-border passage for insurgents** and criminals **including arms and drug traffickers** (Myanmar has become the largest opium producer in the world).
- **Territorial Conflicts:** There are existing **inter-state and international territorial conflicts**. For example, the **Assam-Mizoram Border Dispute**.
- **Rivalry in militant groups:** Factionalism and splits within the militant groups have implications for the negotiations with the disaffected elements.
 - E.g., the rivalry of the National Socialist Council of Nagalim (**NSCN**) **Muivah faction and the Khaplang factions** has been complicating the Naga negotiations.
- **Lack of Efficient Infrastructure:** Infrastructure both physical (like roadways, waterways, energy) and social (like educational institutions, and health facilities) is lacking in NER.



Other Initiatives to bring peace and stability in NER

- **Reduction of disturbed areas under Armed Forces Special Powers Act (AFSPA)** from a large part of the North East. Examples-
 - AFSPA has been lifted from **85% area of Assam**.
 - Disturbed area notification under AFSPA was **completely withdrawn from Tripura in 2015 and Meghalaya in 2018**.
- **North East Special Infrastructure Development Scheme (NESIDS):** It is a central sector scheme to support infrastructure development in identified sectors including connectivity in the North Eastern States.
- **Revised Scheme for Surrender-cum-Rehabilitation of militants in North East:** It provides incentive to to wean away the misguided youth and hardcore militants.
- **PM-DevINE:** It is a central sector scheme aimed at the rapid and holistic development of the Northeast Region by funding infrastructure and social development projects.
- **The Northeast natural gas pipeline grid project:** It involves the development, Operation, and Maintenance (O&M) of a natural gas pipeline connecting eight states.
- **NITI Forum for North East:** To promote inclusive and sustainable economic growth and to recommend appropriate interventions for the development of the Northeast.
- **Act East policy:** To promote economic, strategic and cultural relations with the vast Asia-Pacific region at different levels and promote the integration of the northeast region.

Way forward

- **Holistic approach:** The government should back the peace efforts with a push for infrastructure projects like roads, railway lines, to connect the region with the rest of India.
- **Promoting regional industrial value chains:** Industries like agro-processing, horticulture, textiles, etc. in which northeast has a competitive advantage should be encouraged.
- **Continue peace talks:** Government through discussions should keep acting as a facilitator for peace talks with insurgent groups and amicable settlement of inter-state border disputes.
- **Preserve culture:** Preserving and promoting the unique dialects, languages, dance, music, food, and culture of the Northeast can help bridge cultural differences.
- **Checking illegal migration:** The Ministry of External Affairs should closely coordinate with the Ministry of Home Affairs and the State Governments to address the issue of illegal migration.
 - The government should also take up the issue of **repatriation of such illegal migrants with the Governments of neighboring countries** at the highest level.
- **Border Management:** Strengthen border security through advanced technology, increased personnel, and improved infrastructure to counter traffic along the border.
- **Amendments to North Eastern Council Act, 1971:** It may be suitably amended to restore the original 'conflict resolution provision' requiring the Council to 'discuss issues of mutual interest to two or more states in the region and to advise the Central Government thereon'.

4.3. SECURING MARITIME TRADE ROUTES

Why in the news?

Several recent incidents in the maritime domain have raised concerns regarding the security of maritime trade routes.

More about the news

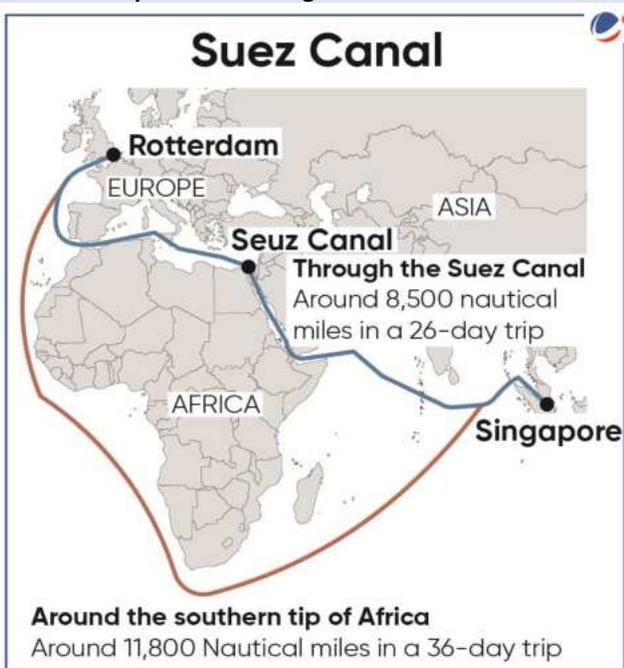
- **Houthi attacks in Red Sea:** Houthi rebels in Yemen are attacking vessels traveling through **Bab-el-Mandeb Strait which is south of the Suez Canal (Red Sea)** in response to Israel's bombardment of Gaza.
 - **MV Chem Pluto** ship in the Red Sea was struck by a **drone attack** on its way to India.
- **Piracy in Arabian Sea:** Malta-flagged vessel **MV Ruen** was hijacked in the Arabian Sea near Somalia.
 - The Indian Navy played the role of 'first responder' and immediately to stress calls and swiftly **deployed Naval Maritime Patrol aircraft** to undertake surveillance in the areas.
- Further, Panama is facing **its driest rainy season in decades** and Fifty percent of ships have stopped using Panama Canal in **the last three months due to low water levels.**

Other threats to maritime trade routes

- **Rising geopolitical tensions** in different parts of the world
E.g., Ukraine war impacted maritime transport in the Black and Azov seas
- **Disputed Maritime Boundaries**
E.g., Potential of South China sea dispute to disrupt global trade
- **Digitalization of vessels** has made it vulnerable to cyberattacks
- **Climate change and increase in Natural Disasters** such as hurricanes, typhoons, earthquakes, tsunamis etc.
- **Maritime terrorism, armed robbery, human and contraband trafficking**
- **Presence of multiple choke points**

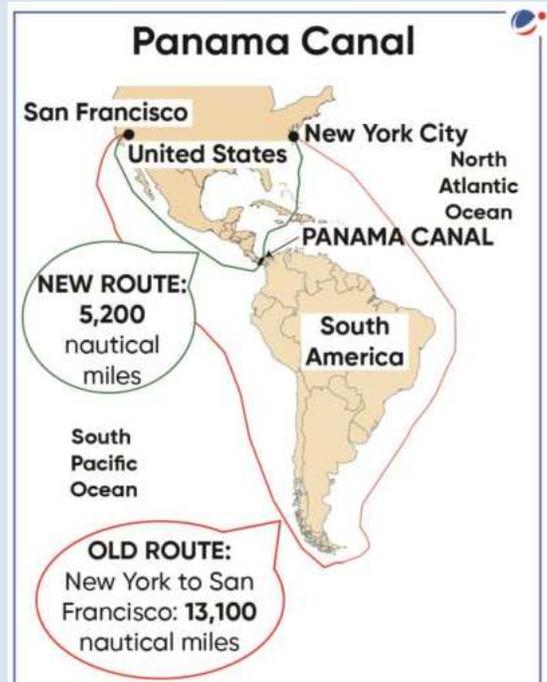
Suez Canal

- An **artificial sea-level waterway** in Egypt connecting the **Mediterranean and Red Seas.**
- **193 kilometers in length**
- **Shortest route between East and West.**
- **Trade Volume:** In 2020, **~12% of global trade** passes through it, representing **30% of all global container traffic.**
- Enables the transfer of an estimated **7-10% of the world's oil** and **8% of liquefied natural gas.**



Panama Canal

- **~80 kilometers long** canal that connects the **Atlantic and Pacific Oceans.**
- Uses a system of **locks compartments** with entrance and exit gates and the locks function as water lifts.
- **The Republic of Panama** owns and operates the Panama Canal.
- **Trade Volume:** Represents approximately 6% of the world trade.



Impacts of recent threats to maritime routes

- **Geopolitical tension:** Houthi groups receive support from Iran (Russia is perceived as Iran's ally) and oppose Western nations and Israel. Their attacks can lead to war.
- **Inflation:** Higher charges (surcharges, higher insurance etc.) and cost of longer travel time (more fuel and crew time) will increase shipping costs and lead to inflationary pressures on the world economy.
 - The disruption at the Red Sea route, for instance, is estimated to push the prices of Indian agricultural products by 10-20% due to shipments being re-routed through Cape of Good Hope.
- **Disruption in global supply chain:** Over 80% of global goods trade is carried by sea, with the share of trade via sea is much higher for developing countries such as India.
- **Environmental impact:** Longer routes around South America and Africa mean an increase of CO₂ emissions for each ship by 20% to 35%.
- **Impact on India**
 - **Impact on exports:** European Union is 2nd largest destination for Indian exports and the Suez Canal is a key route for export shipping.
 - ✓ E.g., India's plan to export 500,000 tonnes of new season basmati rice to Europe and the Middle East can be at risk.
 - **Risk to Energy Security:** The Red Sea is a key route for oil and gas shipments.
 - ✓ About 65% of India's crude oil imports in FY2023, likely passed through the Suez Canal.
 - **Diplomatic Ties:** India maintains positive relations with both Iran and Israel, making it challenging to assess the overall diplomatic landscape.

Measures to enhance maritime trade security

Global

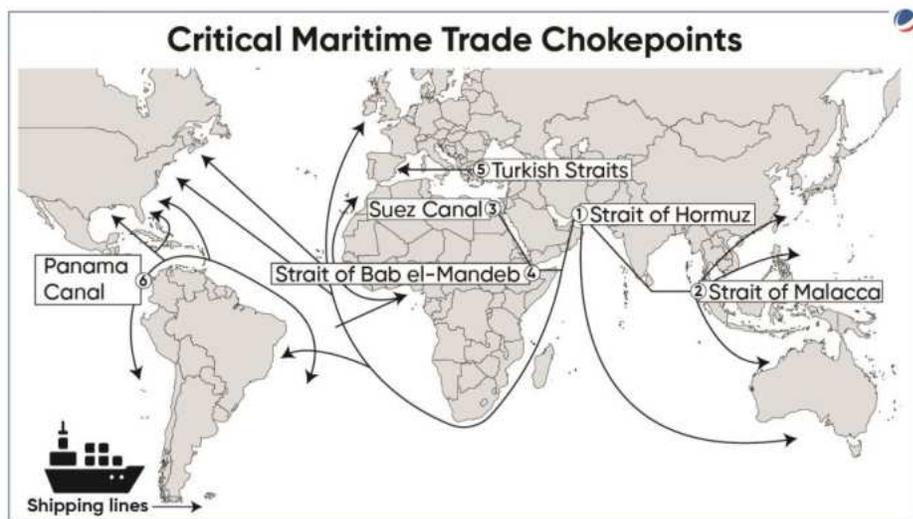
- **US announced a multi-nation Operation Prosperity Guardian** to safeguard maritime commerce in the Red Sea.
 - As part of the measure, the US, along with Britain, Bahrain, Canada, France, Italy, the Netherlands, Norway, Seychelles, and Spain will stage joint patrols in the southern Red Sea.

India

- **Deployments:** The Navy presently has **four stealth-guided missile destroyers of Project 15B and 15A class** deployed to counter piracy and drone attacks on merchant shipping.
- **National Maritime Domain Awareness (NMDA) Project:** It includes an integrated intelligence grid to detect and tackle threats emanating from the sea in real time.
- **The Indian Navy's Information Fusion Centre for the Indian Ocean Region (IFC-IOR)** is actively monitoring the region and coordinating in the back end to facilitate communication.
- Indian Navy completed **second Gulf of Guinea (GoG) Anti piracy patrol** in Nov. 2023.

Way forward

- **Diversification of supply chains:** It will not only enhance resilience but also contribute to the creation of a more adaptive global trade infrastructure.
- **Acknowledging Non-State Actors' Roles:** Recognizing the increasing military capabilities of groups like the Houthis, maritime security strategies must adapt to counter their influence.
- **Global collaboration:** International organizations and multilateral groupings should aim toward restoration of stability in regional maritime routes, securing choke points, and finding regional security development models.



- **India's role as mediator:** As an affected party and as a large trading nation, India can help mediate peace given its good relations with various players in the Middle East, including Iran and Israel.
- **Diplomatic dialogue** It is needed to foster collaboration among nations to address the root causes of conflicts and mitigate the risks associated with the disruption.

Related News:

Maritime Heads for Active Security And Growth for All in the Region (MAHASAGAR)

- The maiden edition of the high-level virtual interaction MHASAGAR was hosted by the Indian Navy.
- The interaction took place between maritime heads for active security and growth for all in the region.
 - It was attended by representatives of **Indian Ocean Region littorals**, viz., Bangladesh, Comoros, Kenya, Madagascar, Maldives, Mauritius, Mozambique, Seychelles, Sri Lanka and Tanzania.
- It was the maiden edition, with the theme **“Collective Maritime Approach towards Countering Common Challenges”**.
- It aligns with the Government of India's vision of **SAGAR 'Security and Growth for All in the Region'**.

Yard 12706 (Imphal)

- Ministry of Defence recently unveiled crest of Yard 12706 (Imphal), **the third amongst the four Project 15B stealth guided missile destroyers**.
- It is a **potent and versatile platform equipped with state-of-the-art weapons and sensors**, including surface-to-air missiles, anti-ship missiles, and torpedoes.
- It is **designed by the Indian Navy's Warship Design Bureau** and built by Mazagon Dock Shipbuilders Limited (MDL).
- **Project 15B is a follow-on of the Kolkata class (Project 15A) destroyers** commissioned in the last decade .
 - The first ship of the Project – **INS Visakhapatnam was commissioned into the Indian Navy in 2021**.

4.4. INTERPOL

Why in the News?

The recently concluded 91st General Assembly of the INTERPOL in Vienna, Austria marked 100-year anniversary of the organization.

Key highlights of the 91st General Assembly

- **Vienna Declaration:** Challenging the rise of transnational organized crime' was released, with 5 priority actions.
- India stressed the need to **deny any safe havens** for crime, criminals and proceeds of crimes.
- India also sought **“concerted action” through INTERPOL** to combat and prevent transnational crimes such as terrorism, online radicalization and cyber-enabled financial fraud.

About International Criminal Police Organization (ICPO - INTERPOL)

- It was formally created in **1923**, as International Criminal Police Commission (ICPC).
- In 1956, a modernized constitution was adopted and ICPC became the ICPO – INTERPOL.
- **Headquarter:** Lyon (France)
- **General Assembly:** It is INTERPOL's supreme governing body, that meets once a year, comprising **representatives from each member country**.
- **Membership:** 196 member countries, including India.
 - **India joined INTERPOL in 1949.**



- **National Central Bureau (NCB):** Each member country hosts an INTERPOL NCB which is country's focal point for all INTERPOL activities.
 - **Central Bureau of Investigation (CBI)** is the NCB for Interpol in India.
- **Functions:** Supports national efforts in combating crimes across **four global areas** – **Terrorism; Cybercrime; Organized crime; and Financial crime and anti-corruption.**
- **Database:** Maintains databases containing with information on **individuals** (names, fingerprints etc.); **stolen property** (passports, vehicles, works of art etc); **Firearms trafficking;** and **Organized crime networks.**
- **Notices:** INTERPOL issues notices to enable countries share alerts and requests for information worldwide.



Key contributions of INTERPOL

- **INTERPOL Financial Crime and Anti-Corruption Centre (IFCACC)** for coordinated global response against transnational financial crimes.
 - In 2022, INTERPOL helped member countries **intercept nearly 200 million dollars** in criminal proceeds from cyber-enabled fraud
- **INTERPOL's Operations:** Under Operation Lionfish which targets drug trafficking, seizures were made in India.
- **FATF and INTERPOL joint initiative** to reinforce international law enforcement on asset recovery.
- **INTERPOL's Match-Fixing Task Force (IMFTF)** to curb competition manipulation.
- **INTERPOL is working jointly with UN Counter-Terrorism Centre (UNCCT)** to assist member countries to understand and adopt new technologies to counter the challenges in fight against terrorism.
- **Global crackdown on illegal wildlife and timber trade** in joint operation between INTERPOL and the World Customs Organization.
- **Innovation-as-a-Service (INaaS) offering** to provide member countries fresh insights and strategic recommendations to better prepare for the future.

Challenges faced by INTERPOL

- **Legal and structural limitations:**
 - **Relies on voluntary cooperation** from member countries, which can be hindered by legal disparities, and bureaucratic processes.
 - **Varying levels of data privacy and security regulations** across countries creates **hurdles in information exchange and analysis.**
 - **Inability to extradite international criminals** earlier flagged through Red Notice as it cannot coerce a state to comply with the request.
- **Political issues:**
 - **Allegations of politically-motivated prosecutions** of victims perceived to be opposition to the government in a member state.
 - ✓ e.g., Report by **Stockholm Center for Freedom** (2017) revealed misuse of INTERPOL mechanism by Turkish authorities against their critics and opponents.

- **Bilateral/regional political disputes** impede information sharing and joint operations, hampering overall Interpol's effectiveness.
- **Emerging threats and trends in trans-national policing:**
 - **Organized crime continues to adapt and diversify**, with emerging areas like human trafficking, environmental crime, and crypto-crime.
 - **Anonymity and complexity of dark web marketplaces** make tracking of criminal activities more difficult.
 - **Emergence of Big-techs** and their significant control over data makes it difficult to balance cooperation with private companies while ensuring data privacy.

Way Forward

- **Multidimensional and global advocacy approach to reform** which should include academics, policymakers, Interpol's General Assembly, NGOs, etc.
- **Standards for membership** to ensure that **only democracies with respect to the rule of law** are members of Interpol.
- Establish an **independent body for periodic review of Red Notices**.
- **Sensitize member states** on white collar crimes, standardization of investigation procedures, providing model legislations on money laundering among others.
- **Adapt to emerging threats and trends** by conducting research, developing specialized units, and partnerships with relevant stakeholders.
 - E.g., Design and implement **clear guidelines and regulations for collaboration with private companies** to ensure data privacy and prevent abuse.

India's engagement with INTERPOL

- **India hosted the 90th INTERPOL General Assembly in New Delhi in 2022.** Important outcomes of 90th General Assembly include:
 - **First ever global crime trend report** was released by INTERPOL.
 - INTERPOL launched its presence in the **Metaverse**.
- India has also hosted the **INTERPOL young global police leaders' programme**, in 2023, involving participation of 44 countries.
- **CBI Academy joined the INTERPOL global academy network** to emerge as a global training hub for Interpol.
- INTERPOL contributed to the **3rd Ministerial Conference on Counter Terrorism Financing – "No Money for Terror"** – hosted by the Indian government in New Delhi in November 2022.

4.5. NEWS IN SHORTS

4.5.1. EXTREMISM THROUGH USE OF NEW TECHNOLOGIES AND INTERNET

- India hosted **anti-terrorism meetings** with **Shanghai Cooperation Organisation (SCO) members**.
 - India's National Security Council Secretariat held joint exercise with **Regional Anti-Terrorist Structure (RATS) of SCO** to **restrict terrorism and extremism through the use of new technologies and internet**.
 - ✓ **RATS (HQ: Tashkent, Uzbekistan)** is a **permanent organ of SCO** which serves to promote cooperation of member states against terrorism, separatism and extremism.
- **Misuse of technology and internet by Extremists**
 - Non-state actors have disabled **critical infrastructures by using cyber-attacks, drones to smuggle narcotics, arms and ammunitions** across borders.

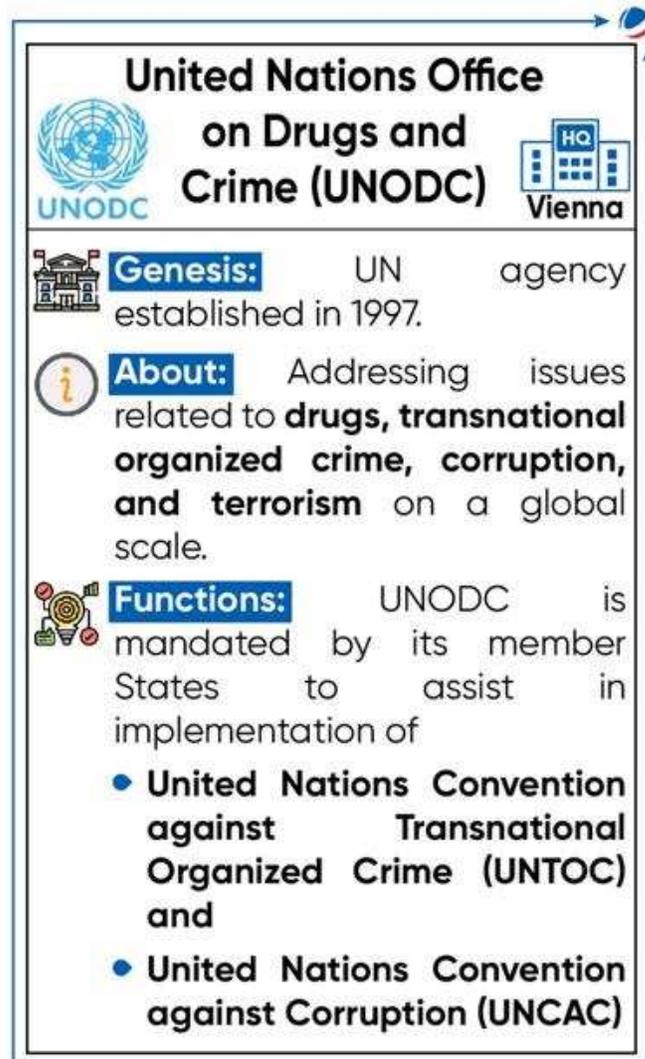
- **Dark web, AI-enabled tools and software** have been widely used to **create fake news**, recruit members through **online radicalization** etc.
- Non-state actors can **transfer money through virtual currencies** and **indulge in money laundering, drug trafficking** etc. E.g. **'Wannacry' ransomware attack in 2017**.

About SCO

- Established in **2001**.
- **Two Permanent Bodies** - SCO Secretariat in Beijing, and Executive Committee of RATS in Tashkent.
- **SCO Members:** China, **India**, **Iran**, Kazakhstan, Kyrgyzstan, Pakistan, Russia, Tajikistan and Uzbekistan.



- **Organized Crime and Violence:** Drug trafficking often associated with organized criminal networks that engage in violent activities.
- **Threat to national security:** Routes used by drug traffickers could be used for smuggling in weapons as well as terrorists.
- **Corruption and Money Laundering:** Drug money may be laundered through the formal financial system, undermining economic integrity.
- **Healthcare Burden:** Drug abuse places a strain on healthcare system.



4.5.2. SOUTHEAST ASIA OPIUM SURVEY 2023

- Report “Southeast Asia Opium Survey 2023: Cultivation, Production, and Implications” by United Nations Office on Drugs and Crime (UNODC) assess opium poppy cultivation in **Southeast Asia**.
 - **Golden Triangle** comprises illicit opium production region covering **Myanmar, Thailand and Laos**.
 - Whereas **Golden Crescent** comprises illicit opium production areas in **Iran, Afghanistan and Pakistan**.
- **Key Findings**
 - **Golden Triangle opium economy sees steady growth** in 2023.
 - **Myanmar is now world's top opium source** after the decline in **Afghanistan**.
 - A targeted assessment also found indications of **substantial opium cultivation** in **Sagaing, along Myanmar's border with India**.
- **Drug trafficking a challenge to India's Security**
 - **Cross-Border Smuggling:** Illicit narcotics are often trafficked from neighbouring countries.

4.5.3. INDIAN OCEAN NAVAL SYMPOSIUM (IONS) – 2023

- **8th edition of IONS Conclave of Chiefs** was conducted by Royal Thai Navy at Bangkok, Thailand.
 - **Republic of Korea Navy** was welcomed as latest ‘Observer’, raising the **collective strength of IONS to 34 (25 Members & 09 Observers)**.
- **About IONS:**
 - Was conceived by **Indian Navy in 2008**.

- It is a **voluntary initiative** that seeks to **increase maritime co-operation** among navies of the **littoral states of the Indian Ocean Region**.
- **Last year, IONS** conducted its **maiden edition of maritime exercise, IMEX-22**.

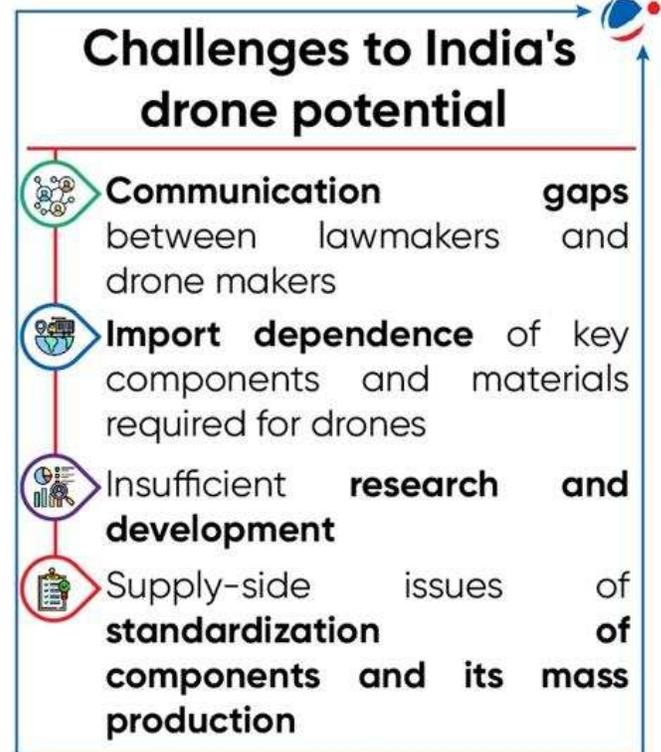
- They are **faster and easier to deploy** as they provide operational flexibility.

4.5.4. ZERO TRUST AUTHENTICATION

- In response to rising **cyber-attacks**, Centre has established a **secure e-mail system for 10,000 users** across critical ministries and departments.
 - **National Informatics Centre (NIC)** has designed this system, incorporating **Zero Trust Authentication (ZTA)**.
 - NIC is under **Ministry of Electronics and Information Technology**.
- **About ZTA**
 - ZTA is a **cyber-security approach** intended to address **rapidly evolving security risks** faced by IT systems.
 - It uses **multi-factor authentication, continuous monitoring** etc.
 - Works on **never trust, always verify principle**.

4.5.5. DRONES FOR DEFENSE

- DRDO successfully **tested autonomous flying wing technology demonstrator**.
- It is an **indigenous high-speed flying-wing** Unmanned Aerial Vehicle (UAV).
 - It has a **tailless fixed-wing aircraft** that houses its payload and fuel in its main wings.
 - It is a scaled-down version of its futuristic **unmanned combat aerial vehicle**.
- It is designed and developed by DRDO's **Aeronautical Development Establishment**.
- **Significance**
 - **Allow take-off and landing from any runway** with surveyed coordinates (using GPS Aided GEO Augmented Navigation (GAGAN)).
 - India joined the elite club to master the **flying wing technology**.
 - It can be employed as a **covert stealth combat drone**.
- **Need of drones for defense**
 - **Intelligence gathering:** used to identify enemy positions, assess the terrain, and track movements.
 - **Precision strike:** They are equipped with precision-guided munitions, which can be used to target enemy positions.
 - **Search and rescue operations:** used to locate and rescue personnel in hazardous or inaccessible areas.



Government Initiatives to promote Drones

- **Drone Shakti scheme** for institutionalizing and creating a framework where multiple stakeholders can work together.
- **Production Linked Incentive (PLI)** scheme for drones and drone components.
- **India's Drone Rules 2021** to help start-ups and small and medium-sized enterprises.

4.5.6. AKASH WEAPON SYSTEM (AWS)

- During **Air Force Exercise Astrashakti-2023**, India became the **first country** to demonstrate **engaging four aerial targets simultaneously at 25 km range** using single firing unit.
 - This test was **conducted using AWS**.
- **About Akash Weapon System**
 - **Short Range Surface to Air Missile System** to protect vulnerable areas and points from air attacks.
 - Indigenously designed and developed by **Defence Research and Development Organisation (DRDO)**.
 - **Simultaneously engage Multiple Targets in Group Mode** or Autonomous Mode.
 - It has **built in Electronic Counter-Counter Measures (ECCM)** features.
 - Inducted with **Indian Air Force** and **Indian Army**.

4.5.7. AGNI-1

- Training launch 'Agni-1' was carried out successfully from APJ Abdul Kalam Island, Odisha.
- Agni-1 is **Short-Range Ballistic Missile** and is a **very high precision** missile system.
 - **Range capacity:** over 700 Kms.
 - It is **nuclear-capable**, road-mobile missile.

- **First deployed in 2007.**

- Agni-1 to 5 missiles are **designed & developed by Defence Research & Development Organisation (DRDO).**

4.5.8. VINBAX-2023

- It is a Joint Military Exercise between Armed forces of **India and Vietnam.**

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5. ENVIRONMENT

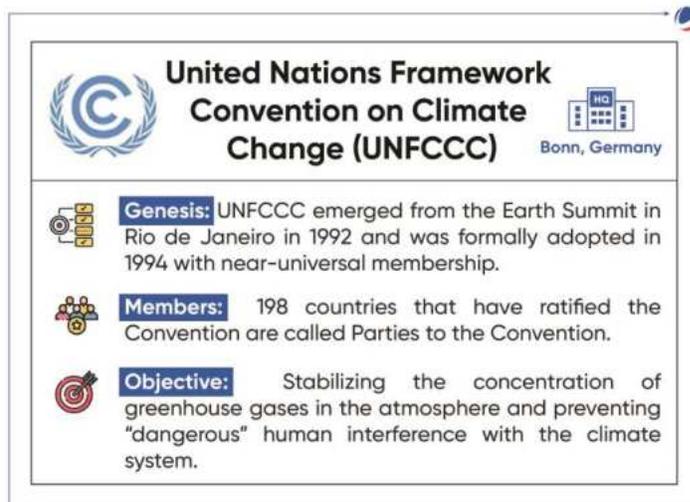
5.1. COP28

Why in the news?

Recently 28th Conference of the Parties (COP28) of the UNFCCC, was held in Dubai, UAE.

About COP28

- COPs are **annual conference** that takes place to discuss on ways to address the climate crisis.
 - A crucial part of COP meetings is the **review of the Nationally Determined Contributions (NDCs)**, submitted by member countries under Paris Agreement (2015).
- It also marked **18th session of the Conference of the Parties to the Kyoto Protocol (CMP 18)** and **5th session of the Conference of the Parties to the Paris Agreement (CMA 5)**.
- It also adopted final document called **UAE Consensus**.



United Nations Framework Convention on Climate Change (UNFCCC) Bonn, Germany

Genesis: UNFCCC emerged from the Earth Summit in Rio de Janeiro in 1992 and was formally adopted in 1994 with near-universal membership.

Members: 198 countries that have ratified the Convention are called Parties to the Convention.

Objective: Stabilizing the concentration of greenhouse gases in the atmosphere and preventing "dangerous" human interference with the climate system.

Key outcomes of COP28

Pillars of COP28	Key outcomes
Fast-tracking a just, orderly, and equitable energy transition	<ul style="list-style-type: none"> • Launch of Global Renewables and Energy Efficiency Pledge • The Global Cooling Pledge for COP 28 which provides countries an opportunity to commit to sustainable cooling with concrete actions. • Oil and Gas Decarbonization Charter
Fixing climate finance	<ul style="list-style-type: none"> • Mobilization of \$83.9 billion to climate finance in the Green Climate Fund, Adaptation Fund, Least Developed Countries Fund, and Special Climate Change Fund. • Operationalization of loss and damage fund to help vulnerable countries cope with the impact of climate change. • Declaration on a Global Climate Finance Framework.
Focusing on people, lives and livelihoods	<ul style="list-style-type: none"> • First implementation report of Sharm el-Sheikh Adaptation Agenda (SAA) was released. • COP28 UAE Declaration on Agriculture, Food, & Climate • COP28 UAE Declaration on Climate and Health • COP28 UAE Declaration on Climate Relief, Recovery & Peace • Global Goal on Adaptation-UAE Framework for Global Climate Resilience adopted. <ul style="list-style-type: none"> ○ It guides long-term adaptation efforts, in the context of the temperature goal referred to in Article 2 of the Paris Agreement. ○ Global Goal on Adaptation is a collective commitment under Article 7.1 of the Paris Agreement aimed at "enhancing world's adaptive capacity, strengthening resilience and reducing vulnerability to climate change.
Underpinning everything with full inclusivity	<ul style="list-style-type: none"> • Launch of the COP 28 Gender-Responsive Just Transitions and Climate Action Partnership. • Appointment of the Youth Climate Champion to serve as the missing bridge between the COP Presidency and youth stakeholders.

Reports released at COP28

Report	Released by	Other details
Report on climate finance	Independent High-Level Expert Group on Climate Finance (IHLEG) , formed by COP26 Presidency, to develop policy options and recommendations	Key findings <ul style="list-style-type: none"> • Amount of global climate finance committed has more than tripled over last decade but it is still too low. • Climate finance is concentrated in developed economies and China, and in mitigation rather than adaptation.

	to promote investment for UNFCCC Paris Agreement.	
An eye on methane Report	International Methane Emissions Observatory (IMEO)	Provides decision-makers a framework, to track and monitor methane emissions, to plan targeted and ambitious actions for their mitigation.

Issues persisting from COP 28

- **Rules on Global Carbon market:** Countries failed to agree on rules for global carbon market.
 - US tried to make regulations which was blocked by EU, African and Latin American.
- **Phasing down of non-coal fossil fuel:** COP28 focus only on phasing down of coal, ignoring other fossil fuel like oil and gas.
- **Limited Climate finance:**
 - COP28 also failed to deliver a credible response to challenge of dwindling fiscal space of developing countries due to the debt crisis.
 - Current levels of climate finance are insufficient to meet adaptation finance gap.
- **Carbon capture and Storage:** Promotion of Marine geoengineering technologies like CCUS in COP28, ignores the harm they pose to marine environment.
- **Greenwashing:** Concerns were raised regarding of oil-and-gas influence and greenwashing during the COP28.

Greenwashing: Roadblock to effective climate action

- It was reported that **many delegates registered at COP28 were economically connected to highly polluting industries** such as petrochemicals, mining and beef production.
- The number of 'net-zero' commitments and other mitigation targets among firms and governments is growing across the globe. In the absence of criteria and coherent standards to check the credibility of emission reduction claims, the tendency to **mark activities as climate-friendly, based on misleading information and unverifiable claims** (greenwashing) is also on the rise.
 - Greenwashing **presents a false picture of the progress being made on the climate change front**, thereby pushing the world towards disaster, while at the same time rewarding entities for irresponsible behavior.

Way Forward

- **Scaling climate finance:** To finance adaptation and transitioning costs for developing countries and Small Island Developing States.
 - Developed country need to expeditiously deliver USD 100 billion/year goal through to 2025, towards climate mitigation.
- **Concerted actions on outcomes:** Countries need to deliver on the outcomes of UAE Consensus through national policies and investments
- **Need to adhere to Precautionary principle:** while planning to implement geo-engineering technologies like Carbon Capture and Storage (CCS).
- **Capacity building:** Operating entities of the Financial Mechanism e.g. GEF, need to provide, capacity-building support to attain and update INDCs.

5.1.1. INDIA AT COP 28

Prime Minister at the COP-28 **voiced the concerns of the Global South** and reiterated the urgency of making climate finance available to the developing countries.

India's role at COP28

Role	Details
Co-launched the Leadership Group for Industry Transition (LeadIT 2.0)	<ul style="list-style-type: none"> • LeadIT 2.0 will focus on inclusive & just industry transition, codevelopment and transfer of low-carbon technology, and financial support to emerging economies for industry transition. • LeadIT was launched by India and Sweden at the UN Climate Action Summit in 2019.
Co-hosted (India and UAE) event on 'Green Credits Programme' at COP-28	<ul style="list-style-type: none"> • The Green Credit Initiative focuses on voluntary environmental actions involving the community, private industry and individuals.

India participated at Mangrove Alliance for Climate Ministerial Meeting at COP-28	<ul style="list-style-type: none"> • MAC seeks to scale up, accelerate conservation, restoration and growing plantation efforts of mangrove ecosystems globally. • It was initiated by the UAE and Indonesia, during COP 27. India is also a member.
India's National Statement at COP-28 reiterated	<ul style="list-style-type: none"> • India has successfully reduced the emission intensity vis-à-vis its GDP by 33% between 2005 and 2019. • India also achieved 40% of electric installed capacity through non-fossil fuel sources, nine years ahead of the target for 2030. • Between 2017 and 2023, India has added around 100 GW of installed electric capacity, of which around 80% is attributed to non-fossil fuel-based resources.
India-led Global River Cities Alliance (GRCA) launched	<ul style="list-style-type: none"> • National Mission for Clean Ganga (NMCG) signed a Memorandum of Common Purpose (MoCP) with Mississippi River Cities and Towns Initiative (MRCTI). • This led to launch of GRCA, as the current River Cities Alliance (RCA) has now expanded its strength to membership of 267 global river-cities including India, USA and Denmark. • GRCA's secretarial role would be served by NMCG under Ministry of Jal Shakti (MoJS) and National Institute for Urban Affairs (NIUA) under Ministry of Housing and Urban Affairs (MoHUA). • RCA is a joint initiative of MoJS & MoHUA to connect river cities and focus on sustainable river centric development.

Issues concerning India at COP28

- **Refrained from signing COP28 Declaration on Climate and Health:** The declaration calls upon to reduce greenhouse gas (GHG) emissions of health systems.
 - India expressed **concerns that GHG reduction for cooling in the health sector could hinder its ability to meet the growing demands for medical services.**
- **Equity and justice:** India emphasized need of "equity and justice" in U.N. climate negotiations, with rich countries leading global climate action.
- **Phase down of coal:** India reiterated that **cuts must be on all fossil fuel, not just Coal**, which it needs for thermal power.
 - Accordingly, India has **refused to sign Green energy pledge** due to its focus on coal and investments in it.

Way forward

- **Uphold voice of Global South:** Advocate principles of equity and climate justice to uphold the interests of Global south at climate negotiations.
- **Leadership through climate Action:** Ramp up efforts to sustained climate action to achieve Panchamitra targets.
- **Sustainable consumption:** Developed countries should focus on transitioning to sustainable lifestyles, as highlighted by India's "LiFE campaign".

Conclusion

Overall, India's active participation at COP-28 positions the country as a proactive and influential player in the global fight against climate change, showcasing a commitment to collaborative, innovative, and localized solutions.

5.1.2. INITIATIVES

Initiative	Launched	Features
Global Green Credit Initiative (GGCI)	By India	<ul style="list-style-type: none"> • Serve as the international platform for dialogue, collaboration, and the exchange of innovative environmental programs and instruments.
Loss and Damage (L&D) Fund	<ul style="list-style-type: none"> • First announced during COP27. • Operationalized during COP28. 	<ul style="list-style-type: none"> • L&D refers to the negative consequences arising from the unavoidable risks of climate change, like rising sea levels, heatwaves, crop failures, etc. • L&D fund is meant to compensate countries already dealing with climate change.
Global Stocktake		<ul style="list-style-type: none"> • COP28 marked first Global Stocktake of the Paris Agreement.
Global Renewables and Energy Efficiency Pledge	Signed by 118 countries on the sidelines of COP28	<ul style="list-style-type: none"> • Aims to triple the global installed renewable energy capacity to at least 11,000 GW and

		<ul style="list-style-type: none"> • Double the global energy efficiency improvement rate to more than 4% by 2030. • Phase down unabated coal.
Fossil Fuel, Oil and Gas Decarbonization Charter (OGDC)	50 companies, representing more than 40 percent of global oil production have signed on to the OGDC	<ul style="list-style-type: none"> • A global industry Charter dedicated to speeding up climate action and achieving high-scale impact across the oil and gas sectors.
Africa Green Industrialisation Initiative (AGII)	African leaders launched at COP28.	<ul style="list-style-type: none"> • AGII aims to accelerate green growth of industries in Africa and attract finance and investment opportunities.
G7 climate club	Led by Germany and Chile , along with 36 member countries including Kenya, the European Union, Switzerland and others.	<ul style="list-style-type: none"> • It is an open, cooperative, and inclusive forum of climate-ambitious countries with the goal of supporting the effective implementation of the Paris Agreement and decisions thereunder. • It aims to support accelerating climate action and increasing ambition to achieve global net-zero greenhouse gas emissions by or around mid-century, with a particular focus on decarbonising industry.

5.1.2.1. GLOBAL GREEN CREDIT INITIATIVE (GGCI)

Why in the News?

India and UAE co-hosted the High-level event on 'Green Credits Programme' at COP-28 which led to the launch of Global Green Credit Initiative (GGCI).

About GGCI

- It would serve as an **international platform for dialogue, collaboration, and the exchange** of innovative environmental programs and instruments.
- Unlike traditional carbon credits, **"green credits" focus on voluntary environmental actions** involving the community, private industry and individuals.
- **Key Purposes:**
 - **Science:** Sharing of global technical know-how and experiences.
 - **Policy:** Shaping green credit policy instruments.
 - **Supporting implementation (practice component):** Creating one common value chain.
 - ✓ It will connect **communities, self-help groups, etc.** with **companies/corporates** and other stakeholders who can participate in the program through one marketplace.
- **Key Benefits:** Knowledge Sharing, innovative solutions, collective actions, and participating countries can assert global leadership in providing environmental solutions.
- **Features of GGCI**
 - **'Green Credit' system**, envisages a fully digital and tradable instrument for environmental sustainability.
 - **Green Credit Portal,** a repository documenting plantations and environmental projects working to shape global demand for future policies.
 - GGCI is aligned with the principles of the **Green Credit program (GCP).**

Conclusion

GGCI is expected to facilitate global collaboration, cooperation and partnership in planning, implementation and monitoring of environment positive actions. It reflects India's pro-active approach to climate change, sustainability.

Green Credits Programme (GCP)

- Notified through **Green Credit Rules, 2023** by the **Ministry of Environment and Climate Change** under the **Environment Protection Act, 1986.**
- It is an innovative **market-based mechanism designed to incentivize voluntary environmental actions** across diverse sectors, by various stakeholders like individuals, communities, private sector industries, and companies.

- In its initial phase, the GCP focuses on two key activities: **water conservation and afforestation**.
- **Governance Structure:** Steering Committee, Indian Council of Forestry Research and Education (ICFRE) (Administrator), and Technical Committees.

5.1.2.2. LOSS AND DAMAGE

Why in News?

COP28 climate conference in Dubai, officially operationalized the loss and damage fund to help vulnerable countries cope with the impact of climate change.

About Loss and Damage (L&D)

- These are **impacts of climate change that cannot be adapted to, and where losses are permanent**.
- **Loss and damage (L&D) fund**
 - It refers to the **compensation that rich industrialized nations, with historic role in climate change, must pay to poor nations**, whose carbon footprint is low but are facing the brunt of climate change.
 - It will be **based at the World Bank** but managed by an independent secretariat.
 - Several countries including **UAE, Germany, UK, Japan**, etc., pledged money to the fund
 - L&D fund was **first announced during COP27 in Sharm el-Sheikh (Egypt)** in 2022.
- **India's stand on fund**
 - India has been a **strong supporter of the fund** and welcomed the decision to operationalize it.
 - India is among the countries pitching for **opening up L&D funds for developing nations** and not limit it to small island and least developed nations.

Need of L&D fund

- **Slowdown Loss and Damage:** To slowdown if not stop irreversible loss of ecosystems and their services, including freshwater, land and ocean ecosystems.
- **Prevent humanitarian spillover of L&D:** L&D leads to food insecurity, risk of malnutrition, and loss of livelihoods.
- **Address climate induced socio-economic degradation:** These include increased human mortality and morbidity, rise in inequality and poverty rates, risk to water and energy security due to drought and heat etc.
- **Address Existential threat:** Sea-level rise poses an existential threat for low-lying areas, at or below current sea levels. E.g. Small Island Developing States (SIDS).
- **Uphold climate Justice:** Regions facing highest levels of L&D (e.g. SIDS, Africa) have lowest levels of carbon footprint.
 - Therefore, it is an ethical imperative for rich, industrialized to support such vulnerable regions.

Challenges in L&D fund

- **Lack of common definition:** Absence of a mutually agreed upon definition to categorize L&D activities.
- **Data availability:** Poor data availability and processes for systematically collecting, recording, and reporting information on L&D.
- **Low technical capacity:** Especially in developing countries – to scientifically model L&D.
- **Difficulty in quantifying non tangible L&D:** Non-economic losses, like losing family members, the disappearance of cultures and ways of living etc. are difficult to quantify.

Way Forward

- **Global consensus:** Build upon the COP28 UAE consensus to arrive at a mutually compatible definition of L&D.
- **Resilience:** Focus on building climate change resilience.
 - E.g. strengthening flood defences, Climate resilient Infrastructure, financial or social support, like, insurance protection etc.
- **Mitigation and adaptation actions:** Essential for both developing and developed countries, to avert and minimize the extent of L&D.
- **L&D in Climate Policy:** Incorporate concept of L&D in national and international policy on climate action.

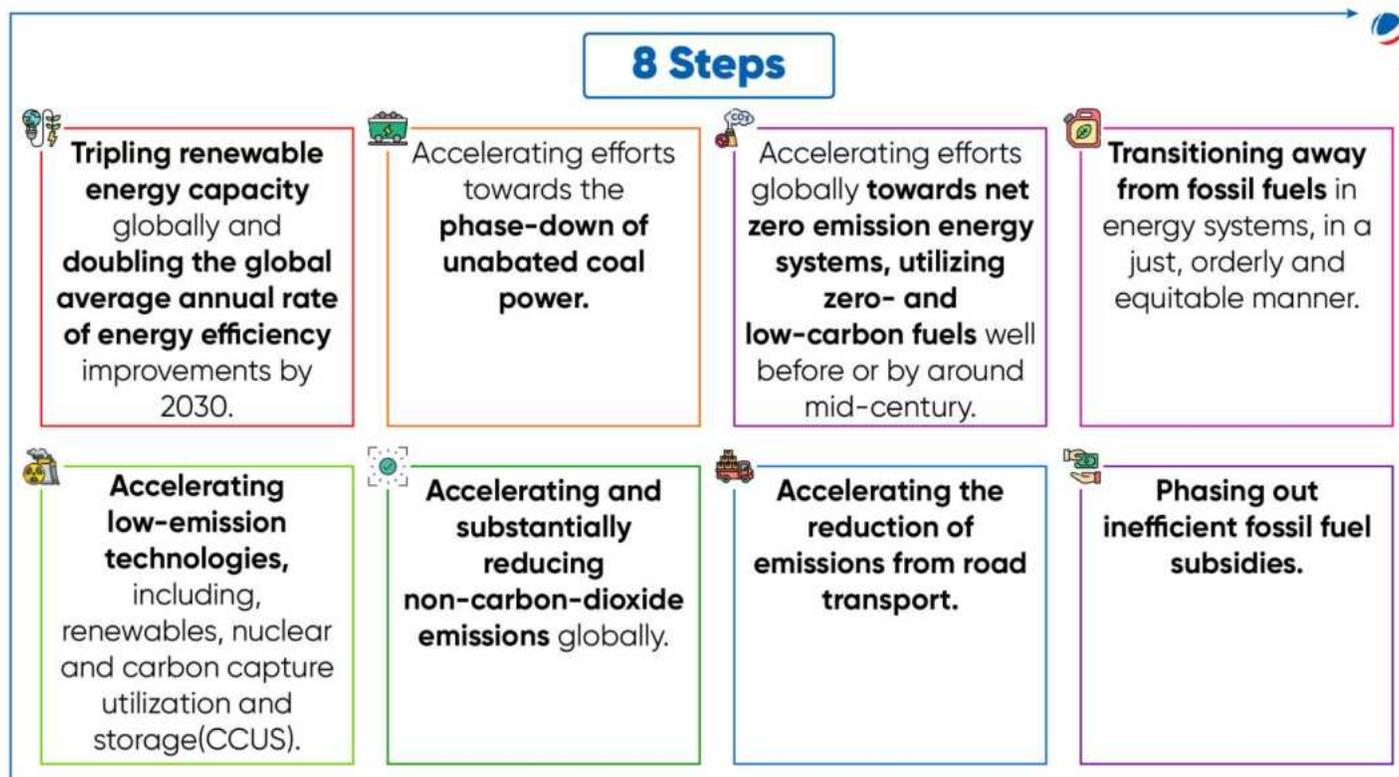
Warsaw International Mechanism (WIM) for L&D

- WIM for L&D was established at COP19 in 2013 in Warsaw (Poland) to address L&D associated with climate change in developing countries.
- **Functions of WIM**
 - Enhance knowledge and understanding of comprehensive risk management approaches
 - Enhance action and support, including finance, technology, and capacity building, to address L&D.

5.1.2.3. FIRST GLOBAL STOCKTAKE (GST)

Global stocktake is a process for countries to see whether they are collectively making progress towards meeting the goals of the Paris Agreement.

Global Stocktake (GST) calls on Parties to the Paris Agreement, to follow 8 steps



5.2. INDIAN TRADITIONAL PRACTICES & CLIMATE CHANGE

Why in News?

The risks posed by climate change have led to a growing recognition that traditional practices should be at forefront in climate change responses.

Role of Indian Traditional practices in increasing climate change resilience

- **Agriculture**
 - **Natural Farming:** E.g. **Zero-Budget Natural Farming (ZBNF)**, a chemical-free agriculture drawing from traditional Indian practices.
 - ✓ It increases farmers' climate resilience by improving soil health and reducing water usage.
 - **Diverse cropping systems:** E.g. **Akkadi Saalu** practiced in dry land regions of Karnataka.

Know the term

- **Traditional knowledge** refers to the wisdom, practices, and beliefs developed by indigenous and local communities over generations.

- ✓ Such systems present an answer to green revolution led mono cropping and genetic simplification.
- **Unique Agricultural practices:** E.g. **Kuttanad Kaliyanam farming** involves below sea level paddy cultivation in Kerala, **paddy-cum-fish cultivation of Apatani tribes** (Arunachal Pradesh)
- ✓ Such practices can help adapt to present impacts of climate change like Inundation of coastal and island regions.
- **Irrigation:** E.g. **Meghalaya's bamboo drip irrigation system** Leverages the locally made bamboo pipes to divert perennial springs on the hilltops to the lower reaches by gravity.
- **Architecture and housing: Traditional architecture** from extreme weather and disaster-prone regions can provide insights to contemporary climate resilience. E.g.
 - **Kathkuni structures** of Himanchal Pradesh.
 - **Dhajji-Dewari and Taq system** of Kashmir valley.
 - **Bhonga houses** of the Kutch region.
- **Traditional medical practices:** Practices like **Ayurveda** help in preventive medication and adoption of healthier lifestyle in face of rise in disease frequency due to climate change.
- **Sacred Grooves in India**
 - They are **critical sanctuaries of religious and cultural significance** where customary laws prohibit their exploitation.
 - ✓ E.g. 133 sacred groves at the foothills of the Himalayas in Uttarakhand.
 - They act as **gene pools for traditional crop varieties and medicinal plants**, safeguarding genetic resources for future generations.
- **Faith Based In situ conservation:** Communities protect endangered animal species like fish, turtles, tortoises, deer, blackbucks, peafowl, and birds etc.
 - E.g. **Bishnoi community** of Rajasthan **consider black buck as sacred**.
- **Traditional Rainwater harvesting** helps mitigates the effects of drought.

Traditional water harvesting structures in India

- **Jhalaras** are rectangular-shaped step wells in Jodhpur region of Rajasthan.
- **Talabs** are reservoirs that store water for household consumption and drinking purposes. E.g. pokhariyan ponds in the Bundelkhand region lakes of Udaipur.
- **Bawaris** are unique step wells that were once a part of the ancient networks of water storage in the cities of Rajasthan.
- **Taanka** is a traditional rainwater harvesting technique indigenous to the Thar desert region of Rajasthan.
- **Ahar Pynes** are traditional floodwater harvesting systems indigenous to South Bihar.
- **Johads**, of Rajasthan, are small earthen check dams that capture and store rainwater.
- **Zings**, found in Ladakh, are small tanks that collect melting glacier water.
- **Zabo**, practiced in Nagaland, combines water conservation with forestry, agriculture and animal care.
- **Eri** (tank) system of Tamil Nadu is one of the oldest water management systems in India.
- **Baolis** are traditional secular structures from which everyone could draw water.

Issues with adoption of traditional practices

- **Threat to food security:** Risk of decline in agricultural productivity, as a result of traditional agri-practices.
- **Lack of Scientific certainty:** Efficacy of some traditional practices, E.g. ZNBF farming, traditional medicine, lack sufficient scientific validation.
- **Endangered Traditional practices:** Homogenizing influence of modernization and westernization, compounded by lack of repository of traditional practices.
- **Misappropriation of India's traditional Knowledge and practices:** Wrong granting of patents to foreign entities for Indian traditional knowledge. E.g. patent on healing properties of turmeric, neem etc.

Conclusion

There is need to Capturing India's Traditional Knowledge and practices through community engagement, participatory mapping, ethnographic research and documenting and mapping. Also, there is a need to integrate traditional knowledge into national climate change policies.

India's initiatives to incorporate traditional practices

- **Traditional Knowledge Digital Library (TKDL)** includes India's rich traditional knowledge related to the systems of medicine from classical/ traditional books.
 - It seeks to prevent exploitation and protect Indian traditional knowledge at Patent Offices worldwide.
- **Bharatiya Prakritik Krishi Paddhati (BPKP)** aims at promoting traditional indigenous practices, which give freedom to farmers from externally purchased inputs.
- **Tribal Research Institute:** Research and documentation of Indigenous practices by tribals in medicinal plants, agriculture system, etc.
- **SWASTIIK (Safe Water and Sustainable Technology Initiative from Indian Knowledgebase)** can have significant benefits in terms of providing safe water.

5.3. NATIONAL CIRCULAR ECONOMY ROADMAP FOR REDUCTION OF PLASTIC WASTE IN INDIA

Why in news?

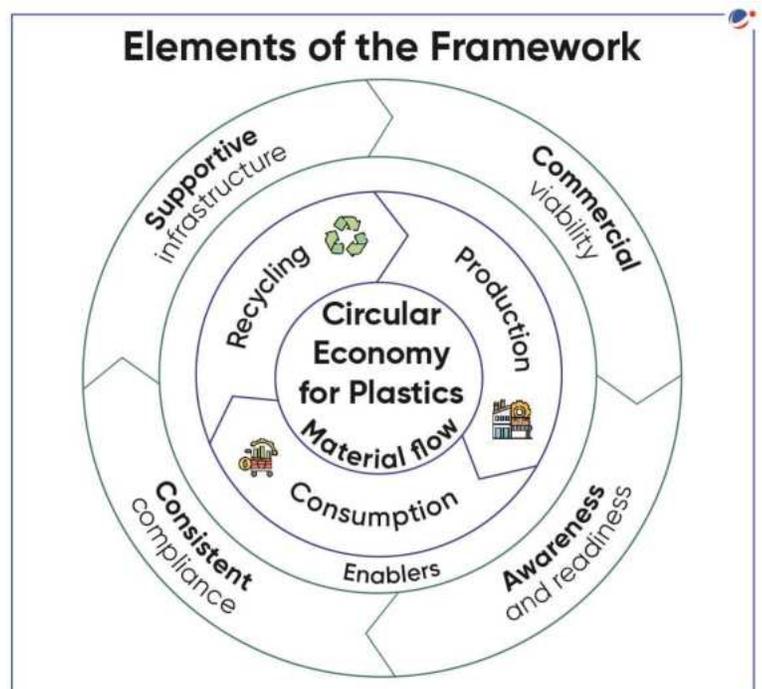
Recently a flagship document on 'National Circular Economy Roadmap for reduction of Plastic waste in India' was released.

More on news

- The document is **collaborative exercise** between leading research institutions from **India and Australia**.
- The research was part of **India-Australia Comprehensive Strategic Partnership** announced by in 2020.
- Document aims to **foster research and industry partnerships** between two countries and co-develop a roadmap for India's transition to a circular economy in the Plastics sector.

What is Circular Economy?

- The circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. In this way, the **life cycle of products is extended**.
- When a product reaches the end of its life, its **materials are kept within the economy** wherever possible by recycling.
 - These can be productively used again and again, thereby **creating further value**.
 - This is a departure from the **traditional, linear economic model**, which is based on a **take-make-consume-throw away** pattern.



About National Circular Economy Roadmap for reduction of Plastic waste in India

The roadmap mentions **seven elements (refer image)** in framework for achieving circular economy for plastics, as follows:

Element	Steps suggested
Production	• Design products that can be easily and efficiently recycled , with minimal contamination, to reduce waste, minimising the use of additives etc.
Consumption	• Avoid single-use plastics , choose products with extended lifetimes, reuse plastics, choose products made with recycled plastic etc.
Recycling	• Promote closed-loop recycling and chemical upcycling technologies, to retain plastic in the material loop for longer etc.
Commercial viability	• Use incentives for circular economy businesses , develop markets for high quality secondary material etc.

Awareness and readiness	<ul style="list-style-type: none"> • Schools, universities etc. should be used to raise awareness. • Selective curricula on waste management
Supportive infrastructure	<ul style="list-style-type: none"> • Invest in recycling and digital infrastructure needed to collect, sort, track, and assess quality and value of end-of-life plastics, etc.
Consistent compliance	<ul style="list-style-type: none"> • State governments must set targets and monitor progress on plastics reduction, reuse and recycling.

Why a circular economy roadmap for plastics is needed for India?

- **The scale and complexity of the plastic waste problem:** India generates nearly **26,000 tonnes of plastic waste each day** (CPCB, 2020), more than any economy except the USA and European Union.
 - Despite several initiatives, India continues to confront the challenge of **linear ‘take-make-waste’ industry**.
- **Economic benefits:** Circular economy can create new secondary markets for used plastics in construction and manufacturing, and new primary markets for alternative, eco-friendly products.
- **Ecological benefits:** Diverting dry waste from landfill, leading to a cleaner environment, less greenhouse emissions, improved air quality, and reduced microplastics in the food chain.
- **Enabling behavioural change:** Circular economy can support a **cultural shift, away from ‘use and throw’**, to one that leads future generations to value resources and care for the environment even as they develop their economy.
- **Global commitments:** Circular economy can be a tool to achieve Sustainable Development Goals (SDG) and net zero target.
- **Align with proposed Plastic treaty:** It can support Government and industry associations in responding to the requirements of **Global Plastics Treaty** that is expected to be in force by 2024.
- **In line with LiFE – Lifestyles for Environment:** Launched as **India-led global mass movement** to nudge individual and community action to protect and preserve the environment.
 - Its key element is **sustainable consumption and production**.

Current challenges in attaining circular economy for plastics

- **Informal sector:** Informal sector, dominated by unregistered waste pickers and rag pickers, contributes significantly to the plastic waste value chain posing a major barrier to circular economy.
- **Compliance mechanisms for existing policies:** At the industry level, there are rules in place empowering pollution control boards to undertake periodic audits and inspections to check compliance. However, there are implementation issues.
- **Gaps in policies:** For example, EPR regulations lack aspects of designing for the environment and minimising production.
 - They currently target mostly small-scale plastic processors and manufacturers whose activities are highly fragmented and informal, whereas polymer manufacturers are few in number and mostly large firms.
- **Cost:** Businesses substituting plastics noted that plastic is very cheap and it is difficult for alternatives to compete on price.
- **Regulatory barriers:** Technologies enabling plastic recycling options for secondary raw materials face regulation barriers and require infrastructure and large investments.
 - Also, plastic recycling technologies for various types of polymers are still a grey area for the plastic recycling scenario in India.
 - For instance, PET recycling rate in India is comparatively high, compared to other countries.
- **Information and awareness:** Lack of knowledge and incentive among households about importance of segregation and outcomes of waste collected leave these primary waste generators entirely out of the system.

Steps taken for Plastic waste management in India

- Mandated **Extended Producer Responsibility (EPR)** on producers, importers and brand owners for plastic packaging waste in 2016.
- Prohibited **identified single use plastic items**, which have low utility and high littering potential, with effect from 1st July, 2022, under **Plastic Waste Management Amendment Rules, 2021**.
- **In order to stop littering due to light weight plastic carry bags**, prohibited manufacture, import, sale, use etc. of plastic carry bags having **thickness less than one hundred and twenty microns** from December, 2022.

Overall strategy for attaining circular economy

- **Set a single, clear framework and implementation plan:** A practical policy framework for circular economy, in which all initiatives and information have a place, and a plan to put it into action.
- **Formalising the sector:** Integrate **informal sector into the formal economy** by recognising their role, enabling their access to government services and benefits and supporting them in developing their own business ventures in the sector.
- **Recognise and engage all stakeholders:** Collaboration must encompass entire ecosystem: across the petrochemical industry, ULBs, informal cooperatives, regulators etc.
- **Create systems to support state governments to design and implement action-plans:** Needed to encourage decentralised governance and implementation at municipal and panchayat levels, leveraging local skills, networks and enabling local contextual responses.
- **Integrate learning along the supply chain:** Encouraging state-level data collection, monitoring, and evaluation as well as higher transparency in public reporting to enable better measurement.
- **Phase out plastics:** Set dates beyond which manufacture of certain plastics is banned, and support manufacturers of these materials to transition to alternative products and businesses.
- **Support the circular economy:** With public procurement policies and fiscal and tax incentives that prefer secondary plastic waste-based products and businesses.
- **Technology-related investments:** Investments in digital waste management tools such as GPS-enabled tracking for vehicles or image recognition tools are required. data transparency is required to build a circular plastic waste value chain etc.

5.4. GLOBAL COOLING WATCH REPORT-2023

Why in the news?

The United Nations Environment Programme (UNEP) led **Cool Coalition** has released a **Global Cooling Watch report 2023** named “Keeping it Chill: How to meet cooling demands while cutting emissions”.

About the report

- The report,
 - **stocktakes the totality of emissions from the cooling** across sectors like space cooling, cold chain and refrigeration, and transport globally,
 - **suggest pathways to achieve near-zero emissions** from cooling and policy measures that can **enable transition to sustainable cooling** by 2050.
- The report is released to support **the Global Cooling Pledge**, a joint initiative between the United Arab Emirates as host of COP28 and the Cool Coalition.
 - **Global Cooling Pledge** aims to raise international cooperation through collective global targets to reduce cooling related emissions by 68% by 2050, increase access to sustainable cooling by 2030, and increase the global average efficiency of new air conditioners by 50%. **India has not signed the pledge yet.**

About Cool Coalition

- UNEP launched the **Cool Coalition** at the **First Global Conference on Synergies** between the 2030 Agenda for Sustainable Development Goals and the Paris Agreement.
- It is a global network of partners working to provide efficient, climate-friendly cooling for all.
- **International Solar Alliance (India)** is a partner of Cool Coalition network.

Key Highlights of the report:

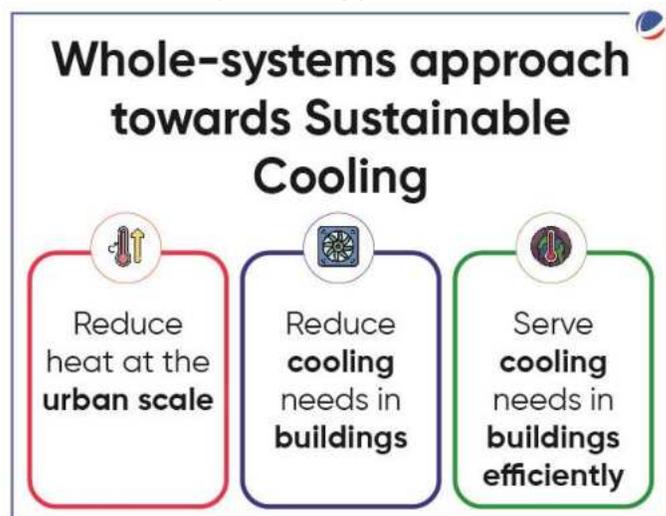
- **Cooling acts as a double burden on climate change:** Cooling equipment raise the demand for power at one end and induces global warming due to the release of refrigerant gases.
- **Rising demand for cooling:** Under the current approach to cooling, the installed capacity of cooling equipment globally **will triple between now and 2050**.
 - Providing access to cooling in developing countries overall requires an additional 10 per cent growth in the 2050 cooling capacity.
- **Key drivers of cooling demand:** Climate change, population growth, income growth, urbanization, and policies to improve access to cooling.
 - 82% of global cooling-related GHG emissions came from G20 countries, in 2022.

- **Increasing emissions from cooling sector:** Emissions from cooling are predicted to account for more than 10% of global emissions in 2050 (6.1 billion tons of CO₂e per year).
 - This will present a major hurdle to the ongoing transition from fossil fuels to renewable energy sources in many countries.
- **Sustainable Cooling as the solution:** To minimize the multiple and severe negative impacts from cooling growth, a rapid transition to sustainable cooling is needed. These measures could **reduce predicted 2050 emissions from cooling by at least 60%**.
 - **Sustainable cooling** requires the adoption of cooling technologies and approaches that are **accessible, affordable and scalable but that minimize negative impacts on people, the economy and the environment.**

Recommendations by the report:

The report focuses on **three key measures** for sustainable cooling:

- **Implementing Passive Cooling Strategies:** To address extreme heat and reduce cooling demand in buildings and in the cold chain.
 - E.g. Integrating **building energy codes** which incorporate passive strategies like improved insulation, reflective surfaces, shading through nature, natural ventilation etc.
- **Driving energy efficiency:** This includes **higher energy efficiency standards** and norms for cooling equipment.
 - **Minimum energy performance standards (MEPS) along with effective labelling of products and regulations** for phasing down high-GWP refrigerants are needed to increase the efficiency of cooling products.
- **Faster refrigerant phase down: A phase-down of climate-warming hydro fluorocarbon (HFC) refrigerants at a faster rate than is required under the Kigali Amendment to the Montreal Protocol.**
 - Under the Kigali Amendment, Parties will phase **down production and consumption of HFCs** that do not deplete ozone but have **high global warming potential.**
- **Other measures:**
 - Transitioning towards **electric vehicles and decarbonizing the electric grid.**
 - **Integrating cooling within climate and energy decrees:** mandating reporting on annual cooling GHG emissions.
 - **Cooling bonds** can be used to raise funds towards sustainable cooling projects.



Steps taken by India towards Sustainable Cooling

- **India Cooling Action Plan** It was launched in **2019** by the MoEFCC.
 - It seeks to reduce cooling demand across sectors by 20% to 25% by 2037-38, and refrigerant demand by 25% to 30% by 2037-38.
 - Recognize 'cooling and related areas' as a thrust area of research under the National S&T Programme.
- **Energy Conservation Building Code – ECBC 2017:** formulated by the **Bureau of Energy Efficiency (BEE)** makes it mandatory for commercial buildings with a load of 100 kVA or more to comply with its energy-efficient standards.
- **BEE Star Labelling Program** to reduce the energy consumption of appliances **such as** Electric Geysers, Colour TV, Room Air Conditioners, LED lamps, etc.
- **Green Building Ratings:** Green Rating for Integrated Habitat Assessment (GRIHA), Indian Green Building Council (IGBC) and Leadership in Energy and Environmental Design (LEED).

5.5. HINDU KUSH HIMALAYAS

Why in the news?

Asian Development Bank (ADB) launches the **Building Adaptation and Resilience in the Hindu Kush Himalayas Initiative**.

About the Initiative:

- It aims to address the adversities of climate change in the Hindu Kush Himalayan region.
- This initiative will combine cutting edge **risk assessment and risk management tools**, such as **insurance and risk transfer**, to help guide investment decisions for large scale infrastructure.
- It supports Bhutan and Nepal in climate adaptation (worst-affected regions).

About Hindu Kush Himalayan (HKH) region:

- Hindu Kush-Himalayan region (refer to infographic) spans an area of approximately. 4.3 million square km in **Afghanistan, Bangladesh, Bhutan, China, India, Myanmar, Nepal, and Pakistan**.
- It is **home to the world's highest peaks** such as **Mount Everest** and **Kanchenjunga**.
- HKH is known as **the Third Pole or the Water Tower of Asia** because it holds the largest ice reserves outside of the polar regions.
- HKH with **young and rising mountains** are highly vulnerable to multiple hazards such as earthquakes and landslides

Climatic risks faced by the region

- **Increased intensity and frequency of Climate change hazards** like- Glacial Lake outbursts, flash floods etc. posing significant risk to mountain habitants.
- **Declining snow cover and accelerated melting of glaciers** resulting in drying rivers, impact on hydropower energy and degradation of water quality.
 - According to ADB, if global warming reaches 3 degrees, up to 75% of glaciers will melt in parts of the Himalayas by 2100.
- **Impact on livelihoods** of mountain inhabitants in the short term and river basins in the long run.
 - Economic losses in the region from disaster totalled \$45 billion from 1985 to 2014, more than any other mountainous region in the world.
- **Loss of Biodiversity**: Adverse impact on mountain dwelling species, some of which are expected to decline in numbers.

Other global initiatives for protecting Himalayan Ecosystem

- **The International Centre for Integrated Mountain Development (ICIMOD)**: An **intergovernmental knowledge and learning centre** working for the people of the Hindu Kush Himalaya (HKH), located in Kathmandu (Nepal).
- **Himalayan Adaptation Network by IUCN**: Web-based network initiative in Sikkim to build climate resilient strategies for reducing community and ecosystem vulnerability in the Indian Himalayan region (IHR) through the landscape approach.
- **Living Himalayas Initiative by the World Wide Fund for Nature (WWF)** to protect the biodiversity in the Eastern Himalayas.

The infographic features the ADB logo (Asian Development Bank) and the text 'Asian Development Bank (ADB)' with 'HQ Manila, Philippines' and a building icon. It includes an information icon (i) for the 'Genesis' section, a flask icon for the 'Objective' section, and a membership icon (three stars) for the 'Membership' section. A green checkmark icon is used for the 'Is India a member?' question.

Asian Development Bank (ADB)
Manila, Philippines

Genesis: Established in **1966** after a resolution was passed at **first Ministerial Conference on Asian Economic Cooperation** held by United Nations Economic Commission for Asia and Far East in 1963.

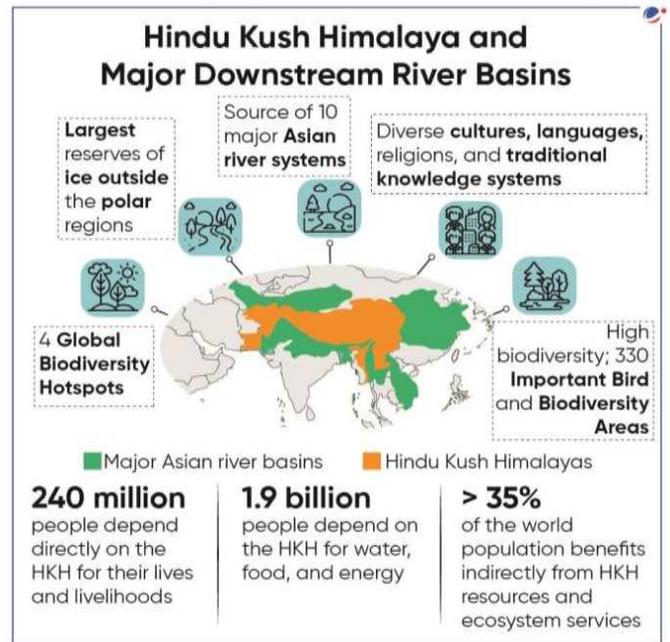
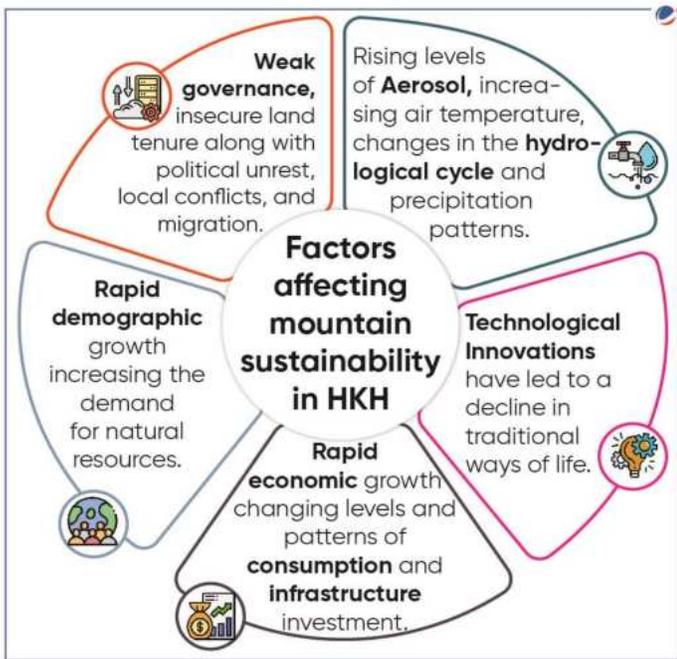
Objective: Fostering **economic growth, cooperation and eradicating extreme poverty in region of Asia** and Far East by providing loans, technical assistance, grants and equity investment.

Membership: **68 members**.

Is India a member?

Other Key Information:

- **Highest policy-making body is Board of Governors**, which comprises one representative from each of 68 member nations.
- **Five largest shareholders** are Japan and United States, followed by People's Republic of China, **India**, and Australia.



- India's Initiatives**
- **National Mission for Sustaining the Himalayan Eco-system (NMSHE)** launched under the National Action Plan on Climate Change (NAPCC) to continuously assess the health status of the Himalayan Ecosystem.
 - **SECURE** (Securing livelihoods, conservation, sustainable use and restoration of high range Himalayan ecosystems) **Himalaya** by MoEFCC (India) and the **United Nations Development Programme (UNDP)** as a part of the Global Wildlife Program (GWP), funded by the **Global Environment Facility (GEF)**.

5.6. CLIMATE ENGINEERING

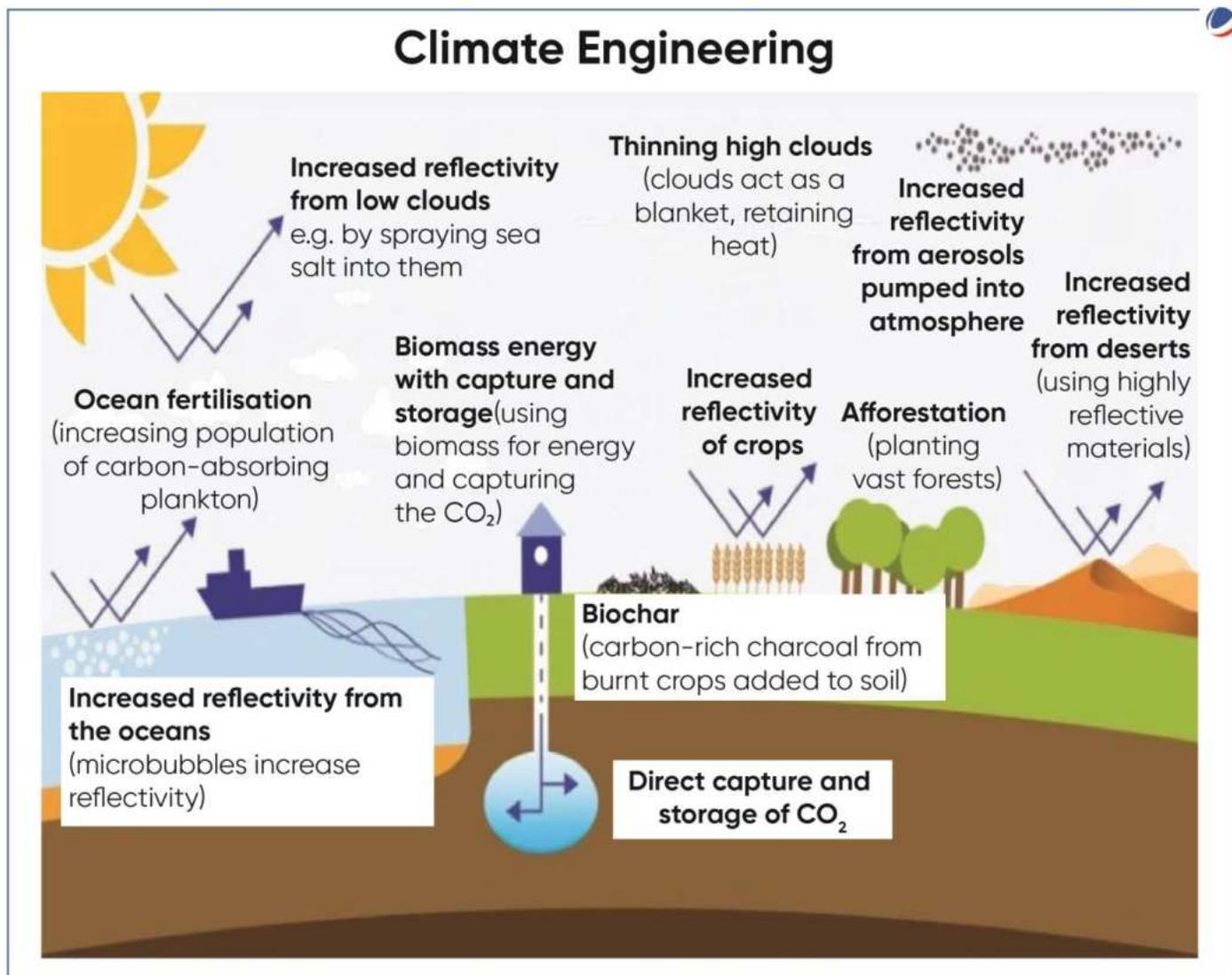
Why in the News?

UNESCO released its **first report on the ethics of climate engineering**.

About Climate Engineering

- Climate engineering or Geoengineering aims to **address global warming** not by reducing greenhouse emissions but **by directly intervening in the climate system**.
- Climate engineering **does not address the root cause of climate change** but it can take critical steps to slow climate change.
- It could be **carried out through**:
 - **Carbon Dioxide Removal (CDR)**: Removing carbon dioxide from the atmosphere.
 - **Solar Radiation Modification (SRM)**: Allowing more infrared radiation to escape into space or reflecting incoming sunlight back to space.
 - ✓ SRM is also referred as **Solar geoengineering**
- **Significance of climate engineering**
 - **Mimicking natural processes**: This amplifies suitability of climate engineering for tackling climate changes.
 - **More time to transition**: Reduces the urgency of reducing carbon emissions and provides more time to transition towards the renewables.
 - **Regional Implementation**: Affordable nature of certain techniques enables it to be built at regional level as well

- **Addressing climate policy gap:** They may fill the gap between **climate policy targets** and the **necessary reductions** in atmospheric greenhouse gas concentrations needed to avert catastrophic climate change impacts.



Potential risks associated with climate engineering

- **Environmental Risks:** Given our current **knowledge gaps**, these techniques **cannot yet be relied on** to significantly contribute to meeting climate targets as they:
 - may **impair the self -regulation capacity** of natural ecosystems in long run;
 - can have **adverse impact** on ozone layer, rainfall, crop production and ocean acidification; and
 - **may create technology dependency** for tackling climate changes and withdrawal of such technology withdrawal may cause **termination shock**, leading to rapid warming, disrupted water cycle, and biodiversity loss.
- **Economic Risks:** The cost of developing and deploying these tools is high.
 - Also, **increased number of patents** are being filed (in US & EU) for such technique which **may exacerbate global inequalities**.

India's Initiative for climate engineering

- **Department of Science and Technology (DST)** is supporting an active **climate modelling research** program in geoengineering at the **Indian Institute of Science(IISc)**.
- **Major Research and Development Program (MRDP)** was launched by DST to understand the implications of geoengineering.
- **Indian Institute of Tropical Meteorology** is developing **Earth system model** for performing solar geoengineering simulations.

- **Ethical issues**
 - **Organized irresponsibility:**
 - ✓ Due to the **uncertainties and synergistic effects** of environmental risks, there is no institution that can specifically assign responsibility and blame.
 - ✓ **Also, there is little transparency available** about their progress, feasibility, risks, and benefits.
 - **Distributive justice**
 - ✓ Technologies are being developed **by small group of countries, firms and academics** and marginalised communities are kept at bay.
 - ✓ **Equally distributing risks globally may not be unfeasible**, and there would be procedural issues in achieving ethical consensus for **proper recognition and compensation**.
 - **Moral hazard:** Successful implementation can produce morally undesirable consequences as it allows for an easier way to deal with the climate crisis rather than taking ecological responsibility seriously.
- **Other issues**
 - **Transnational nature** of impacts of climate engineering may lead to conflicts.
 - Future control over climate-altering technologies by a country may be perceived as **acts of war**.

Way ahead to minimize risks associated with climate engineering

UNESCO's recommendations for researching and governing climate engineering include:

- **Governance:** Intergenerational and transboundary impacts should get due considerations in **decision making**.
 - States shall **introduce legislation that regulates climate action to prevent harm and ban weaponization** of climate engineering techniques.
- **Participation and inclusiveness:** **Marginalised groups, women, youth, indigenous people and civil society** should be key stakeholders in the development and implementation of policies.
 - **International cooperation down to regional activities** within local communities should be encouraged.
 - **Scientific knowledge and research:** Promote open **collaboration and constant monitoring** of climate actions to promote informed decision making.
 - ✓ **Political and economic interests** should **not interfere** with scientific research.
- **Strengthening capacity:** UNESCO should support Member States in **strengthening institutional, technological and ethical capacities** as regards climate action.
 - **Businesses and industry should act ethically**, follow international standards, and closely collaborate with public sectors.
- **Education, Awareness and Advocacy:** Ethical issues related to climate action should become an **integral part of the curricula** of relevant educational and training programmes.

Conclusion

Climate engineering may be risky because of its interactions with the climate and also its potential for exacerbating existing risks and introducing new ones. Hence, it is imperative to pursue these technologies with a comprehensive understanding of their effects and ethical implications.

5.7. ENVIRONMENTAL COST OF WAR

Why in the news?

Experts have raised concerns with respect to environmental impact and associated costs of Russia-Ukraine war and the Israel-Palestine conflict.

About Environmental costs of war

- According to Institute for Economics and Peace, **only a few countries** globally are **conflict-free**, despite this being considered the most peaceful century.
 - Even in comparatively **peaceful nations, security forces consume extensive resources**.
 - However, **during war**, the environment experiences neglect, exploitation, human desperation, and deliberate abuse on a **significant scale**.

- The environmental **impact of wars** and the **extent** of which depends on various factors, such as the nature and length of the conflict, what weapons were mostly used, and how big an area is occupied etc.

Stage	Associated environmental cost
Preparation (before war)	<ul style="list-style-type: none"> • Exploitation of Resources: Building military forces consumes vast resources, including metals, water, and energy, primarily met through oil. • GHG emissions: Military overall requires significant energy, and it's mostly derived from fossil fuels. <ul style="list-style-type: none"> ○ For example, British military activity is responsible for approximately 50% of all UK government emissions. • Compromise with conservation efforts: Excessive military spending and the use of biodiversity-critical areas for military bases, testing, training, etc.
War	<ul style="list-style-type: none"> • Pollution: Debris from explosive weapons causes significant air and soil pollution. Wrecked or damaged ships, submarines, cause oil spill. • Deforestation: Caused by weapons containing white phosphorous, bombing of protected areas, etc. <ul style="list-style-type: none"> ○ For example, During Vietnam War US military cleared rainforests in Vietnam to enable them to see their enemies more easily, • Invasive species threat: War causes devastating destruction to ecosystems including species loss, and creates the potential for invasive species.
After war	<ul style="list-style-type: none"> • Radiation: Nuclear-weapons may have lasting impact on environment as was seen in Hiroshima and Nagasaki in the aftermath of World War 2. • Wildlife crime: Increased hunting and poaching, facilitated by easy access to small arms in addition to ungoverned spaces contribute to wildlife crime. • Impact on Conservation efforts: Researchers face restricted access to protected areas, government may cut budget for projects under international environmental obligations. • Reduced ecosystem services: Irreversible loss of biodiversity and soil nutrients reduces ecosystem services. • Other issues: Deforestation, forced human displacement, and associated exploitation of resources exacerbate environmental footprints of war.

Key Initiatives: Initiatives and principles that aim to minimize the environmental impact of war and encourage responsible conduct during armed conflicts include:

- **Geneva Convention:** Imposes restrictions on warfare methods aiming to cause widespread, long-term, and severe damage to the natural environment.
- **Brundtland Report (1987):** The report "Our Common Future" introduced the concept of sustainable development.
 - It also emphasizes that **Armed conflict and rivalry pose significant barriers to sustainable development**.
- **Stockholm Conference (1972):** Prohibits the use of all weapons of mass destruction.
- **UN Conference on Environment and Development (1992 Rio Conference)**
 - **Principle 24** emphasizes that armed conflict is fundamentally harmful to sustainable development, urging nations to adhere to international environmental norms during war.
 - **Principle 25** emphasizes the interconnectedness and indivisibility of peace and sustainable development.
- **Rome Statutes - Article 12:** Addresses the responsibility of states regarding environmental damage in armed conflicts.
- **International Day for Preventing the Exploitation of the Environment in War and Armed Conflict:** Recognizes the importance of preventing environmental exploitation during conflicts.
- **Draft Principles on Protection of the Environment in Relation to Armed Conflicts:** Adopted by the International Law Commission, these principles provide a framework for environmental protection during armed conflicts.
- **UN Convention on the Prohibition of Military or Any Other Hostile Use of Environmental Modification Techniques (ENMOD):** Aims to prevent the military or hostile use of environmental modification techniques.

Challenges associated with environmental cost of war

- **Limited knowledge:** Many of the wars have occurred within biodiversity hot spots, however, understanding of environmental costs of war is limited.
- **Difficulty in Quantifying:** Environmental damage from war is challenging to measure, with disruptions to monitoring systems and unreported pollution caused by military activities.

- **Exclusion from Paris Climate Agreement:** Armaments and the military are not included in the Paris Climate Agreement, exempting them from reporting to the Intergovernmental Panel on Climate Change.
- **Competing Priorities Post-Conflict:** After conflicts end, immediate reconstruction efforts prioritize housing, infrastructure, and services over environmental considerations.
- **Vicious Circle:** Climate change (a hidden cost of war on environment) makes resources scarcer and increases vulnerabilities.
 - This creates an ongoing cycle where **resource depletion and heightened vulnerabilities contribute to conflicts which exacerbate the cost of war on environment, perpetuating the cycle.**

Way ahead to mitigate war's impact on the environment

- **UN Framework on Climate Change:** Create binding global agreements under the UN Framework on Climate Change to address military and conflict emissions.
 - Hold responsible parties accountable based on the "**polluter pays**" principle.
- **Green Post-Conflict Recovery:** Prioritize green and sustainable recovery post-conflict, considering climate change, biodiversity loss, and pollution concerns.
- **Military Training:** Educate Armed Forces members on emission reduction and environmental preservation, adapting training to the operational environment and tasks, including Humanitarian Aid, Disaster Relief, and resilience-building in climate-vulnerable countries.
- **Decarbonizing Military:** Implement efforts to reduce greenhouse gas emissions, such as replacing petroleum-fueled vehicles with hybrid and electric cars, installing solar arrays, and enforcing emission reductions in the supply chain.
 - UK's Ministry of Defence has developed a **Climate Change and Sustainability Strategy**
 - **Switzerland** has set a goal to create a **carbon-neutral military** by 2050.

Conclusion

As Former **UN Secretary-General Ban Ki-Moon** highlighted, 'the **environment often becomes a silent casualty of war** and armed conflict'. To safeguard a healthy planet for present and future generations, it is crucial not to overlook the frequently forgotten environmental costs associated with armed conflicts.

5.8. GROUND WATER IN INDIA

Why in news?

Union Minister for Jal Shakti released **Dynamic Ground Water Resource Assessment Report** for the country for year 2023.

More on news

- The assessment was carried out jointly by **Central Ground Water Board (CGWB) and States/UTs**, which can be used for taking suitable interventions by various stake-holders.
- Such joint assessments were carried out from 1980 onwards. From 2022, the **exercise is being carried out annually.**

Key highlights of the report

Indicator	Findings
Total annual groundwater (GW) recharge in the country	<ul style="list-style-type: none"> • 449.08 billion cubic meters (bcm) (Increased from 437.6 bcm in 2022). • Major increase is noticed in West Bengal, Assam, Telangana, Chhattisgarh, Karnataka, Gujarat and Bihar.
'Over-exploited' units (indicating GW extraction exceeding annually replenishable GW recharge)	<ul style="list-style-type: none"> • 736 units (11.23%) of total 6553 assessment units in various States/ UTs. (Decreased from 1006 units (14.2%) in 2022) • Accounts for 17 % of total recharge worthy area of the country. • Over-exploited' Units are mostly concentrated in: <ul style="list-style-type: none"> ○ North west, including parts of Punjab, Haryana, Delhi and Western Uttar Pradesh where there has been indiscriminate withdrawals of GW leading to over-exploitation. ○ Western part, in parts of Rajasthan and Gujarat, where due to arid climate, GW itself is limited.

	<ul style="list-style-type: none"> ○ Southern part, including parts of Karnataka, Tamil Nadu, Telangana and Andhra Pradesh, where due to inherent characteristics of crystalline aquifers, GW availability is low.
'Critical' units (GW extraction between 90-100%)	<ul style="list-style-type: none"> ● 199 (3.04 %) assessment units ● Accounts for 3 % of total recharge worthy area of the country.
"Semi-critical" units (GW extraction between 70 % and 90 %)	<ul style="list-style-type: none"> ● 698 (10.65 %) assessment units ● Accounts for 12 % of total recharge worthy area of the country.
'Safe' units (GW extraction is less than 70 %)	<ul style="list-style-type: none"> ● 4793 (73.14 %) assessment units. (Increased from 4780 units (67.4%) in 2022) ● Accounts for 66 % of total recharge worthy area of the country.

- **Reason for improvement in Total annual groundwater (GW) recharge**
 - The changes are attributed mainly to **changes in recharge from 'Other Sources'**.
 - **Recharge from other sources constitutes:**
 - ✓ Recharges from canals, surface water irrigation, ground water irrigation, tanks & ponds and water conservation structures in command areas and non-command areas.
 - **Main source of replenishable groundwater was rainfall**, which contributed to nearly **60%** of total annual GW recharge.

GW scenario in India

- India is the **world's largest user of groundwater**, exceeding the use of the United States and China combined.
- Although the recent assessment is a silver lining but water level in more than 60% of wells monitored by CGWB **registered a declining trend** in the last one decade.
- **According to Interconnected Disaster Risks Report 2023**, published by **United Nations University** – Institute for Environment and Human Security some areas in **Indo-Gangetic basin in India have already passed the groundwater depletion tipping point**.
 - Also, the entire north-western region is predicted to experience **critically low groundwater availability by 2025**.
 - **78%** of wells in Punjab are considered overexploited.

Reasons for Overall decline in GW in India

- **Over-Extraction:** Green revolution has rapidly increased the demand for groundwater for agriculture. Over the last 50 years, number of borewells has grown from 1 million to 20 million.
- **Climatic factors:** A long-term decline in monsoonal rainfall, owing to climate change, has partially been contributing to the decline in GW due to lower recharge levels.
- **Policy related factors:** Several states affected by depletion of groundwater provide free or heavily subsidized power (including solar pumps) for pumping groundwater for irrigated agriculture.
 - Also, weak regulations result in the expansion of groundwater irrigated areas and drilling of additional wells.
- **Irrigation methods:** Irrigation efficiencies are extremely low in India. Traditional flood irrigation in India accounts for **huge water loss through evapotranspiration**.



Central Ground Water Board (CGWB)

Faridabad, Haryana.



Genesis: Established in 1970 by renaming Exploratory Tube wells Organization.

- It was **merged with the Ground Water Wing** of Geological Survey of India during 1972.

About: National Apex Agency entrusted with the **responsibilities** of providing scientific inputs for **management, exploration, monitoring, assessment, augmentation and regulation** of GW resources of country.

Ministry: Ministry of Jal shakti.

Mandate:

- To **develop and disseminate** technologies, implement policies for scientific and sustainable development of GW resources.

- **Other factors**, include, exceptionally high demand versus limited supply owing to rise in population, urbanisation and rise in industries etc.

Ground Water Assessment and Management Initiatives by Govt

- **National Aquifer Mapping & Management Programme (NAQUIM)**: It aims mapping of major aquifers, their characterization and formulation of Aquifer Management Plans to ensure sustainability of resources.
- **Jal Kranti Abhiyan**: Launched by Ministry of Jal Shakti, aimed at consolidating water conservation and management initiatives in country through a holistic and integrated approach involving all stakeholders.
- **Atal Bhujal Yojana**: Implemented from 2020, envisages improving ground water management in identified water-stressed areas in parts of seven States in the country with emphasis community participation.
- **Pradhan Mantri Krishi Sinchai Yojana (PMKSY)-Har Khet Ko Pani**: It envisages creation of irrigation potential from groundwater in assessment units where there is sufficient scope for further future ground water development.
- **Jal Shakti Abhiyan**: It involves water conservation and harnessing of rainwater, revitalization of traditional and contemporary aquatic ecosystems, recycling and replenishment of water, watershed development, etc.
- **Masterplan at India level**: “**Master Plan for Artificial Recharge to Ground water in India 2020**” by Central Ground Water Board envisages implementation of nearly **11 million Rain Water Harvesting and Artificial Recharge structures** to augment the ground water resources of the country.
 - Ministry of Jal Shakti has also circulated a **Model Bill to all States/UTs to enable them to enact suitable legislation for regulation of ground water development**, which includes provision of rainwater harvesting.

Suggestions to improve GW management

- **Estimating future availability**: Ground water modelling can be done which gives an idea of the future availability of Ground water resources with respect to the changing climate and extraction patterns.
- **Move away from water guzzling crops**: For instance, in Gujarat, farmers are beginning to understand the need to move away from water-guzzling crops such as cotton and wheat to pomegranates and cumin, which not only use less water but also fetch good prices.
- **Community participation**: Since groundwater conservation lies in the hands of millions of people, communities shall be placed at the heart of the effort, marrying scientific inputs with traditional wisdom.
- **Policy level measures**: Policies like separating agricultural electrical connections from household connections and a fixed timing for agricultural electricity availability.
 - **Mihir Shah Committee** recommended corrective measures such as establishing required drilling depth, distance between wells, etc.
- **Restructuring governance**: **Mihir Shah Committee** recommended that Central Water Commission and CGWB should be restructured to form a new **National Water Commission**. It reasoned that a **unified body will help in the collective management of ground and surface water**.
- **Demand side interventions**: Surface water harvesting through farm ponds and check-dams, installation of water-efficient irrigation systems (e.g. more efficient drips and sprinklers) etc.



5.9. GLOBAL DROUGHT SNAPSHOT 2023

Why in news?

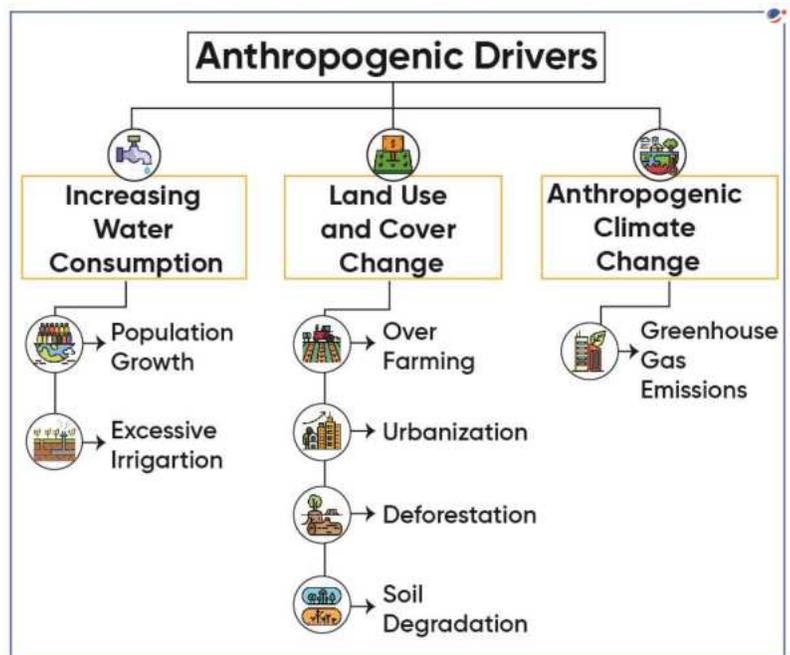
As per **United Nations Convention to Combat Desertification (UNCCD)** report **Global Drought Snapshot 2023**, at least 23 countries, including India, declared drought emergencies at a national or sub-national level during 2022-23.

What is a drought?

- India Meteorological Department (IMD) defines a meteorological drought in any area when the **rainfall deficiency in that area is $\geq 25\%$ of its long term normal**.
 - It is further classified into **moderate and severe** drought depending upon the deficiency.
 - As per Climate Hazards and Vulnerability Atlas of India by IMD, **87% of the districts and 93% of the population are moderate to very highly vulnerable**.
 - ✓ 27% of the districts and 32% of population are **highly vulnerable**.

Current Impacts of droughts highlighted by report

- Global Impact:** Based on data reported by 101 country Parties to the UNCCD, **1.84 billion people are drought stricken**, out of which 4.7 per cent are exposed to severe or extreme drought.
- Impact on women and children:** Compared to men, **women and children are over 14 times more likely** to be killed by climate fuelled disasters.
 - In addition to posing a direct threat to their lives, disasters expose women to other protection risks.
- Impact on food security:** As of the end of December 2022, the ongoing drought had left approximately 23 million people severely **food insecure** across the Horn of Africa.
- Induces forced migration:** 98 per cent of the 32.6 million new disaster displacements in 2022 were the result of weather-related hazards such as storms, floods and droughts.
- Impact on primary energy production:** For instance, Hydropower installations can be impacted when a lack of water reduces their proper operation.
- Impact on forests:** Droughts increased deforestation by 7.6% compared to years of normal weather.
- Impact on Agriculture:** Over the last 3 decades land degradation has caused reduction in global productivity (0.4% each year) in irrigated and rainfed crops.
- Impact on Glaciers of Himalayas:** Glaciers in have lost significant mass over the past 40 years, and the loss is accelerating. In 2022, exceptionally warm and dry conditions exacerbated mass loss for most glaciers.



Suggestions given in report

- **Sustainable development:** This would reduce population exposure to drought by **70%** compared to fossil-fuelled development.
- **Insurance coverage of drought related losses:** Close to 45% of disaster-related losses at a global level in 2020 were insured, a growth from 40% of insured loss over the period of 1980-2018. This can be further scaled up.
- **Rainwater harvesting:** On average, only 15% of rainwater enters the ground in urban areas while in rural areas 50% of rainwater is absorbed into the ground. Rainwater harvesting provides an efficient option to store rainwater and then reuse it in times of drought.
- **Role of international financial system:** By addressing poverty, and addressing gross inequality regional societal collapse driven by food insecurity and environmental degradation can be avoided.
- **Nature based solutions:** Nature-based solutions have the potential to **reduce carbon dioxide emissions by up to 25%**.



United Nations Convention to Combat Desertification (UNCCD)



Genesis: In 1992, UN General Assembly adopted resolution, and UNCCD was established in 1994.

About: It is only **legally binding framework** set up to address desertification and the effects of drought.

Mandate: To **protect and restore our land** and ensure a safer, just, and more sustainable future.

Membership: 197 parties

Is India a member? ✔

Governing body: Conference of the Parties (COP), is Convention's supreme governing body, which held its first session in 1997 in Rome, Italy.

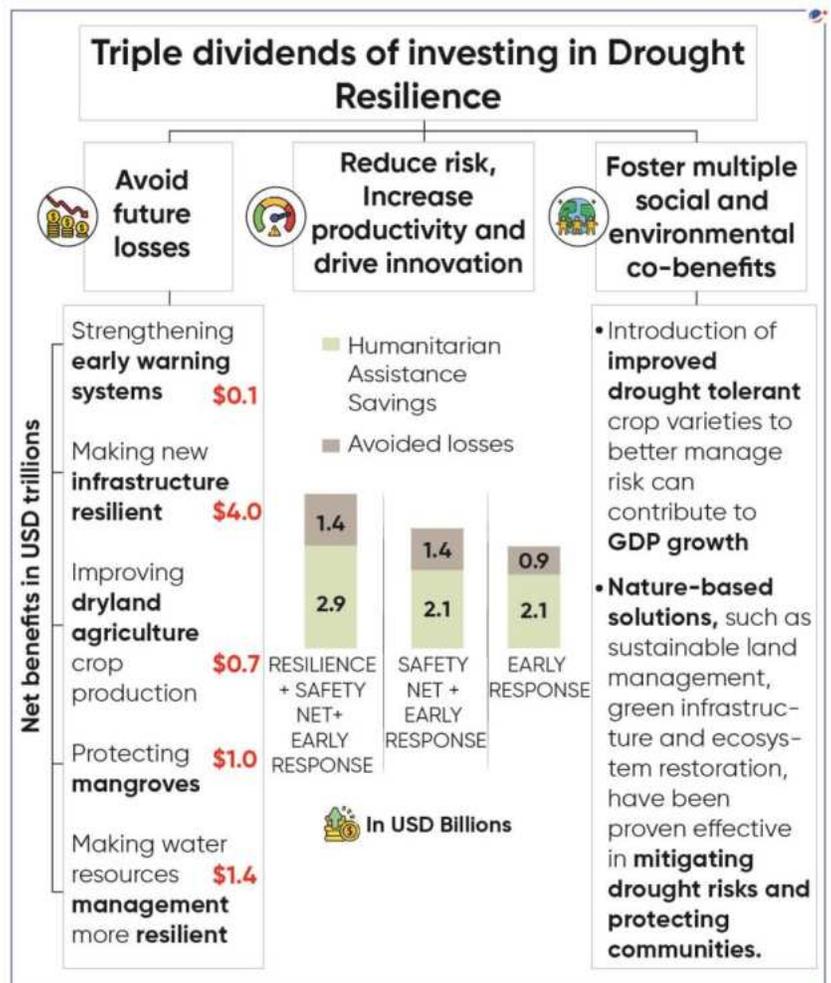
Initiatives undertaken

Global

- **"30x30" Target:** 195 nations to agree to protect and restore at least **30% of Earth's land and water by 2030**, under Convention on Biological Diversity.
- **Early Warning for All:** United Nations Secretary-General announced goal of covering whole world with early warning systems by 2027.
- **International Drought Resilience Alliance (IDRA):** This collaborative platform was launched at the UNFCCC COP27 Leaders' Summit in 2022.
- **UN Decade on Ecosystem Restoration,** aims to deliver on commitments to restore 1 billion hectares of land by 2030.

India's Steps

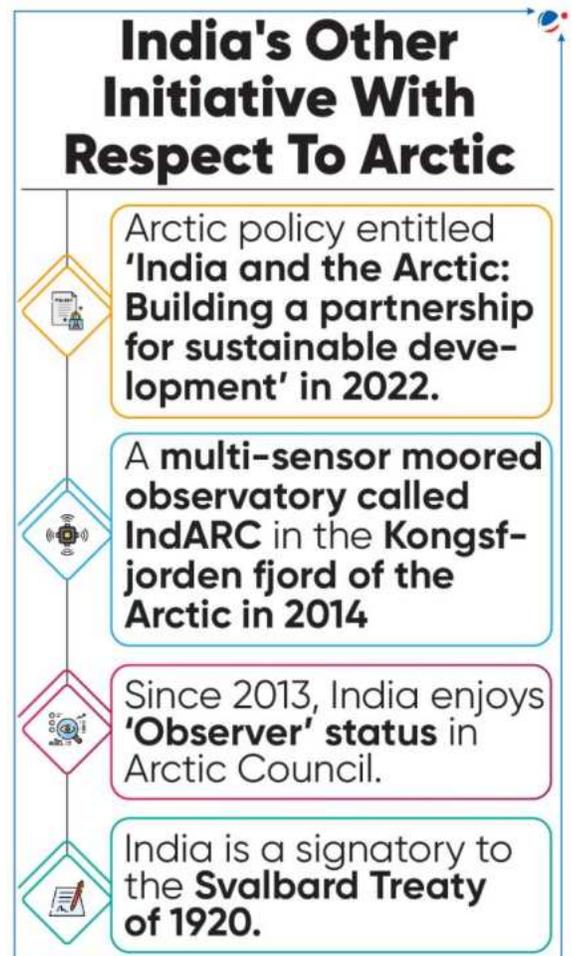
- **National Disaster Management Guidelines – Management of Drought'** recommends measures ranging from early warning system, capacity building, etc.
- **Manual for Drought Management 2016 (updated in 2020):** Released by Union govt, it provides **use of modern technology in monitoring/ determination of drought.**
- **Centrally Sponsored Schemes (CSS) / Central Sector (CS) Schemes,** such as Pradhan Mantri Krishi Sinchai Yojana, Rainfed Area Development Programme.



5.10. NEWS IN SHORTS

5.10.1. INDIA'S MAIDEN WINTER ARCTIC EXPEDITION

- **Ministry of Earth Sciences Launched** India's 1st Winter Scientific Expedition to Arctic.
- Indian scientific expeditions to **Earth's poles (Arctic and the Antarctic)** are facilitated under **Polar Science and Cryosphere Research (PACER)** scheme through **National Centre for Polar and Ocean Research** (institute under Ministry of Earth Sciences).
 - **Since 2008**, India operates a research base in the Arctic named **Himadri** in **Svalbard, Norway**.
 - ✓ **Himadri** has been mostly hosting scientists during **summer (April to October)**.
- **Significance of Winter Expedition (i.e. November to March)**
 - **Allow researchers** to conduct **unique scientific observations during polar nights**,
 - ✓ **During polar nights** there is no sunlight for **nearly 24 hours** and **sub-zero temperatures** (as low as **-15 degrees Celsius**).
 - **Aid in expanding understanding of Arctic**, especially **climate change, space weather, ecosystem adaptations, etc.**
 - ✓ **Space weather** affects **weather and climate** in the tropics, **including monsoons**.
 - **Makes India** among select nations with **extended in-time operations in the Arctic**.
 - ✓ **Priority research areas include** atmospheric and space sciences, environmental chemistry, terrestrial ecosystems, and astrophysics etc.
- **Challenges**
 - **Unlike Antarctica**, which is governed by **Antarctic Treaty**, Arctic region belongs to various **national jurisdictions**.
 - **Limited access, harsh climate**, several months of darkness etc.



5.10.2. INDIA SURPASSED MONTREAL PROTOCOL TARGETS

- India surpassed Montreal protocol targets, says report by MOEFCC and UNDP.
- According to the report India **exceeded the 35% HCFC (Hydrochlorofluorocarbons) phase-out goal**, achieving a **44% reduction** from the **2020 baseline** and has also **eliminated HCFC 141b**.
 - **HCFCs** are employed as **refrigerants** in production of new equipment.
 - **HCFC 141b**, is used as a **blowing agent** in production of rigid polyurethane foam.
- India will also phase out use of **HCFCs in new equipment manufacturing** completely by **December 2024** ahead of the Montreal Protocol schedule (2030).
- **Montreal Protocol (1987)**
 - It is a **global environmental treaty** to **eliminate the production and use of Ozone Depleting Substances (ODS)**.
 - It was implemented under the **Vienna Convention (adopted in 1985)**.

- In 2016, **Kigali Amendment to Montreal Protocol** was adopted to phase down production and consumption of **Hydrofluorocarbons (HFCs)**.
 - ✓ HFCs are **non-ODS alternative to CFCs and HCFCs**, but their global warming potential is **thousands of times** that of carbon dioxide.

About Ozone and ODS

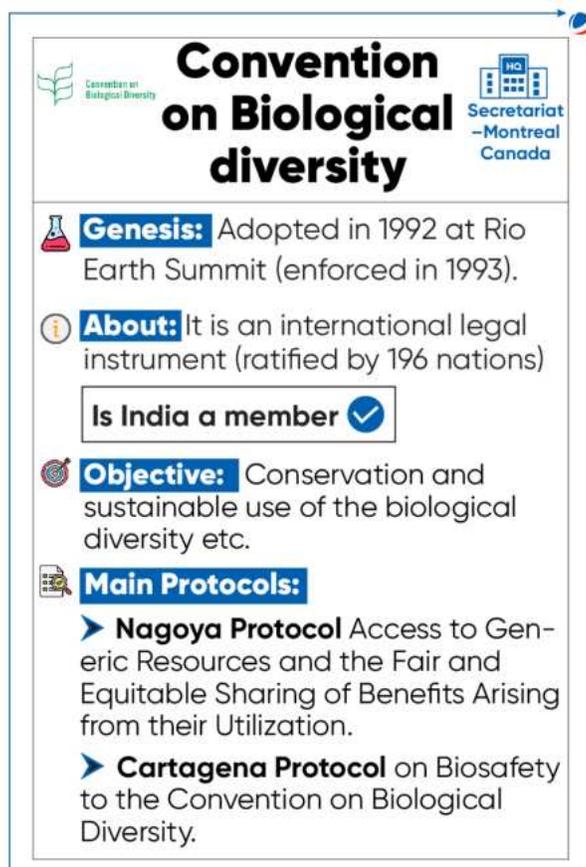
- Stratospheric ozone (**good Ozone**) are found at **10-40 KM** above Earth's surface, and protects Earth from **UV radiation of Sun**.
 - ODS are **human-made chemicals** containing **chlorine and bromine** like Chlorofluorocarbons (CFCs), HCFC, tetrachloride, etc.
 - ODS after reaching stratosphere undergo catalytic reactions that depletes stratospheric ozone.
- **Ozone** formed in **Troposphere** is harmful and is called '**bad ozone**'.

- **Key highlights of KMGBF.**
 - **Four overarching goals for 2050:**
 - ✓ Halt human-induced species extinction
 - ✓ Sustainable use of biodiversity
 - ✓ Equitable sharing of benefits
 - ✓ Closing the biodiversity finance gap of \$700 billion per year.
 - It has set **23 Global Targets for 2030**, it includes-
 - ✓ **30 % conservation of land, sea, and inland waters,**
 - ✓ **30 % restoration of degraded ecosystems,**
 - ✓ Integration of biodiversity into policies,
 - ✓ **Halving the introduction of invasive species,** etc.
 - **Funding: Global Biodiversity Framework (GBF) Fund, a Special Trust Fund by Global Environment Facility (GEF).**
 - ✓ GEF was established at Rio Earth Summit (1992) and World Bank serves as the GEF Trustee.
 - **Monitoring and Reporting:** Countries to monitor and report progress every 5 years or less on a set of indicators.
- **Progress made by KMGBF:** It led to adoption of the **Treaty on the Conservation and Sustainable Use of Marine Biodiversity beyond Areas of National Jurisdiction (BBNJ)**.



5.10.3. KMGBF COMPLETES ONE YEAR

- Kunming - Montreal Global Biodiversity Framework (KMGBF) was adopted at the **Convention on Biological Diversity's (CBD) 15th Conference of Parties (CoP15)**.
 - It replaced **Aichi Biodiversity Targets** (time period 2011-2020).
 - It is legally non-binding in nature.



5.10.4. UPDATED RED LIST BY IUCN

- **International Union for Conservation of Nature (IUCN)** released an updated Red List of threatened species
- **Key-findings**
 - Around **44,000** are threatened with extinction, which increased by 2000 from last year.
 - **Saiga**, an antelope that have roamed the earth since the **last Ice Age**, was **moved from Critically Endangered to Near Threatened**.
 - **25% of freshwater fish** are at risk of extinction, with **at least 17%** affected by climate change.
 - ✓ This is the **first global freshwater fish assessment**.
 - **Four freshwater subterranean fish species** (found in water bodies under the surface) from **Kerala** included in list are:
 - ✓ **Endangered:** Shaji's Catfish, Abdulkalam's Blind Cave Catfish, Pangio Bhujia
 - ✓ **Vulnerable:** Gollum snakehead



The infographic features the IUCN logo on the left and a building icon with 'HQ Gland, Switzerland' on the right. The main title is 'International union for conservation of nature(IUCN)'. Below this, there are three sections: 'Genesis' with a flask icon, 'About' with an information icon, and 'Function' with a globe icon. Each section contains a brief description of the organization's history, structure, and purpose.

International union for conservation of nature(IUCN)

Genesis: Created in 1948 (It is not an organ of the United Nations)

About: It is a membership Union composed of **both government and civil society organizations**.

Function: It provides public, private, and non-governmental organizations **with the knowledge** and tools that enable human progress, economic development, and nature conservation

- **About Red list**
 - It is a **critical indicator of the health** of the world's biodiversity.
 - Provides information about **range, population size, habitat and ecology, use and trade, threats, and conservation actions**.

- **Categories (Decreasing order of risk):** Extinct, Extinct in the Wild, Critically Endangered, Endangered, Vulnerable, Near Threatened, Least Concern, and data deficient.
- **Criteria used to determine the risk of species**
 - **Population size reduction.**
 - **Restricted geographical range.**
 - **A small population and declining.**
 - **Very small or lives in a restricted area.**
 - **Quantitative analysis of extinction risk.**

5.10.5. REPORT ON CONSERVATION OF MIGRATORY SPECIES

- "Climate Change & Migratory species: a review of impacts, conservation actions, indicators and ecosystem services" report released by the **conservation of migratory species of wild animals (CMS)**.
- **Key findings**
 - **Ecosystem services:** Migratory species provide **essential ecosystem services to society**. For example,
 - ✓ **Antelopes can reduce the risk of wildfires** through their grazing patterns.
 - ✓ Migratory species also help in **pollination, seed dispersal, nutrient cycling, and pest and disease control** in an ecosystem.
 - **Climate change threats to migratory species:** Threats includes **loss of suitable habitat, wide-scale changes in ecosystem functioning, etc.**
 - ✓ Major visible direct effects include **poleward range shifts, changes in the timing of migration, and reduced breeding success and survival**.
- **Recommendation:**
 - Include **conservation needs of migratory species in nature-based climate change mitigation/adaptation strategies**.
 - **Establish effective networks of protected areas** for migratory species, including a coherent and interconnected network of passage and safe stopover sites.
 - **Foster international cooperation in the conservation** of migratory species to help the conservation and restoration of shared resources.
 - Making use of new technologies for conservation, such as those that can **track species movements in real-time or model future scenarios**.

Convention on conservation of migratory species

Genesis: CMS was signed in June 1979 and entered into force in November 1983.

About: CMS, also referred to as **Bonn Convention** is an **environmental treaty of the UN** (UNEP provides Secretariat support).

Role: It provides a global platform for the conservation of migratory animals and their habitats.

Members: CMS has 133 Parties

Is India a member ✓

CMS consists of two Appendices:

- **Appendix I:** Includes migratory species that are in danger of extinction.
- **Appendix II:** Includes Migratory species that need or would significantly benefit from international cooperation.

5.10.7. IMPATIENS KARUPPUSAMY

- This new plant species was recently discovered by the Botanical Survey of India in **Kalakad Mundanthurai Tiger Reserve, Tamil Nadu.**
 - Species is named after **Dr. S Karuppusamy** (Madhura College, Tamil Nadu) for his significant contributions to the taxonomy of south Indian angiosperms.
- **Morphology:** The species, resembling *Impatiens Bicornis*, distinguishes itself with **small leaves, six to eight-flowered, short scape, and small flowers.**
- **Distribution:** Although widely distributed in **tropical Africa, Madagascar, India, Sri Lanka, and China,** *Impatiens* are restricted to certain areas and can become extinct due to climate change.

5.10.8. NAMDAPHA FLYING SQUIRREL (BISWAMOYOPTERUS BISWASI)

- Missing for 42 years, **flying squirrel resurfaces in Arunachal Pradesh.**
- **About Namdapha flying squirrel:**
 - It's a **nocturnal, endemic to northeastern India** mammal.
 - **Status:** Critically endangered.
 - **Range:** Only known with certainty from a single specimen collected in Namdapha National Park, Arunachal Pradesh.
 - **Habitat:** Occurs in dry deciduous montane forests occupying moist forest tracts along streams.
 - **Threats:** poaching, habitat loss.
 - Protected under **schedule II of the Wildlife Protection Act, 1972.**
- Namdapha Tiger Reserve has **evergreen Forests, Moist deciduous forests, sub-tropical forests, Temperate Forests and Alpine biomes.**

5.10.6. INTERNATIONAL YEAR OF CAMELIDS

- **United Nations** has designated **2024** as the **International Year of Camelids.**
- **About Camelids**
 - As a group camelids include **alpacas, Bactrian camels (two humped camel), dromedaries, guanacos, llamas, vicuñas** etc.
 - Mostly are **herbivorous** and feed primarily but not **exclusively on grasses.**
 - **Camelids** play a key role **food security** and livelihoods of communities in **Andean highlands** and in the **arid and semi-arid lands in Africa and Asia.**
 - Even in extreme climatic conditions they can produce **fibre and nutritious food.**

5.10.9. DIEL VERTICAL MIGRATION (DVM)

- DVM is synchronised movement of **deep-sea marine animals** up and down in oceanic water column over a daily cycle.
- **Free-floating zooplanktons swim up to food-rich surface waters at night** to feed when light is scarce and they are "hidden" from predators.
 - They **return to the depths** before sun rises.
- DVM plays a pivotal role in **sequestering carbon.**
 - Animals remove **substantial amounts of carbon** from Upper Ocean as they feed on surface-dwelling plankton.
 - When these organisms return to deeper waters, they **carry carbon with them.**

5.10.10. TROPICALISATION

- A study indicates that **rising sea temperatures** due to climate change are causing **tropical marine species to move from equator towards poles and retraction of temperate species**.
 - This **mass movement of marine life** has been termed **tropicalisation**.
- **Mediterranean Sea** is now considered a **tropicalisation hotspot** due an increase in tropical species.
- Tropicalisation together with **Borealisation** and **Desertification** contribute to global redistribution of biota and rearrangement of ecological communities.
 - **Borealisation** is **expansion of temperate species** (terrestrial and marine) **into Arctic polar- regions**.

5.10.11. GLOBAL FINANCE ARCHITECTURE FOR SUSTAINABLE GROWTH

- Green and Sustainable Growth Agenda for the global economy **report released by NITI Aayog**.
- Report emphasized on **‘Reshaping Global Finance Architecture for Sustainable Growth’**.
- **Need of Reshaping Global Finance Architecture:**
 - **Fragmented global financial architecture:** Current global system is contributing to **disparities in economic recovery** between developed and developing regions.
 - ✓ Global debt architecture is informal and inefficient, with many low-income countries in or nearing a debt crisis.
 - **Finance Requirement:** There is need of USD 3 trillion over the next decade to **finance green growth**.
 - ✓ Poor mobilisation of private resources.
- **Recommendations:**
 - **Multilateral Development Banks (MDBs):** Reforming their structure to improve **capital mobilisation, better project implementation** and making **sustainable infrastructure** an asset class.
 - **Establishing multilateral creditor club:** For managing **debt sustainably** in a transparent manner.
 - **Flexibility Missions:** Countries in Global South need them as they will provide them with the means to adapt and innovate in response to impacts of climate change.
 - **Expand bilateral swap lines** and IMF contingency lines to make capital flows safer.
 - ✓ Also, making Special Drawing Rights (SDR) allocation rule-based and less discretionary.
 - **Other long-term solutions:** Creating resilience funds, promoting circular economies, joint

technological development, enhancing green energy security and transition partnerships.

5.10.12. STATE OF FINANCE FOR NATURE 2023 REPORT

- The report is released by the **UN Environment Programme**.
- It tracks **public and private finance flows** to **Nature based Solutions (NbS)** to tackle global challenges related to **biodiversity loss, land degradation and climate change**.
 - It first time estimated **global scale of public and private nature-negative finance**.
- **Key Findings of Report**
 - **Current finance flows to NbS:** Around **US\$200 billion** which is only one third of NbS finance needed by 2030.
 - **Nature-negative finance flows:** Estimated at almost **US\$7 trillion per year**.
 - ✓ **Nature-negative financial flows** refer to finance flows for activities that could potentially have a negative effect on nature. **Like fossil fuel subsidies.**
 - **Future investment needs:** To meet **Rio Convention targets** finance flows to NbS must almost **triple from current levels** to reach **US\$542 billion per year by 2030**.



About Nature based Solutions (NbS)

- **NbS are actions** to protect, sustainably manage, and restore natural and modified ecosystems **that address societal challenges** effectively and adaptively, simultaneously **benefiting people and nature**.

- Examples of NbS are **Reforestation and Afforestation, Wetland Restoration, Green Infrastructure** etc.

Related news

ENACT Partnership

- **Six new countries and UN Environment Programme** have joined ENACT (Enhancing Nature-based Solutions for an Accelerated Climate Transformation) Partnership recently.
- **About ENACT Partnership**
 - Launched by Germany and Egypt along with the **IUCN** at COP 27, which took place at **Sharm el-Sheikh, Egypt in 2022**.
 - It aims to **coordinate global efforts** to address climate change, land and ecosystem degradation, and biodiversity loss through **Nature-based Solutions (NbS)**.

5.10.13. GLOBAL CLIMATE 2011-2020 REPORT

- The Global Climate 2011-2020 Report released by **World Meteorological Organization (WMO)**.
- **Key Findings:**
 - 2011-2020 is the **warmest decade** on record for both land and ocean.
 - **Northwest India, Pakistan, China** and the southern coast of the Arabian Peninsula experienced wet decade.
 - **Marine heat waves (MHW)** experienced over 60% of the surface of oceans.
 - ✓ **MHW** occurs when the **surface temperature** of a particular region of the sea rises to 3 or 4 degree Celsius above the average temperature for at least five days.
 - **Glaciers** globally **thinned by 1 meter per year**.
 - ✓ Antarctic ice sheet lost nearly 75% more ice (in comparison to 2001-2010).
 - **Sea level** rose at an annual rate of 4.5mm/yr.
- **Key impacts on Human System:**
 - **94%** of all **disaster displacements** recorded over the last decade was due to weather related event.
 - Four pillars of **food security (access, availability, utilization, stability)** are facing threat, posing challenges in achieving **SDG 2** targets by **2030**.
- **Key Recommendations:**
 - Strengthening **science-policy-society interaction** to advance synergistic action.
 - Develop a **framework for action** (refer to image).
 - ✓ It will help **decision-makers** to identify synergistic action for **just transition**.
- **WMO** is a specialized agency of the **United Nations**, established in 1950.

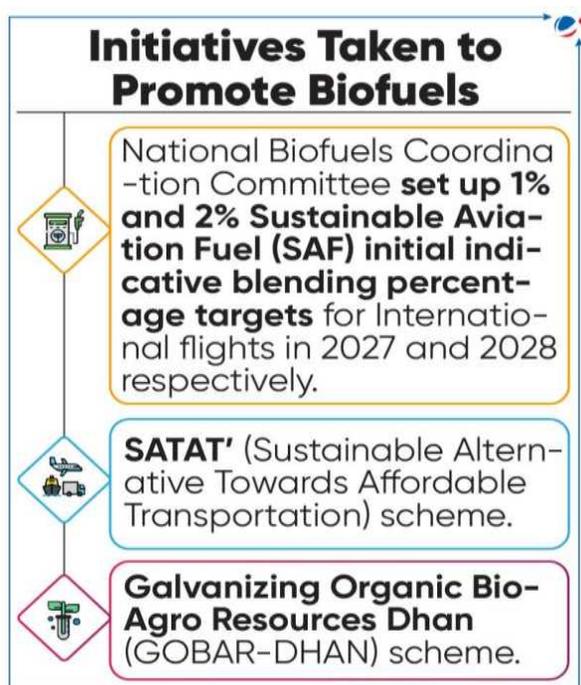


5.10.14. COMPRESSED BIO-GAS BLENDING OBLIGATION

- Centre announced **mandatory blending of Compressed Bio-Gas (CBG) in CNG** (Transport) & **PNG** (Domestic) segments of City Gas Distribution (CGD) Sector.
- **Ministry of Petroleum & Natural Gas** introduced **phase-wise CBG Blending Obligation (CBO)** to promote production and consumption of CBG.
- **CBO** is an **obligation** where **mixtures of traditional and alternative fuels** (like CBG) are **blended in varying percentages** in order to **displace petroleum**.

- It will **encourage investment** (around Rs. 37500 crores) and facilitate **establishment of 750 CBG projects** by 2028-29.
- **Key objectives of CBO**
 - **Stimulate demand** for CBG in CGD sector,
 - **Import substitution** for Liquefied Natural Gas,
 - **Saving in foreign exchange,**
 - **Promoting circular economy** and,
 - **Assisting in achieving net zero emissions.**
- **CBO Roadmap**
 - CBO will be **voluntary till FY 2024-2025** and **mandatory blending obligation would start from FY 2025-26.**
 - CBO shall be **kept as 1%, 3% and 4% of total CNG/PNG consumption for FY 2025-26, 2026- 27 and 2027-28** respectively. From **2028-29 onwards CBO will be 5%.**
 - **Central Repository Body** shall **monitor and implement** blending mandate.
- CBG is an **energy-rich gas produced by anaerobic decomposition of biomass** like agriculture residue, cattle dung, sugarcane press mud, municipal solid waste, among other.
- It comprises: **Methane (it consists 90%), carbon dioxide** and low levels of **Hydrogen sulphide** and **ammonia.**

- **ADB's initiative** aims to enhance **municipal solid waste (MSW) management** under **SBM-U 2.0** which commits **all cities to be garbage-free** by 2026.
 - ADB's Initiative (refer infographics) will be implemented in **100 cities across 8 states** with a focus on **climate resilience and social inclusivity.**
- **About MSW in India**
 - MSW comprises **solid or semi-solid commercial and residential wastes** including treated bio-medical wastes but excluding industrial hazardous wastes from municipal areas.
 - In 2020-21, **India generated 1.6 lakh TPD** (Tonnes Per Day) of **solid waste**, with 95.4% collected, but **only 50% treated** (CPCB report).
 - **Management** of MSW is the responsibility of **Urban Local Bodies (ULBs).**
- **Issues in MSW management in India**
 - Initially, **urbanization did not incorporate MSW management** as a component.
 - **Suboptimal compliance** of source segregation.
 - **Insufficient funds** with ULBs.
- **Key initiatives:**
 - **Solid Waste Management Rules, 2016** provide for detailed criteria for setting-up solid waste processing and treatment facility, among others
 - **Waste to Wealth Mission** to generate energy, recycle materials, and extract resources of value from waste.
 - **SBM-U 2.0** calls for **100% source segregation, door to door collection, etc.**



5.10.15. LOAN TO INDIA FOR MSW MANAGEMENT BY ADB

- Asian Development Bank (ADB) approved **US \$200 million loan to India** to Improve Waste Management and Sanitation.

5.10.16. MULTI-HAZARD EARLY WARNING SYSTEMS (MHEWS)

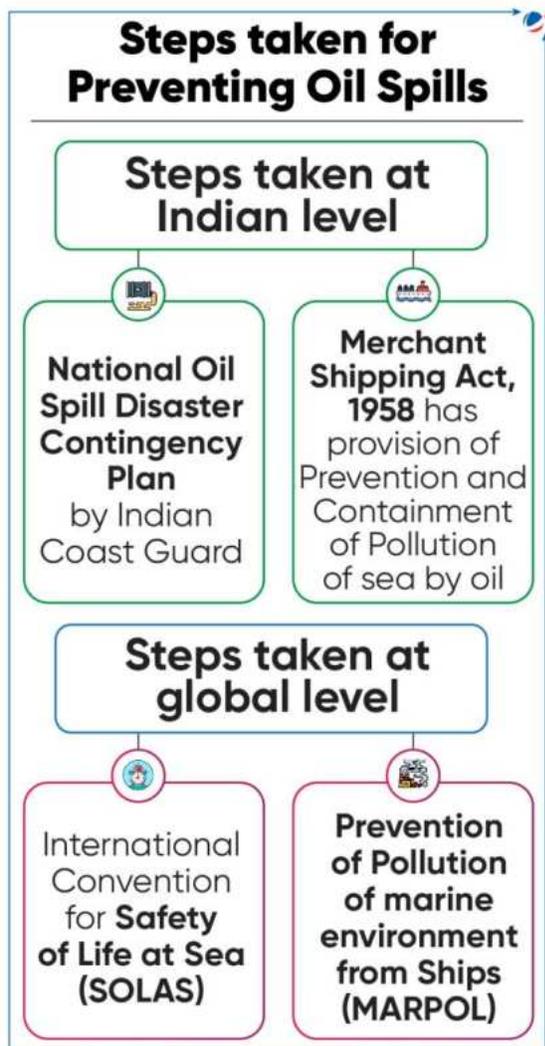
- ‘Global Status of Multi-Hazard Early Warning Systems 2023’ report released by the United Nations and the World Meteorological Organisation
- **Multi-hazard early warning systems (MHEWS)** enables individuals, communities, governments, business and others to take timely action to reduce disaster risks in advance of hazardous events.
 - **Four pillars of MHEWS** are disaster risk knowledge, observation & monitoring, communication and preparedness to respond.
 - Report assesses the current global status of MHEWS against Target of the Sendai Framework (2015-2030).
- **Key highlights:**
 - **Out of the 101 countries** reporting having MHEWS, 95 have reported the existence of a disaster risk reduction strategy.
 - **Common Alerting Protocol** has helped the timely flow of information from authoritative sources to the public.
 - Over **400 million people in Least Developed Countries (LDCs) and Small Island Developing States (SIDS)** have access to better predictions and warnings for floods, drought, etc.
- **Challenges:**
 - **Only half of the world** is covered by an early warning system.
 - **Increasing unpredictability, complexity and severity** of hazardous events are challenging the MHEWS capability.
 - In India, **disaster risk knowledge and management, warning, dissemination and communication** are not adequate.
 - ✓ However, **preparedness, response capabilities and detection, monitoring, forecasting capabilities** are available.



5.10.17. ENNORE OIL SPILL

- Oil spill occurred in Ennore region of Chennai after Cyclone Michaung-induced floods.
- As per Indian Coast Guard, Oil spill originating from **Chennai Petroleum Corporation Ltd refinery** has spread across 20 square kilometres into the sea.
- An oil spill is the **release of a liquid petroleum hydrocarbon into environment, especially marine areas.**
- **Causes of Oil Spills:** Equipment breaking down due to human errors; deliberate acts by illegal dumping natural disasters like hurricanes, etc.
- **Impacts of oil spill**
 - **Destroys insulating ability of fur on mammals and impacts water repelling qualities** of a bird's feathers.
 - Impacts **immune system and reproduction of dolphins and whales** by oil inhalation.
 - Health problems like **heart damage, immune system effects**, headache due to strong odour, skin irritation, etc.
 - **Obstruct passage of sunlight into sea**, thereby destroying photosynthesising phytoplankton.

- Impacts mangrove forests as they can no longer shield coastlines.
- **Bio remediation technology developed in India for Oil spills**
 - **Oilzapper (developed by TERI)**, an eco-friendly technique of using the bacteria to get rid of **oil sludges and oil- spill**.
 - **Oilivorous-S** (jointly developed by TERI and Indian Oil Corporation Ltd) has an **additional bacterial strain** that makes it **more effective against sludge and crude oil with high-sulphur content**.



5.10.18. RAT HOLE MINING METHOD

- Rat Hole Mining method used to **rescue workers in Uttarkashi Tunnel Collapse**.
- This method was used for horizontally drilling for the remaining 10- to 12-meter stretch of debris in the **collapsed section of the under-construction Silkyara tunnel on the Char Dham route in Uttarakhand**.
- **Rat Hole Mining** involves digging of **narrow pits dug into the ground, typically just large enough** for one person to descend and extract coal.

- It is mostly **prevalent in Meghalaya because of thinness of coal found there**.
- Once the pits are dug, miners descend **using ropes or bamboo ladders to reach the coal seams**.
- The coal is then **manually extracted using primitive tools** such as pickaxes, shovels, and baskets.
- However, **rat hole mining has various issues like:**
 - **Soil erosion**-excavation of rat hole causes the removal of vegetation.
 - **Water pollution**- contaminate water sources with pollutants and runoff from exposed mining areas
 - **Poor Ventilation**- Cases have been reported of miners succumbing to death.
 - **Involvement of children**-underage labour in rat-hole mining is a prevalent issue.

Banning Status

- The **National Green Tribunal had banned Rat hole mining in 2014** on grounds of the practice being unscientific and unsafe for workers.
- However, in **2019 Supreme Court stated that if coal mining is done under Mines and Minerals (Development and Regulation) Act and Mineral Concession Rules 1960, then NGT ban will not be applicable**.

5.10.19. MULLAPERIYAR DAM

- Supreme Court orders Survey of India to assess Kerala's mega parking project Near Mullaperiyar Dam.
- **Survey of India** will determine if the mega parking project encroaches on **Periyar Lake Lease Agreement (1886) territory**.
- **Mullaperiyar dam**
 - It was constructed during 1887-1895 and **owned, operated, and maintained by Tamil Nadu Government**.
 - It is **located in upper reaches** of river **Periyar**, which flows **into Kerala** after originating in Tamil Nadu.
 - ✓ The reservoir is within **Periyar Tiger Reserve**.
- **About the dispute**
 - The Dam was **constructed based on Periyar Lake Lease Agreement (1886) for a lease of 999 years**.
 - ✓ Agreement signed between **Maharaja of Travancore and Secretary of State for India** (during British rule).
 - Earlier, Kerala Government claimed that **dam is unsafe** and a **threat to people living downstream** and pitched for **building a new dam**.
 - Whereas, **Tamil Nadu government denies** it and is **utilising the dam to its full capacity** after structural strengthening.

- **Importance of Dams and Dams Safety**

- Dams play a vital role in the **overall water security and energy needs of a country.**
- India's **third-largest number of dams in the world**, and many of them are **aging, and seismically vulnerable**, thus safety becomes paramount.
- Unsafe dams **expose downstream** areas to risks of **catastrophic flooding, and displacement.**

- **Survey of India**

- **Survey of India** is the **National Survey and Mapping Organization.**
 - ✓ It was **set up in 1767.**
- It works under the **Department of Science & Technology.**

 <p>SMART QUIZ</p>	<p>You can scan this QR code to practice the Smart Quiz of Environment at our open test online platform for testing your understanding and recalling of the concepts.</p>	
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CURRENT AFFAIRS
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6. SOCIAL ISSUES

6.1. EMERGING TECHNOLOGY AND CASTE IDENTITIES IN INDIA

Why in the news?

Recently, there have been many instances of caste-based discrimination emerging out of the use of technology and also in the representation of marginalized caste groups in the tech workforce.

Social Identity and Role of Caste in India

- **Social Identity:** **Social identity** refers to **people's self-categorizations concerning their group memberships** (the “we”). These categorizations are often assigned to us or something we are born into, such as caste, gender, ethnicity etc.
- **Caste system:** It is the **division of society based on socio-religious norms** and hierarchy passed down through families for generations.
- **Caste disparities:** Disadvantaged caste groups face discrimination in terms of **“inequality of opportunity” and “inequality of outcome”**.
 - A study by Jawaharlal Nehru University’s Centre for Study of Social Exclusion and Inclusive Policy says approximately **27% of modern Indian families practice untouchability**.

Emerging technologies and caste-based disparities

Technology has ameliorated the caste-based disparities by providing information access, educational opportunities, and avenues for entrepreneurship.

However, it has **also exacerbated issues** through online harassment, potential biases in algorithms, and the promotion of hate speech, highlighting a complex interplay between technology and caste dynamics in the country.

- **Dominance of upper caste groups:** According to a 2019 survey by Lokniti and CSDS, the appearance of Scheduled Castes (SC) and Scheduled Tribes (ST) is less frequent on social media.
 - Observer Research Foundation’s research report reveals that caste identities are reproduced, and caste norms violations have increased on social media in India.
- **Digital divide:** There exists a large first-level (ownership and access to digital devices) and second-level (digital skills) digital divide between the disadvantaged caste groups and others in India.
 - Such a digital divide strengthens existing gaps in access to quality education, healthcare, employment opportunities and restricts social mobilization.
- **Algorithmic bias:** Emerging technologies like artificial intelligence are often trained on historical data, which may contain biases reflecting and amplifying caste-based biases.
 - For instance, an **AI-based predictive policing system** will likely perpetuate the legacies of caste discrimination and unjust criminalisation of marginalised communities.
- **Workforce representation:** Caste-based disparities are reflected in the underrepresentation of marginalized caste groups in the technology workforce.
- **Social stigma and segregation:** Hate speech, derogatory comments, and online harassment targeting individuals from specific castes can further contribute to social stigma and reinforce existing prejudices.

Emerging technologies have aggravated caste disparities in some domains. But it is not only a part of the problem, it can be part of the solution as well.

Use of emerging technologies in addressing caste disparities

- **Digital inclusion:** Implement initiatives to bridge the digital divide by providing affordable and accessible technology infrastructure, including internet connectivity, to marginalized social groups.
 - This will improve access to education, healthcare services, financial services and employment opportunities.
- **Political mobilization:** Use of information networks such as social media platforms can be utilized to enhance political participation and influence the decision-making of marginalized groups.

- **Access to resources:** Affordable technology can enhance the access of disadvantaged groups to education, healthcare, skill training and economic opportunities.
- **Finance diversification:** Emerging technology can enhance access to different kinds of financial resources required for education, health needs and entrepreneurial efforts.
- **Social awareness:** Social media platforms and digital communication channels can be utilized to raise awareness regarding caste-based discrimination, promote inclusivity and challenge stereotypes.
- **Community empowerment:** Digital platforms and the use of AI technologies can empower marginalized communities by providing information, resources, and networking opportunities.
 - For instance, **AI use in case of atrocities** can allay the issue of non-registration of cases, a simple mobile app can just record the atrocity and notify all government machinery at the same time.

Way Forward: Rooting the idea of non-discrimination in Technology

We can reimagine Ambedkar’s vision of a casteless society within emerging technologies and apply the following to annihilate caste in AI and Metaverse technologies-

- **Recognize Caste Bias:** Technology developers must be trained to recognise potential caste biases and recontextualise datasets with socio-cultural values to mitigate algorithmic caste bias.
- **Develop Fairness Metrics & Constraints:** It is crucial to develop culturally contextual anti-caste fairness metrics and constraints to eliminate caste bias.
- **Promote Diversity and Inclusivity:** Developers from vulnerable communities such as SC and ST should have representation in leadership roles in the design, development, and deployment process.
- **Meaningfully Support Marginalised Communities:** It is crucial to allocate sufficient and appropriate funding to promote inclusive AI.
- **Eliminate Caste in AI:** Anti-caste ethical guidelines for emerging technologies and their effective implementation.

Scan the QR code to know more about Ethics of **Emerging Technology**.

Weekly Focus #80: Ethics of Emerging Technology



6.2. SEXUAL HARASSMENT OF WOMEN AT WORKPLACE (PREVENTION, PROHIBITION AND REDRESSAL) (POSH)ACT, 2013

Why in the News?

Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013 completed **10 years**.

About POSH Act

- Consistent with the **Vishaka judgment (1997)**, the Act aspires to ensure **women’s right to workplace equality, free from sexual harassment**.

Key Provisions of the Act

• Definitions

- **Aggrieved Woman:** It includes all women who work as regular, temporary, adhoc, or on daily wages basis, visiting at workplaces and student.
- **Workplace:** Government organizations, NGOs, Houses, Private companies, educational institutions, farms etc.
- **Sexual Harassment at Workplace:** It Includes unwelcome acts such as **physical contact** and sexual advances, a demand or request for **sexual favours**, making sexually **coloured remarks**, showing pornography etc.

• Responsibilities of Employers

- Organize workshops and **awareness programs** to sensitize employees about the provisions of the Act.

Vishaka vs. State of Rajasthan (1997) judgement.

- It created **legally binding guidelines** based on the right to equality and dignity accorded under the Indian Constitution.
- **It included:**
 - A **definition** of sexual harassment.
 - Shifting **accountability** from individuals to institutions.
 - Prioritizing **prevention**.
 - Provision of an innovative **redress** mechanism.

- Prepare an **annual report** providing details of the complaints received and action taken.
- **Complaints Committees:** All Complaints Committees must have atleast **50 per cent** representation of women.
 - **Internal Complaints Committee (ICC):** Employers are required to constitute an ICC at each workplace with to receive and address complaints of sexual harassment.
 - The **Presiding Officer shall be a woman** employed at a senior level at workplace from amongst the employees.
 - **Local Complaints Committee (LCC):** Receive complaints from women working in an organisation having **less than 10 workers**.
- **Procedure for Filing Complaints:** Any aggrieved women may make in writing a complaint of sexual harassment to the **Internal committee/ Local Committee** within **3 months** (extendable by 3 months) from the date of incident.
- **Penalties:** If the employer fails to constitute an ICC or does not abide by any other provision, they must pay a fine of **up to ₹50,000**, which increases for a repeat offence.

Achievements/Outcomes of POSH Act

- **Increased Reporting:** According to data published by the **Ministry of Women and Child Development**, Registered cases have increased **by 54% from 2014 to 2017**.
- **Women Empowerment:** Legal protection under the act created a **safer and more conducive working** environment for women, allowing them to **exercise their rights**.
- **Increase Accountability of Employers:** The Act places significant emphasis on the role of employers. It states that the employer is responsible to create a safe working environment for the employees.
- **Increased Awareness:** Initiatives like **“A Handbook and Training Module”** of Women ministry on the POSH Acts educated women employees about their rights.

Challenges in Implementation of the Act

- **Non-constitution of ICC:** As per **Supreme court**, many national sports federations in the country had not constituted an **ICC** to date.
 - Also, in May 2023, the **Supreme Court noted serious lapses and uncertainty in the enforcement** of the POSH Act by the internal committee.
- **Lack of Monitoring:** The government had told the Parliament in 2019 that **it maintains no centralised data** regarding cases of harassment of women at workplaces.
- **Inaccessibility:** Law is **largely inaccessible** to women workers in the informal sector, which employ more than 80% of India’s women.
- **Underreporting:** Fear of professional repercussions (loss of employment), requirement of concrete evidence etc.
- **Lack of clarity in the law:** About how to conduct such inquiries, lack of awareness in women employees about who to approach in case of facing harassment, etc.

Global Norms

- **UN Convention on the Elimination of all Forms of Discrimination against Women (CEDAW),**
 - It was adopted by the UN General Assembly in 1979 and has been **ratified by India**.
- **International Labour Organization (ILO)** recognized right of domestic workers, regarding protection against all forms of abuse, harassment and violence.

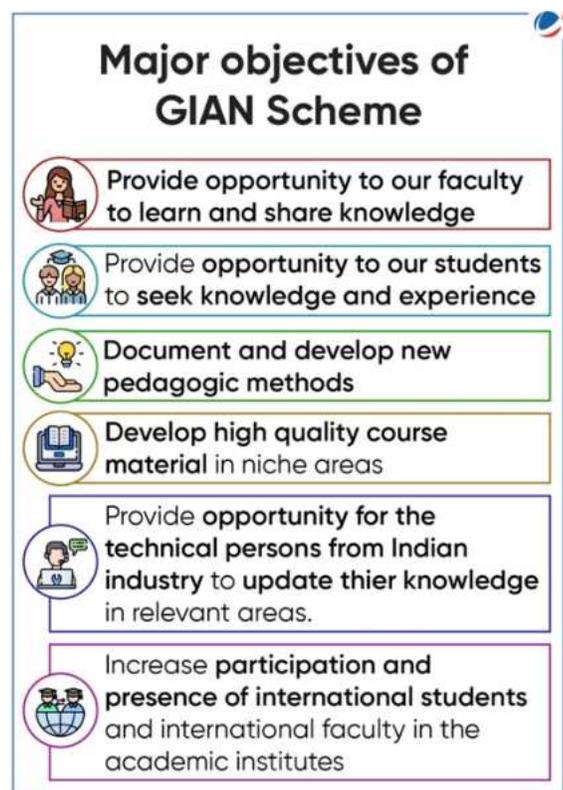
Way Forward

- **The SC has issued certain directions to Union, States and UTs:**
 - To undertake a **time-bound exercise** to verify whether government organisations, authorities, public sector undertakings, institutions, bodies, etc. had constituted **complaint committees**.
 - Publish the **details of their respective committees** in their websites.
 - Authorities/employers must **regularly** conduct **orientation programmes, workshops, seminars and awareness programmes** to upskill members of **committees**.
- **Implement technological solutions:** For confidential reporting and case management, and ensuring that evidence is **securely documented**.

6.3. NEWS IN SHORTS

6.3.1. GLOBAL INITIATIVE OF ACADEMIC NETWORKS (GIAN) PROGRAMME

- Centre has approved the rollout of the **fourth phase of the GIAN programme**.
- **About GIAN Programme**
 - **Launch:** The programme was launched in 2015 under **Ministry of Education** as a **Joint Teaching Program with reputed International Faculty**.
 - **Purpose:** **Tapping the talent pool of scientists and entrepreneurs internationally** to encourage **their engagement** with the **institutes of Higher Education in India**.
 - **Eligibility:** **All Government** (State or Central) **higher education Institutions / University** which are in **top 200 in NIRF** overall rankings and having **at least NAAC 'A' grade (3.0 and above)**.
 - **Benefits:** The scheme **connects India's top institutions** and **Central universities with global faculty**.
 - **Courses offered:** Host Institute organise the course after receiving approval.
 - ✓ Course proposals (excluding tutorial/practical) are **expected to be**
 - **12-14 lecture hours** (for 5- day duration)
 - **24-28 lecture hours** (for 10- day duration)
 - ✓ Courses lasting **over 10 days but less than 2 months** are allowed **without any additional financial support**.
 - ✓ **Funding:** \$ **8000** (for 5-day duration) and **12000 \$** (for 10-day duration) are paid for each course to support:
 - travel and honorarium for the foreign faculty,
 - honorarium for the host faculty & local coordinator,
 - video recording and incidental/contingency expenses.
 - **National coordinator:** **IIT Kharagpur** is the nodal institution and national coordination.



6.3.2. REPORT ON GENDER-RELATED KILLINGS

- Report titled Gender-Related Killings of Women and Girls (Femicide/ Feminicide) is published by the **United Nations Office on Drugs and Crime (UNODC) and UN Women**
- **Femicide** can broadly be defined as **intentional killings** committed on the grounds of **gender-related factors**.
 - It includes the **ideology of men's entitlement and privilege over women**, social norms regarding **masculinity**, and the need to **assert male control or power**, etc.
- **Key findings of the report**
 - In 2022, about **88,900** women and girls were homicide victims **worldwide**.
 - **Around 55% of total female homicide** victims are **killed by family**.
 - In India deaths related to dowry, accusations of witchcraft, and gender-related factors **have been slowly declining** over the past decade.
- **Recommendations:**
 - Address **social norms** at individual, community, and institutional level,
 - Provide victim support and assistance.
 - Enable **evidence-based comprehensive response**.

- **Measures to check femicide in India**
 - **Commission of Sati (Prevention) Act, 1987**
 - **Dowry Prohibition Act, 1961**
 - **Immoral Traffic (Prevention) Act, 1956**
 - **Protection of Women from Domestic Violence Act, 2005**
 - Provisions under the **Indian Penal Code [Section 376 (Rape), Section 304-B (Dowry death), etc.]**



UN Office on Drugs and Crimes (UNODC)

Genesis: Established in 1997 by merging the **United Nations Centre for International Crime Prevention** and the **United Nations International Drug Control Programme**.

Objective: It is committed to achieving security and justice for all by making the world safer from drugs, crime, and terrorism.

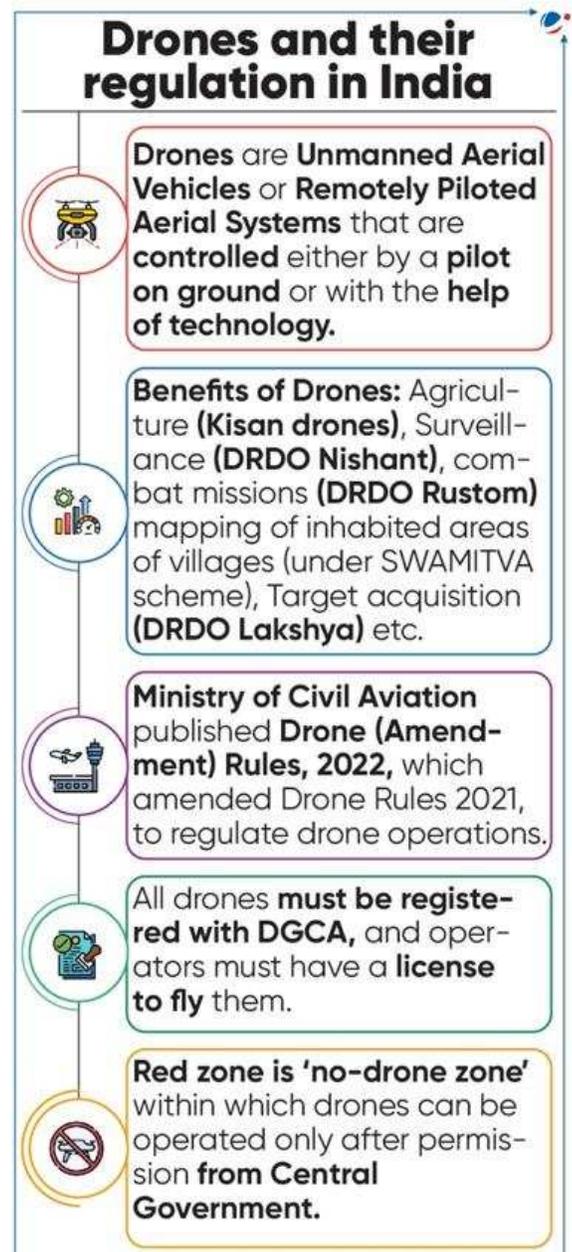
Composition: It has 20 field offices covering over 150 countries and works directly with Governments and non-governmental organizations.

Reports: World Drug Report, Crime and Drug Survey

6.3.3. SCHEME FOR PROVIDING DRONES TO WOMEN

- Cabinet approved Central Sector Scheme for providing Drones to Women Self Help Groups (SHGs)
- Scheme aims to **provide drones to 15,000 selected Women SHGs during period 2023-24 to 2025-2026** for providing rental services to farmers for agriculture purpose.
 - SHGs are made up of **15 - 25 members of similar economic and social backgrounds** who come together to improve their living conditions.
- **Highlights of scheme**
 - Approves holistic interventions by converging resources and efforts of **Department of Agriculture & Farmers Welfare, Department of Rural Development and Department of Fertilizers, Women SHGs and Lead Fertilizer Companies (LFCs).**

- **One member of SHGs who is well qualified and 18 years (or, above) will be elected by State Rural Livelihood Mission and LFCs for 15-day training.**
- LFCs will act as a **bridge between drone supplier companies and SHGs; and promote use of Nano Fertilizers** such as **Nano Urea and Nano DAP** by drones with SHGs.
- **Significance of scheme**
 - Enabling women SHGs to **earn additional income of at least Rs. 1 lakh per annum;**
 - **Infusing advance technology** in agriculture for improved efficiency;
 - **Enhance crop yield;**
 - **Reduced cost of operation** for benefit of farmers.



Drones and their regulation in India

Drones are **Unmanned Aerial Vehicles** or **Remotely Piloted Aerial Systems** that are **controlled** either by a **pilot on ground** or with the **help of technology**.

Benefits of Drones: Agriculture (**Kisan drones**), Surveillance (**DRDO Nishant**), combat missions (**DRDO Rustom**) mapping of inhabited areas of villages (under **SWAMITVA** scheme), Target acquisition (**DRDO Lakshya**) etc.

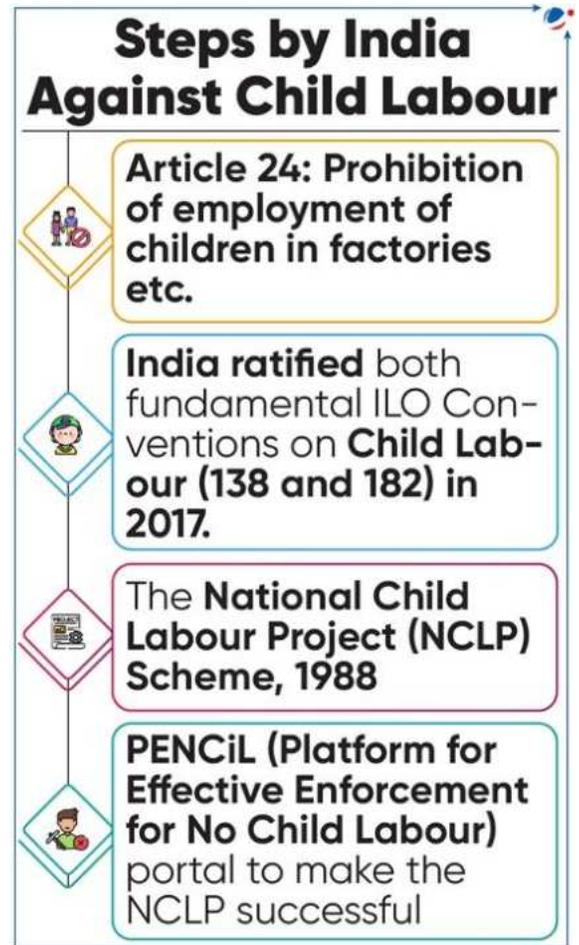
Ministry of Civil Aviation published **Drone (Amendment) Rules, 2022**, which amended Drone Rules 2021, to regulate drone operations.

All drones **must be registered with DGCA**, and operators must have a **license to fly** them.

Red zone is 'no-drone zone' within which drones can be operated only after permission **from Central Government**.

6.3.4. REPORT ON 'NATIONAL POLICY ON CHILD LABOUR'

- Parliamentary Standing Committee Presented Report 'National Policy on Child Labour- An Assessment'.
- **Key Observations:**
 - Policy to **eliminate child labour** has to **go a long way** to achieve **target stipulated** in **Sustainable Development Goal 8.7** (to end all forms of child labour by 2025).
 - Presence of **ambiguity in the definition of child** in various legislations.
 - ✓ **Right of Children to Free and Compulsory Education Act, 2009** defines child as a person aged 6 to 14 years.
 - ✓ **Juvenile Justice (Care and Protection of Children) Act, 2015** defines child as a person who has not completed 18 years of age.
 - **Two major hotspots of child labour and child trafficking:**
 - ✓ Immigrants' area who had come from **Bengal and Bangladesh**, and **tribal areas of Assam**.
- **Recommendations:**
 - **Examination of the discrepancies** in acts to **eradicate ambiguities** between them.
 - ✓ **ILO sets minimum age for work at 15 years**, with exceptions for light work from the age of 13.
 - In addition to **three/four times increase in the amount of fine**, some **stricter punishment** in form of cancellation of licence, attachment of property etc.
 - **Responsibility of reporting children** selling goods or begging at traffic lights be assigned to the **traffic police**.



6.3.5. ANGANWADI PROTOCOL FOR DIVYANG CHILDREN

- **Ministry of Women & Child Development** launched the National Outreach Programme on the Anganwadi Protocol.
- Protocol embodies a **Social Model for Divyangjan** inclusive care under the POSHAN Abhiyan, with a step-by-step approach:
 - **Screening for early disability signs**
 - **Inclusion in community events and empowering families**
 - **Referral support** via **ASHA/ANM & Rashtriya Bal Swasthya Karyakram (RBSK)** teams.
- The protocol is in **line with the National Curriculum Framework for Foundational Stage 2022**.

6.3.6. ERRATA

- In **November 2023 Monthly Magazine**, under **Article 6.5. Surrogacy in India** it was incorrectly mentioned that
 - Supreme Court stayed the operation of Rule 7 of the Surrogacy (Regulation) Act, 2021, to allow a woman suffering from MRKH Syndrome to undergo surrogacy using a donor egg.

- ✓ Rule 7 of the Surrogacy Act banned the use of donor eggs for the procedure.
- **Correct information is:**
 - ✓ Supreme Court stayed the operation of Rule 7 of the Surrogacy (Regulation) Rules, 2022, to allow a woman suffering from MRKH Syndrome to undergo surrogacy using a donor egg.
 - ✓ **Rule 7 of the Surrogacy (Regulation) Rules, 2022 as amended in 2023 through Surrogacy (Regulation) Amendment Rules, 2023,**
- **banned the use of donor gametes (eggs and sperms) for the procedure.**
 - **In October 2023 Monthly Magazine,** under 6.8. Child Sexual Abuse Material, it was incorrectly mentioned that ‘NCRB received about 2.7 lakh reports of OCSAE from the National Centre for Missing and Exploited Children (NCMEC) in 2020 alone.’
 - **Correct information** is ‘NCRB received about 27 lakh reports of OCSAE from the National Centre for Missing and Exploited Children (NCMEC) in 2020 alone.’

 SMART QUIZ	<p>You can scan this QR code to practice the Smart Quiz of Social Issues & Social Schemes at our open test online platform for testing your understanding and recalling of the concepts.</p>	
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Lalshya

PRELIMS MENTORING PROGRAM 2024

19th January

2024

Duration: 3.5 Months

- 

Highly experienced and qualified team of Mentors for continuous support and guidance
- 

A structured plan of revision for GS Prelims, CSAT, and Current Affairs
- 

Effective Utilization of learning resources, including PYQs, Quick Revision Modules (QRMs), and PT-365
- 

Research based subject-wise strategy documents

- 

Scheduled group sessions for strategy discussion, live practice, and peer interaction
- 

Special emphasis on subjects and topics with high-scoring potential
- 

One-to-one dedicated sessions with mentors for preparation management
- 

Continuous performance assessment and improvement
- 

Interactive session with Toppers and Bureaucrats for preparation insights and motivation

7. SCIENCE AND TECHNOLOGY

7.1. SPACE TECH START-UPS IN INDIA

Why in the News?

Under Seed fund scheme, In-Space will provide support to start-ups for developing and scaling up solutions in **urban development and disaster management sector using space technology.**

About Seed fund scheme

- **Background:** Seed fund scheme aimed at promoting space technology was **announced by the IN-Space in March 2023.**
- **Purpose:** To support space-start-ups to develop innovative space products and services that can improve the quality of life of common people in India and around the world.
- **Support to start-ups:** Access to funding, Mentorship, Training and Network opportunities.
- **Sectors covered:** In-SPACE to announces sector opportunities periodically.
- **Ideal Applicants:** They Should have a **clear business plan**, a **well-defined target market**, and a detailed implementing strategy.

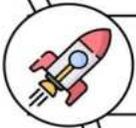
Data Bank

- **USD 360 billion** is the current global space economy in which India's share is only 2%.
- **48%** is the projected CAGR of Indian space economy, reaching USD 50 billion in the next five years.
- **189 Space Start-Ups** in India (2023) Increasing from 1 in 2014 (DPIIT Start-Up India Portal)

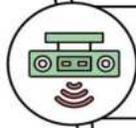
India's Major Space Startups



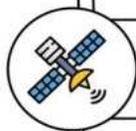
Agnikul Cosmos: Building a **launch-on-demand orbital-class rocket** that can carry **100kgs to Low Earth Orbit.** It is the **first company** in the country to **sign an agreement with ISRO under IN-SPACE.**



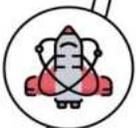
Skyroot Aerospace: Skyroot is the first Indian startup to launch a **private rocket from India.**



SatSure: The company owns a specialisation in providing **remote sensing, machine learning,** and data analytics solutions for agriculture, banking, and financial service issues.



Pixxel: Develops a network of **hyperspectral earth imaging satellites.** It has raised **funding from Alphabet Inc's Google.**



Bellatrix Aerospace: Tested India's first privately developed Hall Effect Thruster, **Arka,** and introduced the nation's initial High-Performance Green Propulsion system, **Rudra. Both Arka and Rudra** were onboard on ISRO's PSLV-C58 mission (POEM-3).



Dhruva Space: It is a National Award-winning space technology company focused on building **full-stack space engineering solutions.**

- **Eligibility for start-ups:**
 - **Start-ups** should be registered with DPIIT and should be using **technology as the core** in its product or services.
 - **Shareholding in start-ups by Indian should be 80%** and company should not have gone through a funding round.
 - ✓ However, investment from venture capitalist is permitted.
 - **Promoters and Angel investors investment** in the start-up at the time of application **must at least match the granted request.**
 - Should **not have received more than 50 lakh support** under any other central/state schemes.
 - ✓ This does not include prize money from competition, subsidised working space, access to labs, or access to prototype facility.
- **Funding to the start-Ups**
 - Grant of up to **1 crore** in three or more instalments, upto 40% may be given in first instalment.
 - Grant should be utilised fully **within a period of three years.**
 - **IPR generated** under the program shall be owned **by start up**

Need for promoting Space-tech start-ups in India

- **Global Competitiveness:** Foreign private companies like SpaceX, Blue Origin, Arianespace, etc. have transformed the global space industry by **cutting costs and turnaround time.**
 - However, India's private space players have mainly served as **vendors or suppliers to the government's space program.**
 - Therefore to provide them a **level playing field**, Centre allowed them to **carrying out end-to-end activities** in the space domain.
- **Harnessing opportunities in space economy:** At present India's share in this is only 2% which needs to be enhanced.
 - Innovative Start-ups could Complementing government's resources to enhance our space economy.
- **Reducing import dependency:** According to the Government data, **India's** import costs in the space technology sector are twelve times higher than the earnings from exports.
 - The major imported items include **electronic and electrical engineering components, high-strength carbon fibres, space-qualified solar cells, detectors, optics and power amplifiers** among others
- **Freeing up the ISRO from ancillary activities:** Start-ups participation could free up ISRO to focus in the **core areas of** research and development, interplanetary exploration, and strategic launches.
- **Spinoff socio-economic benefits:** By finding innovative solutions to pressing challenges in areas such as **agriculture, disaster management, or communication**, the private sector can bring significant improvement to people's lives.
 - Additionally, boost to local manufacturing in space technology will generate employment
- **Geopolitical leverage:** Collaboration between space-tech private players of India and partner countries, such as the US, will empower India as a counterbalance to China.
 - Indian space-tech start-ups could enable India to strategically offset the influence of China in the space arena.

India's Initiatives to promote space-tech start-ups

- **Key organisations**
 - **Indian National Space Promotion and Authorization Centre (IN-SPACe):** It is an autonomous agency under the Department of Space (DoS).
 - ✓ Its role includes **regulating, promoting, guiding, monitoring, and supervising** the space activities of Non-Governmental Private Entities (NGPEs) in India.
 - ✓ It can also allow a NGPEs to use the facilities of DoS.
 - **Antrix Corporation Limited (ACL):** ACL, a **commercial arm of ISRO**, was setup in 1992 and is a wholly owned Government of India Company. It is engaged in providing **space products and services to international customers.**
 - **New Space India Limited (NSIL):** NSIL is a **Schedule 'A' Category Company** under DoS. It was set up **in 2019**, to handle the **commercial activities** of ISRO.
 - ✓ It enabling Indian industries to take up high **technology -tech space activities** and also promotes the **commercial use** of products and services from the Indian space program.
 - **Indian Space Association (ISpA):** Established in 2020, ISpA is an apex **non-profit industry body**, setup for **development of the private space industry** in India.
 - ✓ Represented by leading domestic and global corporations, it aims to **build global linkages, bringing critical technology and investments to the country.**

- **Other Initiatives**
 - **Indian Space Policy 2023:** Enables **end-to-end participation** of Non-Government Entities (NGEs) in all domain of space activities.
 - **Foreign Direct Investment:** FDI in space sector is **allowed under Government route** for satellite establishment and operations. The Dos and DPIIT is in the process of **reviewing the FDI policy guidelines** of space sector to attract more resources.
 - **Tax benefits:** Satellite launches are exempted from GST.
 - **Atal Innovation Mission (AIM)**
 - ✓ **ATL Space Challenge:** AIM in collaboration with the ISRO and CBSE launched the Atal Tinkering Lab (ATL) Space Challenge.
 - It was **open to all school students across the country** and was presented with four broad challenge themes - **Explore Space, Reach Space, Inhabit Space and Leverage Space.**
 - ✓ **Atal Incubation Centre (AIC) Scheme:** AIM has supported more than 15 startups working in Space Tech and related industry across India. The focus areas for these startups are in UAV, Drone and Surveillance Equipment, Aero tech, Air Taxi, Space debris tracking and monitoring service, space education among others.
 - ✓ **ANIC-ARISE program:** It is a national initiative to promote research & innovation and increase competitiveness of Indian startups and MSMEs. Support is also being offered to space-tech startups.
 - **Mentoring:** List of **retired ISRO subject experts** is published on IN-SPACe Digital Platform (IDP). NGEs can approach these mentors directly for expert advice etc.

Challenges in promotion of space-tech start-ups in India

- **Risky Nature of Industry:** Absence of assured market and long incubation periods lead to a cautious approach by private organizations.
- **Funding Constraints:** Inadequate funding, **especially in later stages**, poses a significant challenge. Lack of indigenous materials and high reliance on imports **increase costs and cause production delays.**
- **Unsustainable business models:** Lowest cost wins mentality of start-ups overlooks hidden expenses and future impacts, leading to unsustainable business models.
- **Limited Talent Pool:** Scarcity of skilled professionals adds to existing challenges.

Way ahead for promoting space-tech startups in India

- **Enact Space Activities Bill:** The Space Activities Bill will further provide clarity, focus, and propulsion for the industry.
- **Enhance Financial Viability:** Establish **soft funds and additional incentives** (like more tax incentives, exemption), to address funding challenges.
- **Secure Market Access:** Conduct a dedicated study to define the Indian space economy using consistent methodology.
 - Facilitate government contracts for private start-ups to foster market demand.
 - Ensure partnerships between start-ups, ISRO, and foreign companies to access expertise and markets
- **Global Best Practices:** Study global initiatives to develop and enhance the Indian space ecosystem.
- **Capacity building:** Emphasize academic programs on system development. Invest in training programs to enhance skills in systems engineering.
 - Also, integrate the space segment as a unified system, bridging gaps in interdependence.

Conclusion

Moving forward, aligning government policies with the dynamic needs of the space industry and nurturing innovation among Space-tech start-ups will be crucial for India to realize its ambitions in the rapidly evolving space domain.

7.2. E-CIGARETTES

Why in the News?

As per **World Health Organization (WHO)**, urgent action is needed to protect children and prevent the uptake of **e-cigarettes.**

More about News

- **Key findings of WHO**
 - **Children 13–15 years old** are using e-cigarettes at rates higher than adults in all WHO regions.

- **Between 2017–2022**, rates of e-cigarette use among 16–19-year-olds in Canada have **doubled**.

World Health Organisation (WHO)
Geneva, Switzerland

About: Founded in 1948, is a **specialized agency** of the UN.

Aim: Leads global efforts to expand universal health coverage.

Membership: 194 Member

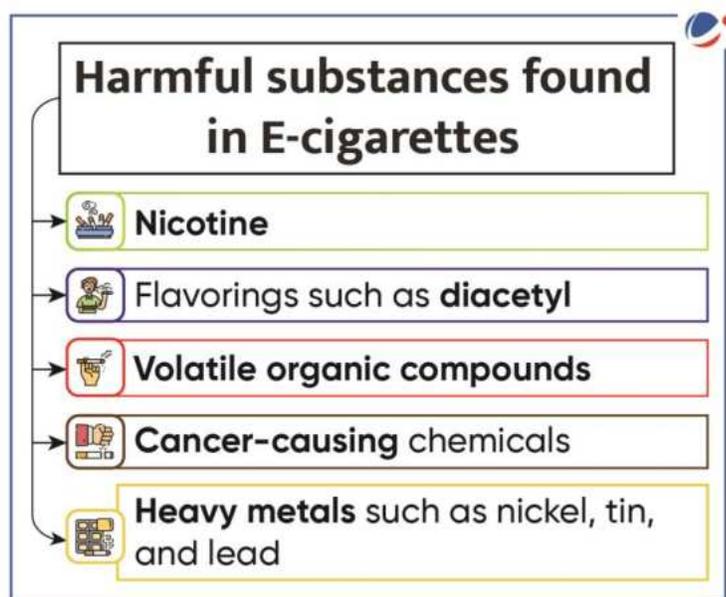
Is India a member? ✓

About e-cigarettes

- The **Prohibition of Electronic Cigarettes (Production, Manufacture, Import, Export, Transport, Sale, Distribution, Storage and Advertisement) Act, (PECA) 2019** banned e-cigarette in India.
- The act defines **electronic cigarette or e-cigarette** (under Section 3) as-
 - An electronic device that heats a substance, which **may or may not contain nicotine** and flavors, to create an aerosol for inhalation.
 - It includes all forms of Electronic Nicotine Delivery Systems, Heat Not Burn Products, e-Hookah, etc.
 - However, it **does not include any product licensed under the Drugs and Cosmetics Act, 1940**.
- They are sometimes called “mods,” “vape pens,” “vapes,” “tank systems,” and “electronic nicotine delivery systems (ENDS).”
- **Working:** They produce an aerosol that is inhaled by the user, by heating a liquid that usually contains nicotine, flavorings, and other chemicals.

Issues with e-cigarettes

- **Health Risks:** E-cigarette emissions typically contain nicotine and other toxic substances that are harmful to both users and non-users who are exposed to the aerosols second-hand.
 - Their use can increase the **risk of heart disease and lung disorders**.
 - Nicotine exposure in pregnant women can limit the brain development of the fetus.
- **Enforcement issues:** Despite a ban on electronic cigarettes by the government of India in 2019, they are **easily available in tobacco shops and online**.
- **Promote addiction among youth:** E-cigarettes have **attractive flavoring and sleek designs** that hook the younger generation to nicotine addiction.
- **Less Regulated:** Around 88 countries have no minimum age at which e-cigarettes can be bought and 74 countries have no regulations in place for these harmful products.
- **Aggressively marketed:** E-cigarettes target children through social media and influencers.
- **Use as cessation aid:** They are presented as devices to help quit smoking, however, the evidence on their use as a cessation aid is inconclusive.



Suggested Measures

- **By WHO:**
 - **Not to be sold as consumer Products:** Governments should **not permit sale of e-cigarettes** as consumer products.
 - **Control Access:** Any government pursuing a smoking cessation strategy using e-cigarettes must control the condition of e-cigarette access.
- **Other Measures**
 - **Strict implementation of the ban by authorities** and taking punitive action against local vendors and online sellers to prevent the illicit selling of e-cigarettes.

- **Raising Awareness:** E.g., India's recent public notice focuses on raising awareness about the banned product, as well as explaining the details of **PECA 2019** provisions, etc.

Conclusion

Given the tobacco industry's harmful influence and deceptive marketing, it's imperative to take firm action to prevent e-cigarette use, particularly among children and adolescents, to protect public health.

7.3. ORGAN AND TISSUE TRANSPLANTATION

Why in the News?

The National Organ and Tissue Transplantation Organisation (NOTTO) ordered an inquiry into 'cash-for-kidney racket' allegations against Indraprastha Medical Corporation Ltd.

About Organ and Tissue Transplantation

- **Transplantation** is a surgical procedure in which an organ/s, tissue or group of cells are **removed** from the donor and transplanted into the recipient, or moved from one site to another in the same person.
- **Organ Transplantation:** It includes kidney, liver, heart, lung, pancreas, and intestine etc.
- **Tissue Transplantation:** It involves corneas (eye), skin, bone, heart valves, and blood vessels etc.
 - **Transplants of tissues within the same person** are referred to as **autografts, e.g., Skin graft.**
- **Compatibility:** Determined by the degree of **immunological similarity** between the donor and recipient, for **e.g., Human Leukocyte Antigens (HLAs), blood group match** etc.
- **Legal Framework:** It is permitted by law, and covered under the "**Transplantation of Human Organs Act 1994**", which has allowed organ donation **by live & Brain-stem Dead** donors.
 - In 2011, amendment of the Act also brought in donation of **human tissues**, there by calling the Amended Act as "**Transplantation of Human Organs & Tissues Act (THOTA) 2011.**"
- **National Organ Transplant Programme:** To organize a system of organ and Tissue procurement & distribution for transplantation.
 - The scheme is currently extended for the period **2021-22 to 2025-26.**
 - It establishes and maintains a **national registry of organ and tissue donation and transplantation.**

Challenges in Organ Transplantation in India

- **Low Donation:** India has a **Deceased Organ Donation** rate of **0.52 donors per million** population, which is very less as comparison to other countries like **Spain (49.61 per million).**
- **Slow progress:** According to the Health Ministry's data, the **number of donors (including deceased)** only grew from **6,916 in 2014 to about 16,041 in 2022.**

Organ Donation Facts

Who can donate in India?

Living Donor: Any person not less than 18 years of age can be donor

Deceased Donor: If donor is **under 18 years age, consent from one parent** or any **near relative authorized** by the parents is essential.

➤ **For others consent of near relative** or the **lawful possessor** of the deceased body.

What organs can be donated by living donors?



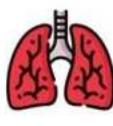
one kidney



a portion of pancreas



a part of the liver



a segment of a lung



part of the small bowel

- **Supply-demand Mismatch:** only **8,000 out of 1.5-2 lakh** people obtain a kidney transplant, **1,800 out of 80,000** receive a liver transplant, and **200 out of 10,000** are given a heart transplant.
- **Organ trafficking:** It means that human organs are illegally acquired by fraud, force or any other illegal means for money exchange with third parties.
- **Lack of male donor participation:** 70%-75% of donors are female. Wives, mothers, and sisters have emerged as most prevalent sources of donation.
- **Brain stem death declaration:** As **brain death** has been defined **only in connection with organ donation** in the THOTA,1994 and **not in Indian Penal Code, Registration of Births and Deaths Act, 1969.**
 - This make doctors reluctant to give certificates due to **litigation fear and ethical concerns.**
- **Low awareness:** People hesitate in pledging their organs/agreeing to donate organs of their loved ones largely due to a **lack of awareness and superstition.**

Way forward

- **Emphasis on Opt-Out model:** Can Adopt an **opt-out model of organ donation** system like **England, Austria, Singapore,**
 - Under this model, the deceased patient **is presumed to have consented** to organ removal unless proved otherwise.
- **Sensitizing police personnel and forensic experts:** It has to be taken up on a war footing to make all **medico-legal cases** smooth.
- **Emulate Kerala model in other states:** Kerala has become the first State to formulate well-defined **clinical protocols for brain death certification** in the country.
- **Transparency in Organ Allocation:** Creation of **digital registry** on organ transplantation to enhance transparency.
- **Streamline transportation process:** For e.g., In air mode ,Consistent use of **flight notes** to indicate organs on board, so that air traffic control can ensure priority take-off and landing of aircraft.



National Organ and Tissue Transplantation Organisation (NOTTO)

New Delhi, India



About: It is National level apex organization set up under **Directorate General of Health Services, Ministry of Health and Family Welfare.**

Objective: To facilitate coordination and networking in organ transplantation activities.

Important Divisions:

- National Human Organ and Tissue Removal and Storage Network
- National Biomaterial Centre (National Tissue Bank)

Function and Responsibilities

- Lay down policy guidelines and protocols.
- Compile and publish registry data.
- Maintaining the waiting list of terminally ill patients requiring transplants.
- Consultancy support on the legal and non-legal aspects of donation and transplantation.

7.4. NEWS IN SHORTS

7.4.1. DECENTRALISED AUTONOMOUS ORGANISATIONS (DAO)

- A **DAO** is a type of organisation that operates according to a **set of rules encoded** as **computer programmes** known as **smart contracts (automatically execute predefined rules).**
 - It is designed to be **self-governing and self-sustaining.**
- It is powered by **blockchain technology.**
 - **Blockchain** is a **shared, immutable ledger** that facilitates the process of **recording transactions and tracking assets** in a **business network.**
- **Key Features of DAO:**
 - **Decentralised:** Decision-making in it is done through **democratic process.** **Token holders** (participants in DAO) have a direct say, resulting in a **more equitable distribution of influence.**
 - **Transparent:** **Smart contracts** ensures that operations are **transparent** and immutable, **fostering trust** among participants.
 - **Inclusive:** It transcends **geographical** and **socio-economic barriers**, enabling global participation.
- **Key Applications:**
 - **Finance:** platforms like **MakerDAO** have introduced lending and borrowing services, enabling users to participate in the **global financial ecosystem** without relying on banks.
 - **Digital Art:** Artists can manage **Non-fungible tokens (NFTs).**
 - ✓ These are assets that have been tokenized via a blockchain.

- **Other: Supply chain management** (transparency and traceability in global supply chains), etc.
- **Challenges associated with DAO:** Prone to **cyber-attacks**, accountability and dispute resolution (legal recourse and liability), regulation, etc.

7.4.2. GPAI SUMMIT ADOPTS NEW DELHI DECLARATION

- Global Partnership on Artificial Intelligence (GPAI) summit adopted New Delhi Declaration.
- The declaration aims to **mitigate risks** (unemployment, lack of transparency etc.) **arising from development and deployment of Artificial Intelligence (AI) systems.**
 - Earlier, **Bletchley Declaration** signed at UK AI Safety Summit **focused on AI related safety risks.**
- **Key highlights of New Delhi Declaration**
 - **Supports AI innovation in agriculture sector** as a new thematic priority, adding to previous GPAI themes including healthcare, climate action and building a resilient society.
 - Focuses on **collaboration, inclusion and creating a governance framework on AI.**
 - **Global framework for use of AI** should be rooted in **democratic values and human rights, personal data protection**, promoting responsible, sustainable, and human-centred use of AI etc.
 - **Promote equitable access to critical resources for AI innovation**, including computing and high-quality diverse datasets.
 - **Foster inclusivity** so that countries outside of the GPAI's purview, especially those in global south, can also reap AI benefits.
- **About GPAI**
 - Established in **June 2020** with **15 member countries (including India)**, GPAI is a **multi-stakeholder initiative** of global experts bridging AI theory and practice.
 - Currently, it is an **alliance of 29 members.**
 - India is the **lead chair of GPAI in 2024.**

7.4.3. DARK FIBRE

- **Securities Appellate Tribunal (SAT)** has quashed SEBI's order of imposing a fine on the National Stock Exchange in the dark-fibre case.
- **About Dark Fibre:**
 - A **dark fibre (unlit fibre)** is an **unused optical fibre** which is **not connected** to any active equipment or has no traffic or service running on it.
 - They are named dark because **no light pulse is transmitted** through these cables.
 - Even after these fibres are used, they are referred as dark fibre, as they are independent of other network cables.
- **Benefits:** Low latency, high security etc.

7.4.4. ENVIRONMENTAL CONTROL AND LIFE SUPPORT SYSTEM (ECLSS)

- ISRO will indigenously develop Environmental Control and Life Support System (ECLSS) for Gaganyaan mission, according to the ISRO Chairman.
- ECLSS is a **subsystem of a crewed space vehicle** which provides all necessary conditions to make life in space possible.
 - **ECLSS Tasks primarily include** atmosphere management, water management, food supply and waste management.
- **ECLSS consists of three key components**
 - **Water Recovery System** provides **clean water by reclaiming wastewater**, cabin humidity condensate, and water from the hydration system inside crew members' Extravehicular activity suits.
 - **Air Revitalization System** dedicated to cleaning circulating cabin air.
 - **Oxygen Generation System** consists of oxygen generation assembly and carbon dioxide reduction assembly.
- Gaganyaan Mission envisages demonstration of human spaceflight capability to Low Earth Orbit.
 - It aims to **launch crew of 3 members to an orbit of 400 km for 3 days** and bringing them back safely to Earth.
 - **LVM3 (Geosynchronous Satellite Launch Vehicle Mk III)** is identified as its **launch vehicle**. It consists of solid stage, liquid stage and cryogenic stage.



7.4.5. CHANDRAYAAN-3 PROPULSION MODULE

- ISRO has successfully returned the Chandrayaan-3's Propulsion Module **from lunar orbit to Earth's orbit.**
 - It is a milestone in **ISRO's goal to bring back manned missions in the future.**
- It marks the **first instance of bringing an object back from lunar orbit.** It is also **ISRO's first demonstration of a gravity assist flyby** around another celestial body.
 - It is a technique of using a **planet's or celestial body's gravity** to **redirect and accelerate a spacecraft toward Earth.**
- **Payload SHAPE onboard the module** will continue to conduct a **spectroscopic study of Earth's atmosphere** from Earth's orbit.

7.4.6. SELAM CONTACT-BINARY SATELLITE

- International Astronomical Union has named the **satellite of asteroid Dinkinesh as "Selam (meaning peace)".**
 - Discovered by NASA's Lucy mission, Selam is the **first contact-binary satellite** ever observed.
 - ✓ Contact binary system is where **two space bodies gently rest against each other.**
- Launched in 2021, Lucy is the **first space mission to explore Jupiter Trojan asteroids.**
 - The Trojans are a group of small bodies (remnants of early solar system) that **orbit the Sun in two swarms along the orbit of Jupiter.**

7.4.7. SUB-NEPTUNES

- **Six sub-Neptune planets** were **discovered and** found in a rare condition called **Orbital resonance.**
 - Orbital resonance is when orbiting objects have orbits in a simple numerical ratio, creating a regular, repeating pattern.
- **About Sub-Neptunes**
 - Planets with **radii** between that of **Earth** and **Neptune** are referred to as '**Sub-Neptunes.**
 - They are found in **close-in orbits** around more than half of all Sun-like stars.
 - They are in **multiple combinations of rock, water, and atmospheric composition that can reproduce** - the mass, and density - **of the planets.**

7.4.8. COMET P12/PONS-BROOKS

- Astronomers have photographed the enigmatic Comet P12/Pons-Brooks from the **Indian Astronomical Observatory in Hanle, Ladakh** using the **Himalayan Chandra Telescope.**

- **Comet P12/Pons-Brooks:**
 - A celestial object that has been playfully nicknamed the '**Devil Comet**' or likened to the '**Millennium Falcon**' for its distinctive appearance.
 - This comet, first discovered in the year **1812**, completes an orbit around the Sun in around **71 years.**
- **Himalayan Chandra telescope**
 - It is a **2-meter optical-infrared telescope.**
 - It is at an altitude of **4500m** and **operated by Indian Institute of Astrophysics, Bangalore.**

7.4.9. WHO GLOBAL CLINICAL TRIALS FORUM

- **First WHO Global Clinical Trials Forum** was held.
 - It endorsed a global vision for **sustainable clinical research infrastructure.**
- **Objectives of the forum:**
 - **Develop** a joint vision on strengthening **clinical research capabilities.**
 - **Provide** an update on **clinical research capabilities.**
- **Priority actions for strengthening the clinical trials ecosystem:**
 - Improving **coordination and streamlining of regulatory and ethics review and approval processes.**
 - Addressing barriers to **clinical trials in underrepresented populations** such as children and pregnant women.
 - Enabling clinical trials with **digital and information technologies, etc.**

7.4.10. CODEX ALIMENTARIUS COMMISSION (CAC)

- CAC approved India's proposal for **global standards on millets**, covering Finger millet, Barnyard millet, Kodo millet, Proso millet, and Little millet **as group standards.**
 - **FSSAI has set group standards** which specify **8 quality parameters** like limits for moisture content, uric acid content, etc. **for 15 types of millets.**
- This endorsement coincided with celebration of **International Year of Millets** which was also proposed by India to **raise awareness about nutritional and health benefits of millets.**
 - Millets are **small-grained, annual, warm-weather cereals** belonging to **grass family.**
 - They are **Known as nutri-cereals** as they provide most of nutrients essential for human body's functioning.

- **About CAC**
 - Established in 1963, CAC is an **international food standards body** established jointly by WHO and FAO.
 - It is headquartered in **Rome** and has **189 members (including India)**.
 - Its objective is to **protect consumer's health** and ensure **fair practices in food trade**.
 - **Codex Alimentarius, or "Food Code"** is a collection of standards, guidelines and codes of practice adopted by the CAC.
 - Codex **standards are voluntary**.
 - **Agreement on Application of Sanitary and Phytosanitary Measures (SPS)** of WTO recognizes **Codex standards, guidelines and recommendations** for international trade and trade dispute settlement,



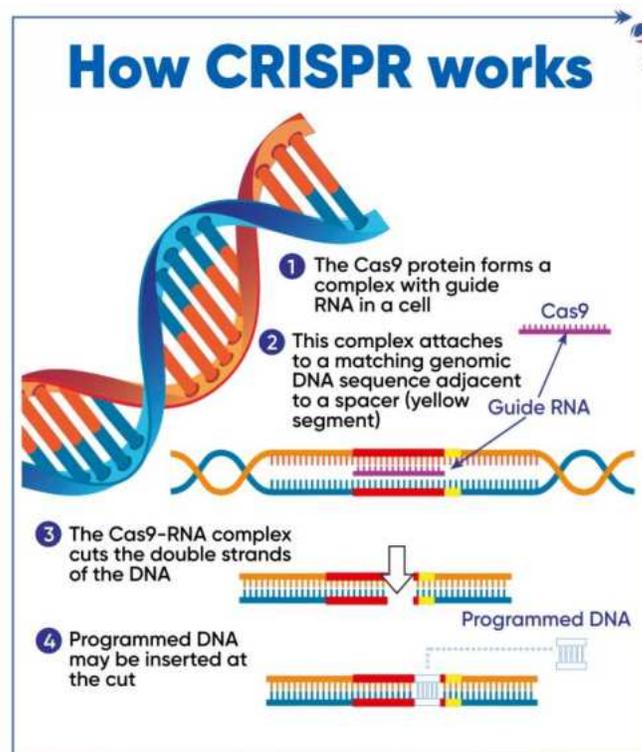
7.4.11. BIOTECHNOLOGY RESEARCH AND INNOVATION COUNCIL (BRIC)

- Recently, the Union Minister of State for Science & Technology addressed the **first-ever meeting of the BRIC Society**.
- BRIC is an **apex autonomous Society** formed after the **rationalization of key autonomous institutions** of the Department of Biotechnology.
- It aims to **achieve centralized and unified governance** to maximize the impact of biotech research across the country.

7.4.12. U.S. APPROVES FIRST CRISPR BASED GENE THERAPIES

- U.S. approved First CRISPR based Gene Therapies to Treat Patients with **Sickle Cell Disease (SCD)**.

- **Casegy and Lyfgenia, first cell-based gene therapies**, is approved for **treatment of SCD** (inherited blood disorder that can be debilitating and lead to premature death) **in patients 12 years of age and older**.
 - **Casegy** is also **approved by UK** to treat both **SCD and beta thalassemia** (inherited blood disorder that reduces production of hemoglobin).
 - **Casegy** therapy is utilizing **Clustered Regularly Interspaced Short Palindromic Repeats Associated protein 9 (CRISPR-Cas9)**, a type of genome editing technology.
- **CRISPR-Cas9** is used to **modify gene function**, to change genetic code or edit DNA at particular locations.
 - Earlier, **Nobel Prize for Chemistry, 2020** was awarded to Emmanuelle Charpentier and Jennifer A Doudna for development of **CRISPR-cas9 technique**.
- **How CRISPR-Cas9 works?**
 - It works as **cut and paste mechanism on DNA Strands**. Genetic codes that need to be changed are identified.
 - **Cas9 protein** is used as a **pair of molecular scissors to cut off a part from strand**.
 - **Strand when broken has self-repairing tendency**. This way a damaged DNA strands can be removed and help human body to restore to healthy state.
- **Applications of CRISPR:** Edit genes in human embryo; **Change genetic codes of crops** to improve crop resilience; Creating new therapies for Cancer treatment etc.



7.4.13. AYUSHMAN AROGYA MANDIR (AAM)

- Centre has decided to rename **Ayushman Bharat Health and Wellness Centres (AB-HWCs)** as 'AAM' with the tagline 'Arogyam Parmam Dhanam'.
- Launched under the **Ayushman Bharat Program** in 2018, there are over **1.6 Lakh centers** in the country.
- They are **envisaged to deliver an expanded range of services** that go beyond **Maternal and child health care** services.
- They provide care for **non-communicable diseases, palliative and rehabilitative care, Oral, Eye, and ENT care, mental health, and first-level care for emergencies and trauma.**
- They also provide **free essential drugs and diagnostic services.**

7.4.14. AAROGYA MAITRI AID CUBE

- World's first **portable hospital 'Aarogya Maitri Aid Cube'** was unveiled in **Gurugram (Haryana).**
- It is a **modular trauma management and aid system** designed for **rapid deployment in Mass Casualty Incidents**, whether in times of peace or war.
 - It is made up of **72 detachable mini-cubes.** Each being a **specialized station for emergency response and humanitarian efforts.**
 - These cubes are **light and portable, and can be rapidly deployed** anywhere, from **airdrops to ground transportation.**
 - It can treat **200 patients.**
 - It is designed indigenously **under Project 'BHISHM (Bharat Health Initiative for Sahyog, Hita and Maitri)'**.

7.4.15. AKTOCYTE

- **AKTOCYTE (nutraceutical tablets)** has shown remarkable results in **enhancing the quality of life for cancer patients.**
 - **Nutraceutical** refers to a food products that provides medical or health benefits, including the prevention and treatment of disease.
- It minimizes **side effects of radiotherapy.**
 - **Radiotherapy** is a **cancer treatment** that uses **high doses of radiation** to **kill cancer cells and shrink tumors.**
- **Developed by: Department of Atomic Energy** along with private pharma company.
- It is approved by **Food Safety and Standards Authority of India (FSSAI).**

7.4.16. POMPE DISEASE

- Recently, **India's first patient diagnosed** with Pompe disease died.
- **About disease**
 - **A rare inherited disorder** that affects one child per million.
 - Caused by a **deficiency of the enzyme acid alpha-glucosidase (GAA)** which breaks down complex sugars in the body.
 - It results in the **accumulation of glycogen in cells,** particularly in muscles.
 - It is the **first recognized lysosomal storage disorder.**
- **Symptoms:** Muscle weakness, respiratory issues, heart problems etc.
- **Treatments:** **Mostly to manage the symptoms** and improve the patient's quality of life.

7.4.17. GREEN LEAF VOLATILES (GLVS)

- For the first time, scientists were able to **visualise plants sensing compounds called GLVs,** released by **damaged plants** to let **other plants know that danger is near.**
 - This allows other plants to make **themselves less palatable or even indigestible** to insect attackers.
- GLVs are a **short chain (six carbon atoms) group of alcohols, acetates, and aldehydes.** They are derived from fatty acids.
 - GLVs are **common constituents of herbivore-infested plant volatiles.**
 - GLVs play an **important role in plant defense.**

7.4.18. JT-60SA: EXPERIMENTAL NUCLEAR FUSION REACTOR

- World's biggest experimental nuclear fusion reactor **JT-60SA inaugurated in Japan**
- JT-60SA is a joint initiative between **European Union and Japan** and is a forerunner for under-construction **International Thermonuclear Experimental Reactor (ITER).**
- **Nuclear fusion** is a process in which **two or more light atomic nuclei fuse to produce a heavier nucleus** and release a **tremendous amount of energy.**
 - In **nuclear fission,** atoms are split apart into lighter elements releasing energy. **All nuclear power plants use nuclear fission.**
- **Advantages of fusion:**
 - Release of **abundant energy** and **fuel** is nearly **inexhaustible.**
 - Neither produces **CO2** and other greenhouse gases nor radioactive waste.

About International Thermonuclear Experimental Reactor (ITER)

- ITER aims to **demonstrate nuclear fusion** as a clean green source of energy
- It is **located in France** and is a collaboration of **China, EU, India, Japan, Korea, Russia and US**
- It aims to build the **world's largest tokamak**, a magnetic fusion device designed to **tap into the potential of fusion energy**
- The tokamak **operates based on same principles** that power the **Sun and stars**.
- Using a robust magnetic field, it **fuses hot plasma**, and can reach temperatures of **over 150 million degrees Celsius** (ten times hotter than Sun's core).

- This development represents a **significant advancement** in **regenerative medicine**.
 - ✓ **Regenerative medicine** is the process of replacing or regenerating human cells, tissues or organs to restore or establish normal function.
- Anthrobots are different from **xenobots**, which are derived from embryonic stem cells of frog.

7.4.20. HYDROGEN FOR HERITAGE SCHEME

- India proposed to invite global firms to manufacture Hydrogen trains for implementing the **Hydrogen for heritage scheme**.
- **About Scheme:**
 - It was announced in the **Union Budget 2023-24**.
 - Under it, Indian Railways (IR) has envisaged to run **35 Hydrogen trains**.
 - Also, IR will **retro fitment of Hydrogen Fuel cell** on existing Diesel Electric Multiple Unit (DEMU).
 - ✓ Hydrogen fuel cells use the **chemical energy of hydrogen** to produce electricity.
 - **Benefits:** It will promote **green transportation technology** that will support zero carbon emission goals.

7.4.21. KRUTRIM

- Ola has recently launched the **Krutrim, which is a large language model (LLM)** trained specifically for Indian languages
 - Krutrim can understand **22 Indian languages and generate content in about 10**.
- **About LLM:** They are deep learning algorithms that can recognize, summarize, translate, predict, and generate content using very large datasets.
 - They are also referred to as **neural networks (NNs)**, which are computing systems inspired by the human brain.
 - **Some of the famous LLMs** are Open AI's ChatGPT, Google's Gemini, etc.

7.4.19. ANTHROBOTS

- Scientists have developed anthrobots.
- **About Anthrobots:** These are **tiny robots made of human cells** that are able to **repair damaged neural tissue**.
 - They can be created from **adult human cells without genetic modifications**.
 - They can be fused together to form a **superbot**.

 <p>SMART QUIZ</p>	<p>You can scan this QR code to practice the Smart Quiz of Science & Technology at our open test online platform for testing your understanding and recalling of the concepts.</p>	
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8. CULTURE

8.1. GARBA

Why in the News?

'Garba of Gujarat' has been inscribed in the Representative List of Intangible Cultural Heritage (ICH) of Humanity by the United Nations Educational, Scientific and Cultural Organization (UNESCO).

More on the news

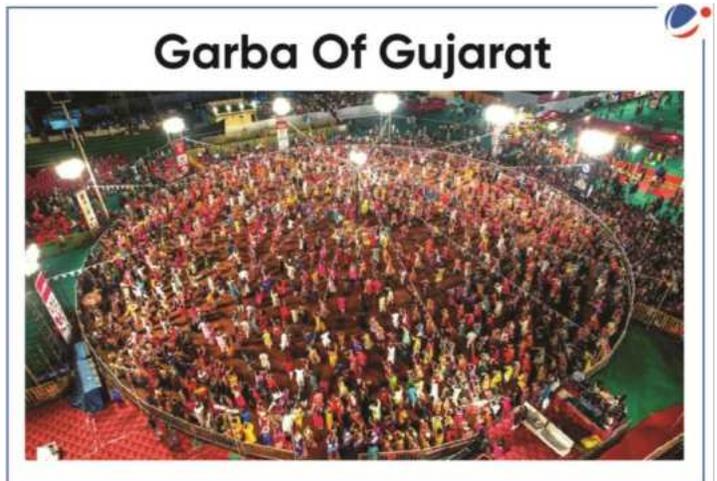
- 'Garba Of Gujarat' was added in the ICH list under the provisions of the **2003 Convention for the Safeguarding of Intangible Cultural Heritage** during the **18th meeting** of the Intergovernmental Committee (IGC) for the Safeguarding of the ICH held in Kasane, Botswana.
- It is the **15th ICH element** from India to join this list.

About Garba

- It is a **ritualistic and devotional folk dance** that is performed on the occasion of the Hindu festival of **Navaratri**, which is dedicated to the worship of the **feminine energy or 'Shakti'**.
- Word "**garba**" comes from the Sanskrit word **garbha**, meaning "**womb.**"
- Key Features of the Dance**
 - Takes place around a **perforated earthenware pot** lit with an oil lamp called a **garbha deep ("womb lamp")**, or an image of the **mother goddess Amba**.
 - Dancers move around the pot in an **anti-clockwise circle** using simple feet movements while singing and clapping hands in unison.
 - Accompanied by **traditional dhol/drum**, and other musical instruments.
 - Apart from **Religious and Spiritual connect**, it is a **symbol of respect towards the women**.

About UNESCO's Convention for the Safeguarding of the ICH, 2003

- The UNESCO meeting in **Paris** adopted this convention in **2003** for the Safeguarding of the ICH.
- IGC**, for the Safeguarding of the ICH, was established within UNESCO, to **examine requests submitted by States Parties** for the inscription of intangible heritage on the Lists.
 - IGC** consists of **24 members** and is elected in the General Assembly of the Convention according to the principles of equitable geographical representation and rotation.
 - India** was elected to the **IGC** in 2022 for a **tenure of 4 years**.
 - In the past, India has served two terms i.e., one from 2006 to 2010 and the other from 2014 to 2018.
- About intangible cultural heritage**
 - Article 2** of this Convention defines "intangible cultural heritage" as the practices, representations, expressions, knowledge, skills – as well as the instruments, objects, artefacts and cultural spaces associated therewith – that **communities, groups** and, in some cases, **individuals** recognize as part of their **cultural heritage**.
 - They are manifested in the following domains:
 - ✓ oral traditions and expressions;
 - ✓ performing arts;
 - ✓ social practices, rituals and festive events;



- ✓ knowledge and practices concerning nature and the universe;
- ✓ traditional craftsmanship.

List of Intangible Cultural Heritage of India	
Kutiyattam, Sanskrit theatre	Buddhist chanting of Ladakh
Tradition of Vedic chanting	Sankirtana, ritual singing, drumming and dancing of Manipur
Ramlila: The traditional performance of the Ramayana	Traditional brass and copper craft of utensil making among the Thatheras of Jandiala Guru, Punjab
Ramman: Religious festival and ritual theatre of the Garhwal Himalayas	Nawrouz
Chhau dance	Yoga
Kalbelia folk songs and dances of Rajasthan	Kumbh Mela
Mudiyettu, ritual theatre and dance drama of Kerala	Durga Puja in Kolkata

India's Steps for intangible cultural heritage

- **Sangeet Natak Akademi**, an autonomous organisation under the Ministry of Culture, as **nodal office for matters relating to ICH** including for preparation of the nomination dossiers for the Representative List of UNESCO.
- **National List of Intangible Cultural Heritage**, to recognize the diversity of Indian culture embedded in its intangible heritage.
- **Schemes** like Global engagement schemes, 'Safeguarding the Intangible Cultural Heritage and Diverse Cultural Traditions of India' scheme, etc.

8.2. NEWS IN SHORTS

8.2.1. BALI YATRA

- On the occasion of **Kartika Purnima**, **Asia's largest open-air annual trade fair** Bali yatra inaugurated on the banks of **Mahanadi River in Cuttack, Odisha**.
 - People of **Odisha float small boats made of banana peels and Sola** in nearby ponds and rivers to recall the **glories of daring Sea Voyages of ancient Kalinga**.
- **About Bali yatra fair**
 - It commemorates **Odisha's historical ties with Bali (Indonesia)**, and its **rich maritime legacy** of transoceanic voyages to Southeast Asian nations.
 - ✓ Festivals **'Masakapan Ke Tukad' in Bali** and **'Loikrathong' in Thailand** bear **similarities with Bali Yatra** fair and also encompasses floating of toy boats.
 - It is also **associated with legend 'Taapoi'** which reminds the traditional memories of a **young maiden waiting for the return of her sailor brothers**.
 - However, there is also a belief that **Vaishnavite Saint Sri Chaitanya landed** in Cuttack after crossing Bali on his way to **Puri on this auspicious day**.
 - **'Bhalukuni Osha'** or **'Khudurukuni Osha'** and **'Bada Osha'** are the **key rituals** associated with this fair.
- **Odisha as a maritime heritage**.
 - Odisha, known as **Kalinga** in ancient times, held a **prominent maritime position in India's history**.
 - Its intrepid sailors establishing maritime links with the **Roman Empire, Africa, Persian coast, Arabian countries, China, Japan, Siam, Champa, Burma, Ceylon**, and more.
 - Notably, **Kalidas in Raghuvamsa** hailed the **king of Kalinga** as the **"Lord of Sea."**

Kalinga's Famous ports 	
Ports	Description
 Palur	<ul style="list-style-type: none"> • Noted by the Greek author Ptolemy in the mid-2nd century A.D
 Tamralipti	<ul style="list-style-type: none"> • Referred to as Tamalitis by Ptolemy. • Also mentioned by Fa-Hien in the 5th century A.D., and Hiuen-Tsang during his 7th-century visit.
 Pithunda	<ul style="list-style-type: none"> • Mentioned in the Jaina text Uttaradhyana Sutra. • Also mentioned in Kharavela's Hatigumpha inscription as the metropolis of Kalinga.

8.2.2. GEOGRAPHICAL INDICATION (GI) TAG

- Recently, **4 products from Meghalaya** received GI Tag.
 - Lakadong turmeric**: known for its **high Curcumin content**.
 - Garo dakmanda**: Traditional dress worn by **Garo tribe**.
 - Larnai pottery**: Black pottery from **Jaintia Hills District**.
 - Garo chubitchi**: Traditional **rice based alcoholic beverage** of Garo tribe.
- About GI Tag**
 - Given by **Ministry of Commerce and Industry**.
 - Administered by **Geographical Indications of Goods (Registration and Protection) Act of 1999**.
 - Once awarded is **valid for 10 years**.

8.2.3. BOOKER PRIZE

- Irish novelist Paul Lynch** won the **Booker Prize in 2023** for his 5th novel '**Prophet Song**'.
- About Booker Prize**
 - Founded in 1969**, the Booker Prize is **open to English-language novels** from any country that have been published in Britain and Ireland.
 - It aimed to **stimulate the reading and discussion of contemporary fiction**.
 - Some **Indian-origin authors** who won the prize include **VS Naipaul (1971), Salman Rushdie (1981), Arundhati Roy (1997)**, among others.
- Note**: Booker Prize is given for fiction books written in English only whereas **International Booker Prize** is **awarded for books translated into English**.

8.2.4. KHELO INDIA PARA GAMES 2023

- 1st edition** of Khelo India Para Games (KIPG) 2023 was organized in December 2023 in Delhi.
- It was held across **7 sports Disciplines**: Para Archery, Par Athletics, Para Badminton, Para Table Tennis, Para Powerlifting, CP Football, Para Shooting.
- Its mascot was **Ujjwala** (a sparrow).
- Haryana topped** the KIPG 2023 medal table, followed by Uttar Pradesh.
- KIPG is the latest addition to the government of **India's Khelo India initiative**, which also includes the Khelo India Youth Games, Khelo India University Games and Khelo India Winter Games.
- About Khelo India Games**
 - Organized under a **Central Sector Scheme** named as **Khelo India Scheme**.
 - Khelo India, which translates to '**Let's play India**', was proposed by the government of India in **2017** to revive India's sporting culture by engaging with children at the grassroots level.

- Since **2018**, a total of 11 Khelo India Games have been successfully held.
 - ✓ This includes **5 Khelo India Youth Games, 3 Khelo India University Games and 3 Khelo India Winter Games**.



8.2.5. INDIRA GANDHI PEACE PRIZE, 2023

- Indira Gandhi Prize for Peace, Disarmament and Development** for 2023 has been jointly awarded to **Daniel Barenboim and Ali Abu Award**.
 - They have brought together **the youth and peoples of Israel and the Arab World** for a **non-violent resolution of the Israel-Palestine conflict**.
- About Indira Gandhi Peace Prize**
 - It has been **conferred every year since 1986** by **Indira Gandhi Memorial Trust**.
 - It consists of a **monetary award of ₹25 lakh along with a citation**.

8.2.6. SAHITYA AKADEMI AWARDS 2023

- Sahitya Akademi** announced its annual Sahitya Akademi Awards in **24 languages**.
 - Besides 22 languages enumerated in the 8th Schedule of the Constitution**.
 - Akademi has recognised **English and Rajasthani** as well.
- About Sahitya Akademi**
 - It is an autonomous **body under Ministry of Culture**.
 - It was founded in 1954**.
 - Registered as a society** under the Societies Registration Act, 1860.

- Other awards given by Akademi are **Bal Sahitya Puraskar, Yuva Puraskar.**

8.2.7. UNESCO'S 2023 PRIX VERSAILLES

- Kempegowda International Airport** Bengaluru (Karnataka) was honored at **UNESCO's 2023 Prix Versailles**, and named among the 'World's most beautiful airports'.
- Granted annually at UNESCO since 2015, the **Prix Versailles consists of architecture awards that showcase the finest contemporary achievements worldwide.**
 - The **Official list** aligns with the with the principles of **intelligent sustainability** and takes into consideration **projects' ecological, social and cultural impacts into consideration.**
 - It highlights the primary role of the **Laureates in beautifying and improving the living environment.**

8.2.8. URBICIDE

- Targeting of Gaza's **hospitals, bakeries, and schools by Israel** is being considered as **urbicide** by several activists.
- Urbicide is Latin for 'city killing'.
 - It refers to an act of **ritualised, premeditated violence on built infrastructures.**
 - In the 1980s, scholars used the term to describe the **extensive destruction of Balkan towns** during the **Yugoslavic wars** from 1992 to 1996.
 - This concept **goes beyond merely destroying cities physically.** It also **eradicates memories, identities, and cultures** embedded in a city's fabric.

8.2.9. ERRATA

- In **September 2023 Monthly Magazine, under Article 8.5.6. Statue of Oneness**, it was incorrectly mentioned that **Statue of equality** was dedicated to **Srinivas Ramanujan**.
 - Correct information is **Statue of equality was dedicated to Vaishnavite Ramanujacharya**

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9. ETHICS

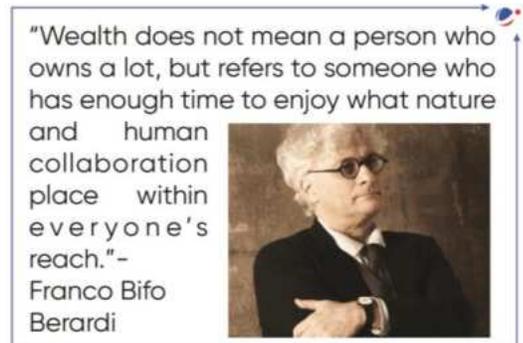
9.1. LABOUR ETHICS AND LONG WORK HOURS

Introduction

Recently, an ILO report highlighted that among various work related risks, long working hours is leading cause of death among employees. This has raised debate surrounding labour ethics.

Labour Ethics

- Includes consideration of **right and wrong on a wide range of questions having to do with the treatment of labour.**
 - It entails that **employers are ethically required to provide a safe and healthy workplace** for their employees.
- **Universal Declaration of Human Rights** affirms that people have a **right to rest and leisure, including reasonable limitations of working hours** and periodic holidays with pay.



Stakeholders	Interests
Employee	• Gainful employment , good working conditions and work-life balance .
Employers/Industrialists	• Promote Organizational efficiency , profits and sustained human resource development.
Management	• Views long working hours as a matter of professional responsibility , especially in fields such as health care and law enforcement.
Investors	• Maximize returns on their investments in short period of time. • Undertake investments in ethically and socially responsible businesses .
Labour Unions	• Negotiate for better workers' rights , including safer working conditions and reasonable work hours.
Labour regulatory bodies	• Enforcement of labour laws , rules, regulations and standards and promote welfare of workers.
Government	• Promote economic growth along with all round human Capital development.

Ethical concerns against overtime and long work hours:

- **Violation of Ethical principle of nonmaleficence:** The principle dictates **that care should be taken not to harm others.**
 - Long working hours causes exhaustion leading to **medical negligence, disasters e.g. Chernobyl, Space Shuttle Challenger accident etc.**
- **Wealth over health:** Choosing extra overtime income compromises **physical and mental health** of the employee. E.g. job burnout in investment banking.
- **Profit over principles:** Mandating long work hours is against **sustainable work culture** where **businesses are mindful of worker's health.**
- **Erosion of family and societal values:** By eroding time for personal relationships, and ties to the broader community.
- **Against socialistic and gender ethics:** Long work hours concentrate job opportunities for limited set of labour force resulting in **inequitable distribution of employment.**
 - It **limits gainful employment opportunities for women** who prefer shorter-hour shifts due to dual burden.

Ethical arguments for long work hours

- For maintenance of essential services, **during emergency situations like pandemic, wartime** etc. (Situational Ethics).
- Often result of shortage of staff and **paucity of skilled workers.** (Situational Ethics)
- To **improve work productivity, efficiency and competitiveness** of industries and countries. (Utilitarian Ethics).

ILO's Global Strategy on Occupational Safety and Health 2023

Guiding principles:

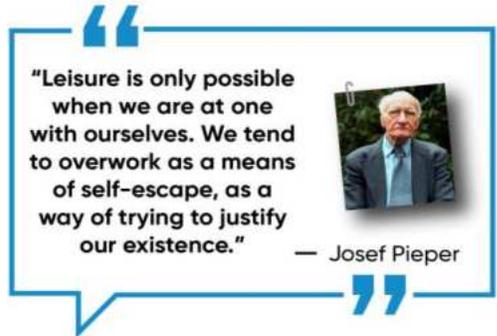
- **International labour standards:** To promote, respect and realize the right to a safe and healthy working environment and build a culture of prevention.
- **Social dialogue and participation:** Recognition of the right to collective as an enabler for right to a safe and healthy working environment.
- **Human-centred, inclusive and gender-transformative approach:** To reduce inequalities based on gender, disability and age, in OSH policies and programmes.
- **Focus on prevention of OSH risks throughout the life cycle.**

Way forward

- **Governments:** Proper **enforcement of labour laws** regulating work hours, e.g. Factories Act, Motor Transport Workers Act, 1961.
 - **Legal framework for sectors where laws to limit work hours don't exist.**
- **Businesses:** **Invest in health and wellbeing of employees** to promote better job satisfaction. E.g. Healthcare insurance, paid leaves, maternity/paternity leaves etc.
- **Employees:** Better **time management** to foster a balance between professional and personal goals.
- **Upskilling:** To address shortage of skilled workforce and promote better division of labour.
- **Collaboration** between multiple stakeholders, like, Government, business, labour unions etc. to create an **ethical framework for Sustainable work culture.**

Conclusion

It is an ethical imperative for a just and fair society to ensure that, jobs are safe, properly compensated, with beneficial work life, and also a life that has time for rest, health, family, leisure and attainment of one's personal values.



70 hours work discussion

Recently, an IT firm founder suggested 70 hours a week as a work ethic for young Indians.

History of workweek

- **1817:** “8 hours work, 8 hours recreation, 8 hours sleep” slogan formulated by **Robert Owen**.
- **1926:** **40-hour work week** popularized by **Henry Ford**.

Why is 70 hours workweek required in India?

- **To reap benefits of favorable demographic dividend.**
- **Nation Building:** E.g. Citizens of Japan and Germany worked for longer hours to rebuild their nations in the aftermath of the 2nd World War.
- **Significant for acquiring new skills and learning**, particularly at start of carrier.
- **Conveys the value of hard work**, particularly among young professionals.

How shorter work can be productive?

- **Better work-life balance:** More time to employees to decompress from work.
- **Focus on Quality hours over Quantity of hours:** **There is Inverted U-shaped relationship** between productivity and work-hours.
- **Focus on capital investment and skilling to enhance work efficiency.**

Check your ethical aptitude

You are CEO of a Fintech startup. Of late, there has been funding crunch in your industry which limits your organization's ability to hire more employees. However, organizational workload continues to expand and existing workforce is already stretched, working for 10-11 hours, 6 days a week.

You explain this to the higher management, however, they highlight company's inability to hire more and indicate you to further distribute the surplus work burden on existing employees.

On the basis of the case study answer the following questions:

- What are the ethical dilemmas before you and who are the associated stakeholders?
- Evaluate the possible options before you.
- What would be your ideal course of action?

9.2. ETHICS OF NUDGE

Introduction

The Haryana government launched the **Pran Vayu Devta Pension Scheme**, offering **pension to trees aged 75 years or older** located on the property of the state's residents. The scheme aims at **nudging** the residents towards conserving and protecting aging trees and the environment.

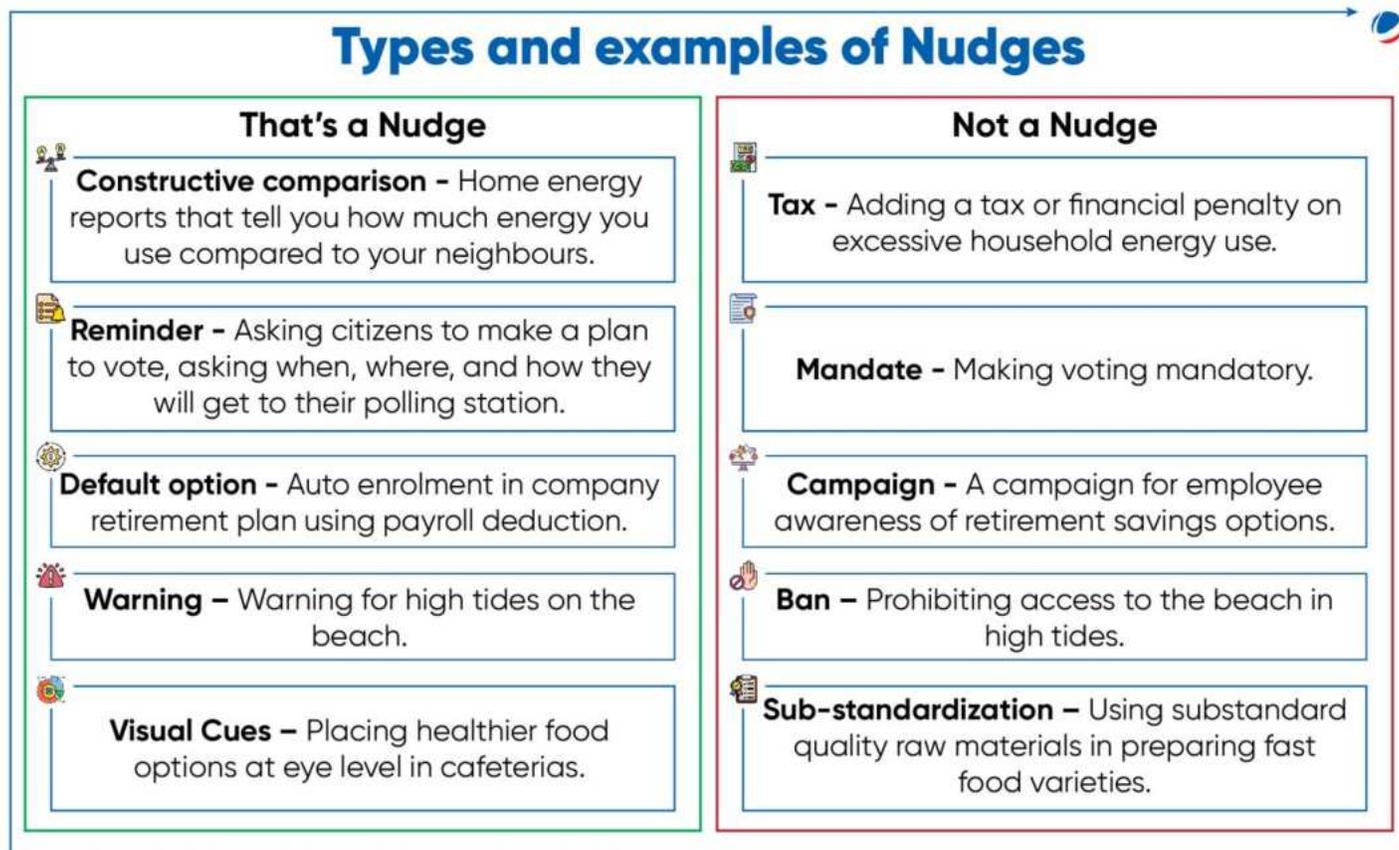
Know the term

Sludge is a term used to describe obstacles, complexities, or intentionally designed difficulties that make it harder for individuals to complete certain tasks or make specific choices (opposite of nudge).

➤ Think of it as the **company that keeps you waiting on the phone for hours** to resolve an issue with a product.

What is a Nudge?

- A nudge is simply an intervention that **gently steers individuals towards a desired action**. It is an aspect of the choice architecture **that alters people's behaviour without forbidding any options** or significantly changing their economic incentives.
- Nudges are rooted in **behavioural sciences**, acknowledging that individuals may not always make rational decisions.
 - Instead, people's choices are **influenced by cognitive biases, heuristics, and emotions**. Nudges leverage this understanding to guide people toward better decisions without limiting their choices. E.g., nudge to keep your surroundings clean via Swachh Bharat Mission (SBM).



Significance of Nudges

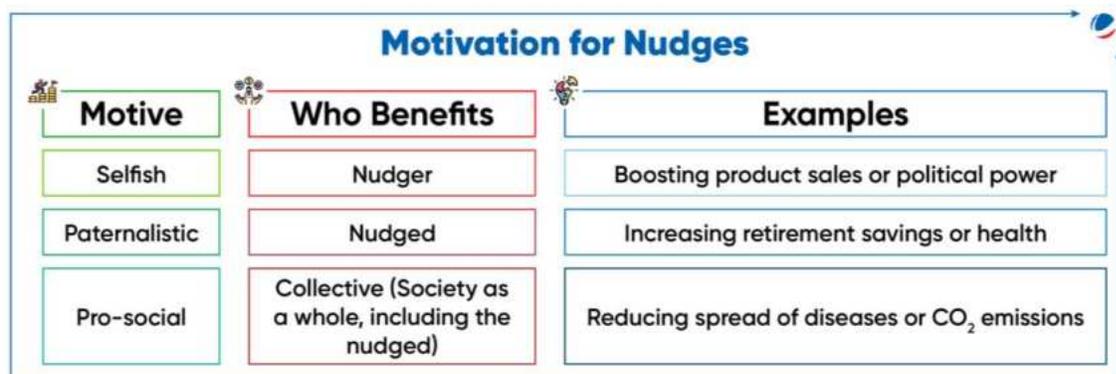
- **Promote law and order:** "Nudge Units" within government agencies have proven that simple nudges can reduce law violations without using heavy-handed penalties.
- **More effective:** When applied thoughtfully, nudges can be more effective than mandates, financial incentives, or awareness campaigns alone.
- **Freedom of choice:** Unlike traditional interventions that impose restrictions or regulations, nudges maintain individuals' freedom of choice.
- **Cost-effective:** Implementing nudges can be relatively simple, and low-cost interventions compared to more traditional approaches.
- **Evidence-based:** Nudges are often arrived at after empirical research and evidence, lending them significant credibility and legitimacy.
- **Diversity:** Nudges can be tailored to accommodate diverse preferences, values, and cultural contexts, allowing for the customization of interventions.

Key ethical concerns with nudge

Key ethical concerns with nudges are often seen with respect to the **'goals of the nudger', 'autonomy of the nudged', and 'effects of nudges'**.

- **Goals of the nudger:** Nudges can be used by **many different actors** such as individuals, governments, supermarkets or other corporations. The potential impact of nudges depends upon the nudgers' motives and who benefits from the nudge.

- **Autonomy of the nudged:** Ethical concerns concerning autonomy largely deals with:



- **Behavioural exploitation:**

Nudges work with human

shortcomings, especially uncertainty, inaction, and impatience; thus, nudging may **exploit people's irrationality**. For instance, auto-enrolment in savings schemes takes advantage of an individual's inaction.

- **Lack of transparency:** Concerns of **manipulation and lack of transparency** are raised with nudges operating on a subconscious level.

- **Effects of nudges:** Effects of nudges may relate to two aspects: Nudge effectiveness (the strength of their impact) and unintended effects.

- **Effectiveness:** A nudge does not stimulate reflection and so is **less unlikely** to create the knowledge, dissonance, or evaluation required to **change people's beliefs, attitudes and behaviour in the long term**.
- **Unintended effects:** In some cases, a nudge may produce **reactance** (negative reaction due to perception of choice restriction) or **boomerang effect** (reversal from follow-up of intended outcome).

What should be the nature of ethical nudging?

- **Transparency:** Nudges should be transparent, not covert or hidden and in the interests of the people who are being nudged and consistent with their values.
- **Autonomy:** The formation and expression of preferences is an important aspect of individual autonomy and the nudger should consider preferences when setting the goals of a nudging campaign.
 - For example, economically underprivileged groups may benefit from nudges that help them avoid unnecessary bank fees or high-interest loans more than those designed to increase savings.
- **Beneficence:** Goal should be to have a positive impact on individuals and society and promote better decision making.
 - Nudging should not exploit individuals' vulnerabilities, such as cognitive limitations, emotional states, or socioeconomic factors.
- **Sensitivity and consent:** Nudges should be culturally sensitive and consider the diversity of values, norms, and beliefs within a population.
 - Individuals should have the **option to opt out of nudges**.

Conclusion

The ethics of nudging demands a **delicate balance** between influencing behaviour for the greater good and respecting individual autonomy. Effective and ethical nudging should prioritize transparency, beneficence, and fairness while avoiding exploitation and safeguarding privacy.



Check your ethical aptitude

A school in New Delhi implements an incentive program for promoting the value of education in the students. Such incentive program awards the students achieving top ranks in specially designed tests of all the subjects, which are conducted on monthly basis. Some students who are very good in some subjects find it disincentivising as they cannot perform very good in overall subjects. This resulted in them losing interest in studies.

On the basis of case, answer the following questions:

- What are the ethical concerns associated with such incentive mechanisms?
- What factors determine that a program designed to bring behavioural changes produce intended outcomes?
- What can be a more effective intervention for promotion of education in schools?

9.3. INDIVIDUAL SOCIAL RESPONSIBILITY (ISR)

Introduction

According to the EdelGive Hurun India Philanthropy List 2023, 119 Indian business tycoons donated Rs 5 crore or more in FY23, together contributing Rs 8,445 crore for philanthropic activities. This highlights the role Social Responsibility can play in society.

What is Individual Social Responsibility?

- **Social responsibility** is a moral framework where organizations and individuals strive to act for the greater good and avoid causing harm to society and the environment.
- **Triple bottom line:** This tenet of social responsibility encompasses “**people, planet, and profit**”. This is the belief that achieving profit does not require harm to the planet or the exploitation of people.
- **Individual Social Responsibility (ISR)** refers to the ethical obligations and actions that individuals have towards their community and society as a whole.
 - ISR involves an individual being aware of how personal actions influence the community.



How ISR is different from Corporate Social Responsibility (CSR)?

Nature of Difference	Individual Social Responsibility (ISR)	Corporate Social Responsibility (CSR)
Scale and Scope	Individual decisions and voluntary contributions. E.g., Philanthropic contributions.	Corporate entities, Businesses and Large firms. E.g., Bottles for change campaign of Bisleri.
Nature of Contributions	Often small and more personal such as volunteering, charitable giving, advocacy for social justice etc.	Typically, larger in scale and include philanthropy, environmental sustainability programs, ethical business practices, community development etc.
Drivers	Typically, voluntary and driven by personal values and a sense of moral obligation.	Often due to legal requirements , but also driven by ethical considerations and public relations.
Public Knowledge	Not always be publicly communicated and are often a private and personal commitment.	Companies often communicate their CSR initiative through various media and annual reports.

Need for ISR in India

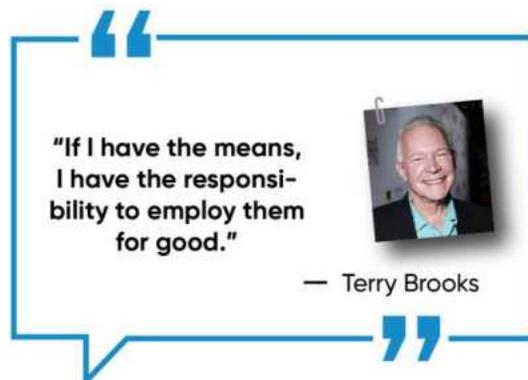
- **Predominance of Public Sector:** The public sector has been carrying the weight of social sector spending in India, accounting for 95% of total spending.
- **Funding gap in Sustainable Development:** India remains well short of NITI Aayog’s estimate (13% of GDP) of total annual funding required to achieve United Nations SDGs by 2030.
- **Resource redistribution:** Despite strong economic growth, multi-dimensional inequalities persist in India which require a considerable amount of investment and efforts for resource redistribution.
- **Environmental sustainability:** ISR practices, such as sustainable living, waste reduction, and conservation efforts, can contribute to environmental sustainability and mitigate the impact of climate change.
- **Technology development:** ISR can be tapped for enhancing the role of technology, bridging the digital divide and promoting financial inclusion.



Ethical Considerations when engaging in ISR

- **Freedom of Choice:** ISR activities should be designed with the choice autonomy of beneficiaries in mind.

- **Cultural Sensitivity:** ISR activities should understand the cultural context and collaborate with local communities for respectful engagement.
- **Social interest vs personal interest:** Individuals are guided by their personal choices and values which may not always be aligned with every group of people.
 - Individuals in their ISR activities should understand the group composition and interests for whom the activity is designed.
- **Outcome-oriented:** Individuals should strive to assess the impact of their contributions, adapting and refining their approaches to maximize positive outcomes.
- **Empowerment:** Ethical ISR involves empowering communities to be self-reliant and fostering sustainable solutions rather than perpetuating a cycle of dependency.



Conclusion

ISR represents a powerful force for positive change in the communities and society at large. Embracing ethical ISR involves a conscientious commitment to making choices that contribute to the well-being of society, the environment, and future generations.

Check your ethical aptitude

Perna, an entrepreneur, supports a local NGO that provides education and healthcare services to underprivileged children. The support by the NGO is vital for survival and development of the underprivileged community. However, the NGO is facing allegations of mismanagement and misuse of funds. News articles and reports suggest that only a small portion of the donations is reaching the intended beneficiaries, while a significant amount is being spent on administrative expenses and lavish events.

On the basis of case, answer the following questions:

- What are the ethical dilemmas that Perna faces?
- What can be the course of action for Perna in this situation?

9.4. ETHICS OF ONLINE GAMING

Introduction

Recently, the online gaming industry signed a **voluntary 'Code of Ethics for Online Gaming Intermediaries'** at the Indian Gaming Convention (IGC), organized by the Internet and Mobile Association of India (IAMAI).

About Code of Ethics for Online Gaming Intermediaries (OGI)

- The document was signed by the **Federation of Indian Fantasy Sports (FIFS), the E-Gaming Federation (EGF), and the All-India Gaming Federation (AIGF)**, which together account for a majority of the gaming industry in India.
 - Adherence to this Code is **voluntary** and does not override or intend to replace existing laws applicable to Signatories.
- **Objectives**
 - **To protect the interests of consumers** and enable them to make informed choices about the online games they access.
 - **To create a healthy environment** for online games in India and ingrain a culture of responsible gaming.
 - **To elevate the industry standard** and bring uniformity in the business practices of signatories.

Online Gaming

- Online game means a **game that is offered on the Internet** and is accessible by a user through a computer resource.
- **Types of Online Games:**
 - **Game of Skill:** Games in which the **outcome depends on the player's expertise, practice, and experience** and not merely on chance.
 - **Game of Chance:** Games in which the **outcome is decided by randomized events** and treated similarly to betting, gambling, and horse racing.
- **Online Gaming Intermediary (OGI)** means any intermediary that enables the users of its computer resource to access one or more online games.

Data Bank

- › **\$2.8 billion** (2022) is the value of Indian gaming Industry in India and expected to reach to \$5 billion in 2025, growing at a CAGR of 28-30%.
- › **500 million** online gamers by 2025.
- › **3 gaming unicorns** ie. Game 24X7, Dream11 and Mobile Premier League in India.

To know more about the Online Gaming Sector and its Regulation, kindly refer to Article 1.7. Regulation of Online Gaming in April 2023 edition of VisionIAS Current Affairs Magazine.

Different Stakeholders in the Online Gaming Industry and their associated Ethical concerns

Stakeholders	Interests	Ethical Concerns
Game developers	<ul style="list-style-type: none"> • Profitability • Increasing user base • Gaining popularity • Building brand reputation 	<ul style="list-style-type: none"> • Exploitative monetization practices • Unfair terms of service • Lack of representation of diverse population • Perpetuation of stereotypes • Age-inappropriate content
Gamers	<ul style="list-style-type: none"> • Entertainment • Fair play • Data privacy and security • Positive gaming environment 	<ul style="list-style-type: none"> • Gaming addiction • Differentiated treatment for players • Value depletion, toxicity, and harassment • Privacy issues • Unfair play and cheating
Regulatory bodies	<ul style="list-style-type: none"> • Consumer protection • Promoting ethical gaming environment • Promote fair competition 	<ul style="list-style-type: none"> • Gambling related issues • Illegal activities and their funding
Advertisers/Sponsors	<ul style="list-style-type: none"> • Maximising revenue • Brand visibility • Promoting fair advertising standards 	<ul style="list-style-type: none"> • Misleading advertisements • Surrogate advertising • Unfair trade practices
Content creators/Streamers	<ul style="list-style-type: none"> • Monetization • Sponsorships • Gaining influence 	<ul style="list-style-type: none"> • Intellectual property concerns • Transparency concerns • Toxicity, bullying and harassment

Key Principles Outlined in Code to overcome these concerns

- **Responsible Gaming:** Online gaming intermediaries (OGI) will advise their users to follow responsible gaming practices and take necessary precautions while playing.
 - OGI will allow users an **option to set time or spend limits for themselves.**
- **Safeguards for Minors (Age Gating):** All necessary safeguards to protect minors such as **displaying the ‘18/18+ only’ signage** will be instituted by OGI.
- **Fair Gaming:** OGI will publish on their website/platforms terms and conditions, privacy policy, nature of content in the online game etc.
 - **Anti-deception Measures** will ensure that games or contests are played only between real persons and against automated systems such as bots.
- **Financial Safeguards:** OGI will adopt best practices to **detect and prevent the use of its platform for money laundering** and other illegal activities.
- **Safe, Secure and Reliable Gaming:** OGI will ensure Safe, Secure and Reliable Gaming by **adhering to existing regulations for cyber security.**
- **Responsible Advertising:** Signatories endeavour to employ responsible advertising and marketing campaigns in conformity with existing laws, regulations, and guidelines for advertising.

Way Forward for an Ethical Online Gaming Sector

- **Consumer protection:** Applying standard consumer protection measures to evaluate the fairness of online gaming platforms such as in-game purchases.
 - One method that can be employed is the **test of acceptable quality** (i.e., meeting the reasonable expectation of utility and value).
- **Innovative system:** Gaming companies can introduce systems which incentivize players to praise one another for teamwork, positivity, and strategy. For instance, League of Legends’ “Honor” system was introduced by Riot Games.

“

“Games have been called the lab for the development of moral attributes, but they will not, of themselves, accomplish this purpose. They must be properly conducted by competent individuals.”



— James Naismith

”

- **Inclusiveness:** Game developers should strive to create inclusive narratives and characters that resonate with a wide range of players, regardless of their gender, ethnicity, or background.
- **Policy measures:** There is a need to implement policies that require companies to focus on age verification, cyber-security measures, and responsible gaming tools to prevent addiction and exploitation, particularly among minors.
- **Fostering Responsible Advertising and Marketing:** Regulations should address predatory marketing practices and ensure transparency in loot box mechanics and in-app purchases.
- **Balance Growth & Innovation:** Regulatory frameworks should be flexible enough to adapt to the evolving nature of gaming technology and emerging game genres.
- **Robust Data Protection:** Stringent data privacy regulations should be applied to ensure player data is collected, stored, and used ethically and responsibly.

Check your ethical aptitude

In 2017, Electronic Arts released a highly anticipated multiplayer game "Star Wars: Battlefront II". The game allowed players to purchase loot boxes with real money, which contained items that could significantly impact gameplay. The game's progression system was tied to loot boxes, impacting the overall player experience. Also, these loot boxes were randomized, and players had no guarantee of receiving desired items. This affected the gaming experience.

On the basis of the case, answer the following questions:

- What ethical concerns are evident in the above case study?
- Identify the elements of ethical design of such a game which enhances the overall user experience.
- How can it be ensured that online games focus on consumer protection?

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10. SCHEMES IN NEWS

10.1. RAISING AND ACCELERATING MSME PRODUCTIVITY (RAMP)

Why in news?

Union Minister for MSME launched three sub-schemes under the aegis of RAMP programme.

More on news

The three sub-schemes include:

Sub scheme	MSME Green Investment and Financing for Transformation Scheme (MSME GIFT Scheme)	MSE Scheme for Promotion and Investment in Circular Economy (MSE SPICE Scheme)	MSE Scheme on Online Dispute Resolution for Delayed Payments
About	Intends to help MSMEs adopt green technology with interest subvention and credit guarantee support.	First ever scheme to support circular economy projects which will be done through credit subsidy and will lead to realising the dream of MSME sector towards zero emissions by 2070 .	First of its kind scheme to synergise legal support with modern IT tools and Artificial Intelligence to address the incidences of delayed payments for Micro and Small Enterprises.

Raising and Accelerating MSME Productivity (RAMP)

Objectives	Salient features
<ul style="list-style-type: none"> Improving access to market and credit, Strengthening institutions and governance at the Centre and State, Improving Centre-State linkages and partnerships, Addressing issues of delayed payments and Greening of MSMEs. 	<ul style="list-style-type: none"> Ministry: Ministry of Micro, Small & Medium Enterprises. Type: Central Sector Scheme. Launch year: 2022 Duration: 2021-22 to 2025-26. Funding: Total outlay ₹ 6,062.45 crore (₹ 3,750 crore as loan from World Bank and remaining funded by the Government). Eligibility: <ul style="list-style-type: none"> MSME should be registered under Micro, Small, and Medium Enterprises Development (MSMED) Act, 2006. MSME should have a valid Udyog Aadhaar Number. Target: Improvement in performance of 5.55 lakh MSMEs. Key approach: <ul style="list-style-type: none"> Shall implement regulatory, financial, and implementation reforms as well as firm-level access reforms to provide targeted interventions to MSMEs. Seek to scale up implementation capacity and firm coverage in states of Gujarat, Maharashtra, Punjab, Rajasthan, and Tamil Nadu. Intended benefits: <ul style="list-style-type: none"> Address generic and Covid related challenges in MSME sector. Bolster inadequately addressed blocks of capacity building, handholding, skill development, quality enrichment, etc. Generate Employment, market promotion, and finance facilitation, and support to vulnerable sections. Usher in larger formalization resulting from the higher impact of the schemes covered under RAMP. Complement the Atmanirbhar Bharat Mission by fostering innovation and enhancement in industry standards.

Scan the QR code to know more about **MSME**.

Weekly Focus #72: Micro, Small, and Medium Enterprises (MSMEs): Backbone of the Indian Economy



11. APPENDIX

11.1. PRADHAN MANTRI AWAS YOJANA (PMAY-URBAN)

Pradhan Mantri Awas Yojana (PMAY-Urban)	
 Ministry	<ul style="list-style-type: none"> ▶ Launched in 2015 under the Ministry of Housing and Urban Affairs (MoHUA)
 Objective	<ul style="list-style-type: none"> ▶ Provide all-weather pucca houses to all eligible beneficiaries (family comprising of husband, wife, and unmarried children) in urban areas through States/UTs/Central Nodal Agencies.
 Beneficiaries	<ul style="list-style-type: none"> ▶ Economically Weaker Section (EWS) upto 3 lakh income. ▶ Low Income Group (LIG) having 3-6 lakh income. ▶ Middle Income Group (MIG) having 6-12 lakh income. ▶ EWS is eligible for Assistance in all four verticals of Missions whereas LIG/MIG category is eligible under only CLSS component of Mission.
 Four verticals	<ul style="list-style-type: none"> ▶ In-situ Slum Redevelopment (ISSR): Central Assistance of Rs.1 lakh per house is admissible for all houses built for eligible slum dwellers, using land as a resource with the participation of private developers. ▶ Credit Linked Subsidy Scheme (CLSS): Benefit of up to 2.67 lakh per house through Interest Subsidy of 6.5%, 4% and 3% on loan amounts up to Rs. 6 lakhs, Rs. 9 lakhs and Rs. 12 lakhs. ▶ Affordable Housing in Partnership (AHP): Central Assistance of Rs.1.5 Lakh per EWS house is provided by the Government of India in projects where at least 35% of houses in projects are for the EWS category and a single project has at least 250 houses. ▶ Beneficiary-led Construction/ Enhancement: Central Assistance up to Rs. 1.5 lakh per EWS house is provided to either construct new houses or enhance existing houses on their own.
 Type	<ul style="list-style-type: none"> ▶ Only CLSS is Central Sector Scheme, remaining is centrally sponsored scheme.
 Features	<ul style="list-style-type: none"> ▶ All houses under PMAY-U have basic amenities like toilets, water supply, electricity and a kitchen. ▶ Adopted a cafeteria approach to suit the needs of individuals based on the geographical conditions, topography, economic conditions, availability of land, infrastructure etc. ▶ Ensures dignified living along with a sense of security and pride of ownership to the beneficiaries ▶ Promotes women empowerment by providing the ownership of houses in the name of female members or in joint name. ▶ The minimum size of houses constructed under each component should conform to the standards provided in the National Building Code (NBC).

**Initiatives
under
PMAY (U)**

- ▶ **Direct Benefit Transfer (DBT):** Instalments are credited directly into the beneficiary's bank account as per the construction stage completed and geo-tagged.
- ▶ **CLSS Awas Portal (CLAP):** It is a common platform where all stakeholders i.e. MoHUA, Central Nodal Agencies, Primary Lending Institutions, Beneficiaries and Citizens are integrated in real time environment.
- ▶ **Capacity Building:** A total of 5% of allocation under the scheme is earmarked for Capacity Building, Information Education & Communication (IEC) and Administrative & Other Expenses.
- ▶ **Affordable Rental Housing Complexes (ARHCs):** MoHUA has also launched ARHCs, a sub-scheme under PMAY-U to provide dignified living to urban migrants/ poor near their workplace.
- ▶ **Light House projects (LHPs):** LHPs to be developed under Global Housing Technology Challenge - India (GHTC-India), will serve as live laboratories for different aspects of transfer of technology to the field.

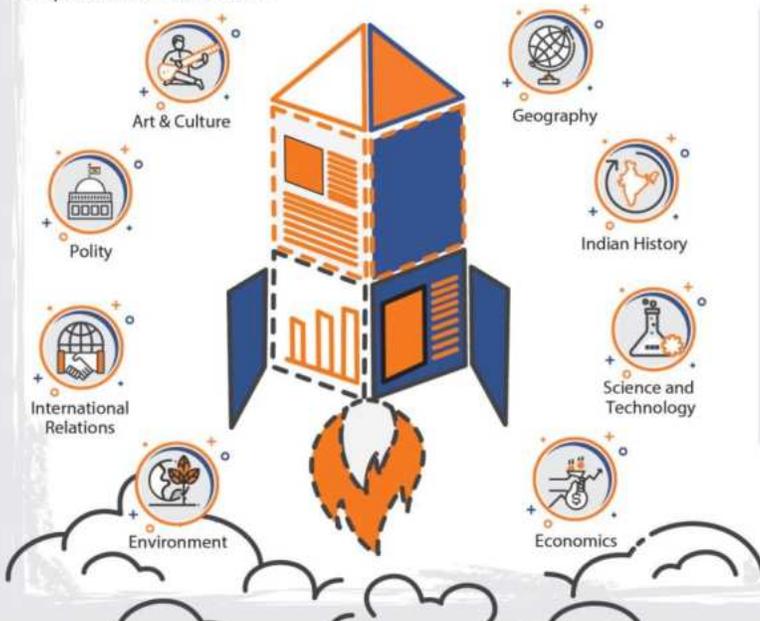
FAST TRACK COURSE 2024

GENERAL STUDIES PRELIMS



PURPOSE OF THIS COURSE

The GS Prelims Course is designed to help aspirants prepare for & increase their score in General Studies Paper I. It will not only include discussion of the entire GS Paper I Prelims syllabus but also that of previous years' UPSC papers along with practice & discussion of Vision IAS classroom tests. Our goal is that the aspirants become better test takers and can see a visible improvement in their Prelims score on completion of the course.



INCLUDES



Access to recorded live classes at your personal student platform.



Comprehensive, relevant & updated Soft Copy of the study material for prelims syllabus.



Access to PT 365 classes

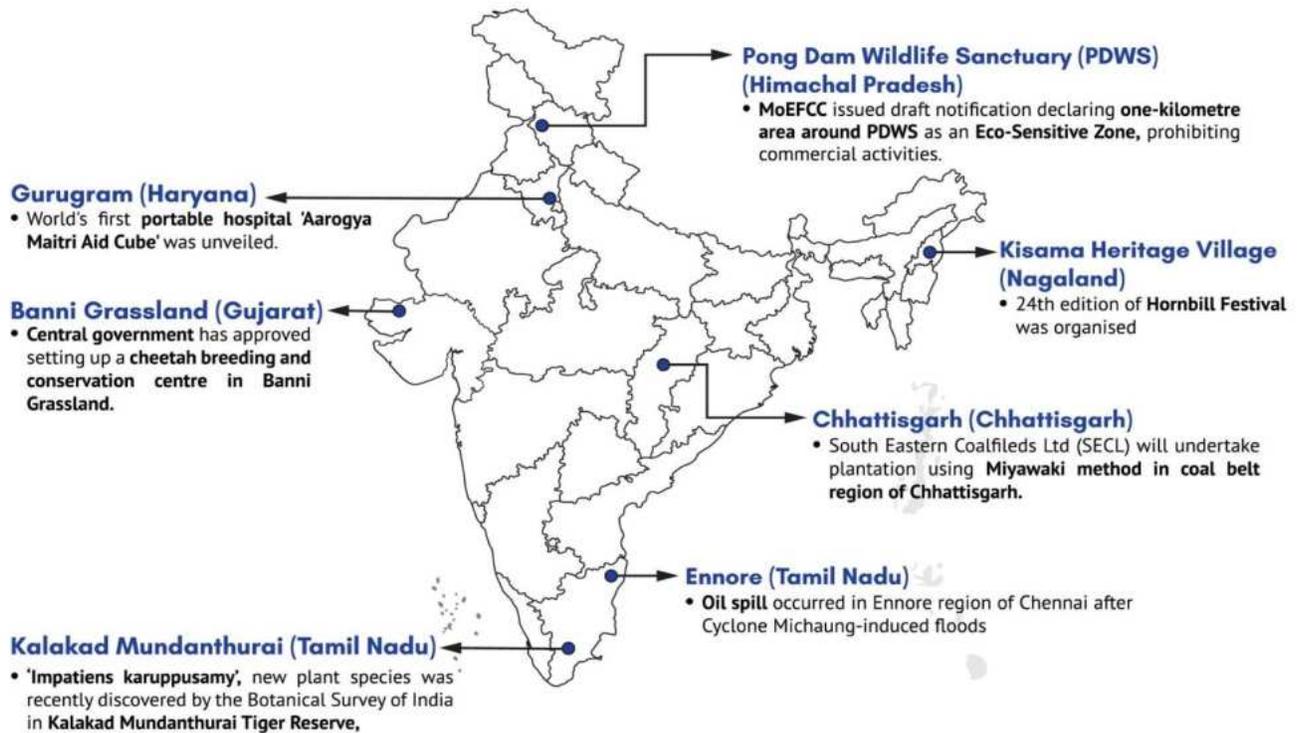


Sectional mini test and Comprehensive Current Affairs.

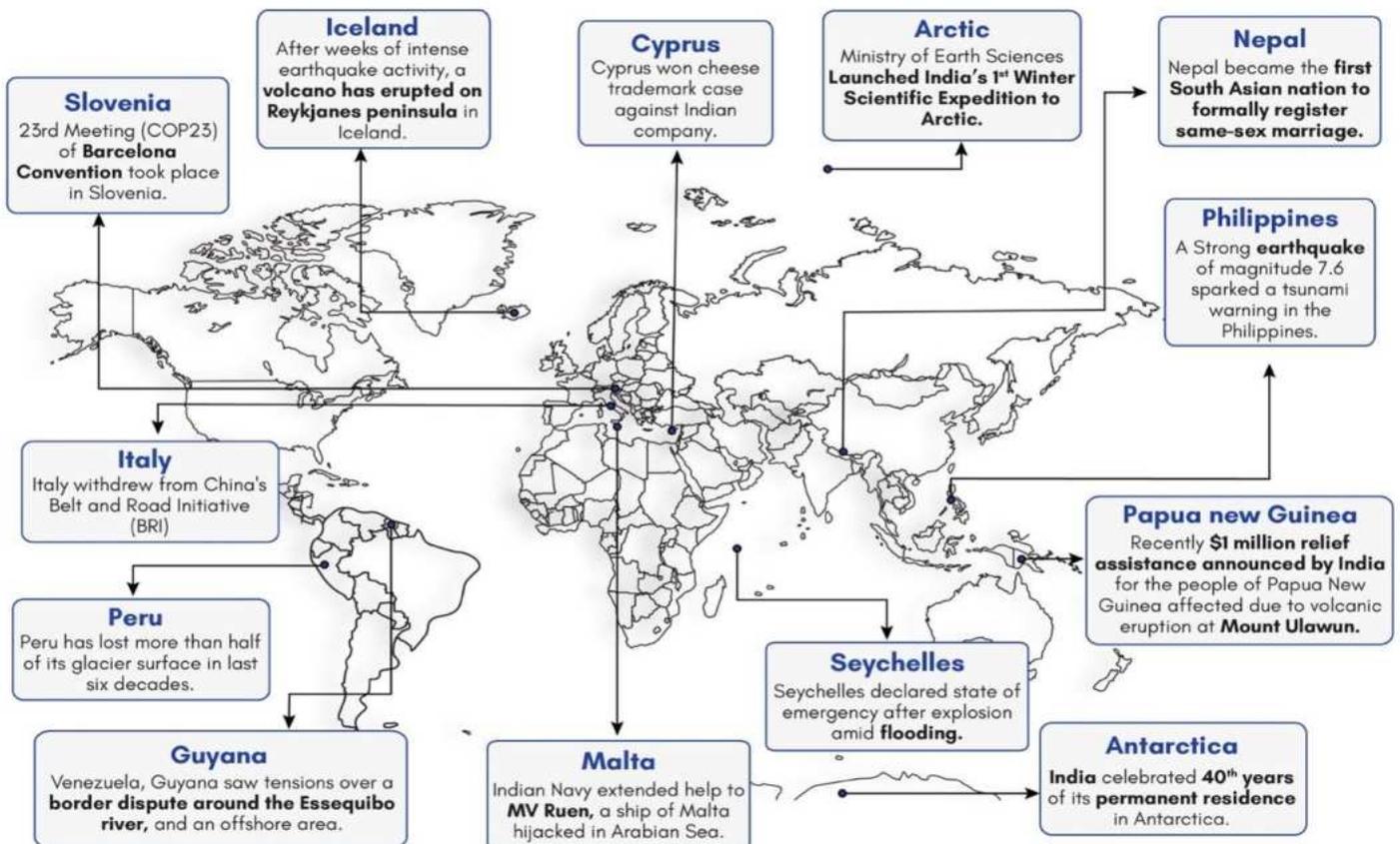
Starts:

1 DEC, 5 PM

Places in News: India



Places in News: World



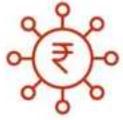
Personalities In News

Personality	About	Ethical Values Exhibited by the Personality
 <p>Pa Togan Nengminja Sangma</p>	<p>Pa Togan Nengminja Sangma</p> <ul style="list-style-type: none"> • He was remembered on his death anniversary. • He was a Garo tribal leader from Garo Hills (Meghalaya). • Contributions: <ul style="list-style-type: none"> ▶ After first Anglo-Burmese war (1824-1826), British decided to occupy Brahmaputra valley. <ul style="list-style-type: none"> ■ In 1872, British took extreme measure of occupying the entire Garo Hills. ▶ He organised people of his community from both hills and plains. ▶ In 1872, he launched attack against British troops at Rongrengiri and refused to bow down to British forces. 	<p>Courage and Inclusive Leadership</p> <ul style="list-style-type: none"> • Demonstrated by his resistance against British forces and leadership during the attack at Rongrengiri.
 <p>Sakharan Ganesh Deuskar (1869-1912)</p>	<ul style="list-style-type: none"> • He was remembered on his birth anniversary. • Contributions : <ul style="list-style-type: none"> ▶ A revolutionary journalist and close associate of Sri Aurobindo. ▶ He was one of the major architects of the Indian Renaissance, <ul style="list-style-type: none"> ■ Acted as a bridge between Maharashtra and Bengal's Renaissance. ▶ He published book named Deshar Katha in Bengali. <ul style="list-style-type: none"> ■ Book was based on the exploitation of the Indian economy by colonial British rule. ■ Book was translated into Hindi as Desh Ki Baat. 	<p>Intellectual Curiosity and Innovativeness</p> <ul style="list-style-type: none"> • His quest for knowledge and understanding of socio-political dynamics. • In bridging diverse cultural movements and introducing new ideas through journalism.
 <p>Bhai Parmanand (1876-1947)</p>	<ul style="list-style-type: none"> • He was freedom fighter, member of Arya Samaj, leader of Hindu Mahasabha. • Contributions : <ul style="list-style-type: none"> ▶ In 1905, went to South Africa and met Mahatma Gandhi. ▶ In 1911, met Lala Har Dayal and persuaded him to go to America for propagation of ancient culture of Aryan people. ▶ Founder member of Ghadar Party. ▶ Was arrested in Lahore conspiracy case. <ul style="list-style-type: none"> ■ Sentenced to death in 1915, which was commuted to life imprisonment. ▶ Books written: Tarikh-i-Hind (in Urdu). 	<p>Resilience and Cultural Preservation</p> <ul style="list-style-type: none"> • Shown in his persistent efforts in freedom activities despite facing imprisonment and exile. • His dedication in maintaining and promoting Indian culture and heritage.
 <p>Taraknath Das (1884-1958)</p>	<ul style="list-style-type: none"> • He was an Indian revolutionary with a global outlook. • Contributions: <ul style="list-style-type: none"> ▶ Was a member of Anushilan Samiti. ▶ Launched organizations of Indian students and labourers on West Coast of USA. ▶ In his quest to mobilize resources for Indian independence he journeyed through four continents. ▶ Associated with Lala Har Dayal of Gadar Party. ▶ Founded "The Free Hindustan" newspaper (1908). ▶ His Book: India in World Politics. 	<p>Global Perspective and Nationalism</p> <ul style="list-style-type: none"> • His ability to connect the Indian independence movement with international audiences. • His unwavering commitment to India's independence and efforts to promote its cause internationally.

 <p>Rukmini Lakshmipathi (1892-1951)</p>	<ul style="list-style-type: none"> • She was freedom fighter, social reformer from Andhra Pradesh's West Godavari district. • She was influenced by Mahatma Gandhi, C Rajagopal-achari, and Sarojini Naidu. • Contributions <ul style="list-style-type: none"> ▸ Participated in Civil disobedience, Salt Satyagraha of 1930 in Vedaranyam of Madras Presidency. <ul style="list-style-type: none"> ▪ She became first female prisoner in Salt Satyagraha movement. ▸ Was elected to Madras Legislative Council. Later, became first woman to become a member of Legislative Assembly. ▸ In 1946, served as a minister of health in Madras Presidency cabinet, becoming first woman Minister in state. 	<p>Fortitude and Social Reformer</p> <ul style="list-style-type: none"> • Demonstrated by her steadfastness in the face of challenges during the freedom struggle. • Her commitment to social change and empowerment, particularly for women.
 <p>Baba Raghav Das (1896-1958)</p>	<ul style="list-style-type: none"> • Birth anniversary of Baba Raghav Das, popularly known as 'Poorvanchal Gandhi', was observed recently. • Baba, born at Pune, Maharashtra, made 'YogirajAnant-Mahaprabhu' his guru. • Gandhiji during his visit to Gorakhpur in 1921 called him Baba. • Contributions: <ul style="list-style-type: none"> ▸ He accompanied Gandhiji during the 1930 Dandi March. ▸ Took part in Vinoba Bhave's Bhoodan movement, in 1951. ▸ Started leprosy homes and degree college in Deoria, U.P. ▸ Served as a Member of the Legislative Assembly in 1948. 	<p>Altruism and Spiritual Integrity</p> <ul style="list-style-type: none"> • His selfless service to the needy and marginalized such as establishing leprosy homes. • He integrated spiritual principles into his social and political activism.
 <p>Shri. Ramasamy Venkataraman (1910-2009)</p>	<ul style="list-style-type: none"> • Birth anniversary of 8th President of India Shri Venkataraman was observed. • He was born at Rajamadam, Tamil Nadu. • Contributions <ul style="list-style-type: none"> ▸ He was an active participant in the Quit India Movement of 1942 and was detained for two years for his activities. ▸ In 1944, he established many labour unions for the welfare of the labour force. ▸ He was a member of the Constituent Assembly. ▸ In 1952, he was elected to the first Parliament. ▸ Also, served as Vice President of India. 	<p>Integrity and Compassion</p> <ul style="list-style-type: none"> • His adherence to ethical principles throughout his political career. • Demonstrated in his efforts to establish labour unions and advocate for workers' welfare.
 <p>Bina Das (24 Aug 1911-26 Dec 1986)</p>	<ul style="list-style-type: none"> • Bina Das, a revolutionary from West Bengal, hailed from a family involved in the Brahmo Samaj and the freedom struggle. <ul style="list-style-type: none"> ▸ Her father inspired Subhas Chandra Bose. • Contribution <ul style="list-style-type: none"> ▸ In 1932, she attempted to assassinate Bengal Governor Stanley Jackson (to protest against the British) at the University of Calcutta but faced failure, leading to a nine-year imprisonment. ▸ Later, she joined Congress, took part in the Quit India movement (1942), and served in Bengal Provincial Legislative Assembly (1946 to 1947) and West Bengal Legislative Assembly (1947 to 1951). • Awards: She was accorded Padma Shri for her contributions in social work. • Others: Dhira Dhar translated her Bengali autobiography. 	<p>Revolutionary Zeal and Empathy</p> <ul style="list-style-type: none"> • Reflected in her bold actions in challenging colonial authority. • Her social work and political activities aimed at improving the lives of her fellow Indians.

WEEKLY FOCUS

Holistic coverage of the issue every week

TOPIC	DESCRIPTION	READ MORE
 SpaceTech Industry: From Curiosity to Reality	In the midst of a technological renaissance, India's Spacotech industry emerges as a beacon of innovation and advancement, marking a pivotal chapter in the nation's journey towards becoming a prominent player in the global SpaceTech arena. This document explores the burgeoning sector's trajectory, innovations, and the pivotal role it plays in national development and beyond.	
 Digital Inclusion in India: Building a Connected and Empowered Nation	Embracing the digital era, India stands at a critical juncture in leveraging technology for inclusive growth and equitable access. This document provides an analysis of the current state, challenges, and opportunities of digital inclusion in India. It explores the multifaceted efforts to bridge the digital divide and outlines strategic recommendations to further drive the agenda of digital inclusivity.	
 Investment Ecosystem in India	Amidst a rapidly globalizing world, India stands out as a land of opportunities, offering diverse and innovative investment options. Exploring the profound impact of investment on a developing economy like India, the document outlines the strategic measures adopted by the government to attract investments. It further acknowledges the existing challenges, and proposes solutions to enhance India's competitiveness in the global investment arena.	
 Social Identities and Structural Transformation in India	In India's complex societal fabric, the interplay of social identities with structural transformation poses unique challenges and opportunities for inclusive development. This document examines the relationship between social identities and structural change, and how policies influence this nexus. It suggests strategies for aligning India's structural evolution with the empowerment of all social groups, aiming for equitable and enduring progress.	

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A Dual-Layered Strategy for Current Affairs

Strengthening Your Foundation



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Devote an hour daily to reading newspapers for a comprehensive understanding of global and national events.



News Today: Context Simplified

Complement daily newspaper reading with News Today, offering a concise overview of current affairs in 180 or 80 words. This resource aids aspirants in identifying crucial news, understanding technical terms, and grasping phenomena.



Monthly Current Affairs Magazine: In-Depth analysis

Dive into the Monthly Current Affairs Magazine for comprehensive coverage and detailed analysis of events. This facilitates understanding the context, significance, and implications of various events across diverse areas.

Mastering the Preparation & Revision



Weekly Focus: Strengthening Foundations

Refer to Weekly Focus to solidify your understanding of a topic, covering static and dynamic components along with various aspects and dimensions of a major issue.



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The Quarterly Revision Document of Vision IAS is useful resource for students who have missed reading monthly updates for 2-3 months. It supports on going learning by providing a summary of key developments.



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“Remember, Current Affairs is not just about memorisation but understanding the broader implications and interlinkages of events. Approach it with curiosity; over time, it becomes less of a chore and more enlightening experience.

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1. Schemes in News: Stay Updated, Stay Ahead!

This section **keeps you abreast of the latest developments**, ensuring that your preparation is not only comprehensive but also relevant to the recent quarter. This real-time integration of information empowers you to confidently approach the exam, armed with the latest knowledge.

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Developing an eye for identifying the kind of news that should be read in the newspapers.



Understanding the different technical terms, complex phenomenon appearing in news.



Key Features of News Today Document

- **Sources:** It covers multiple sources like the Hindu, Indian Express, PIB, News on Air, Economic Times, Hindustan Times, the Mint etc.
- **Segments:** It covers primary News of the day, Also in News and special focus on Personalities and places in News in 4 pages.
- **Primary News of the Day:** It covers main news of the day in less than 180 words. The main focus of this news is to cover the recent development in detail i.e. providing primary level of information so that the aspirant can at least get an idea of the different things that are going on.
- **Also in News and Places in News/Personality in News:** It covers in 80 words like important terms appearing in the news, Protected areas & Species in News etc.



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- **Resources:** You'll find links in the description to the "News Today" PDF document, which complements your video experience, and an MCQ quiz with questions and answers to solidify your learning.



Watch News Today Video Bulletin every day at 9 PM



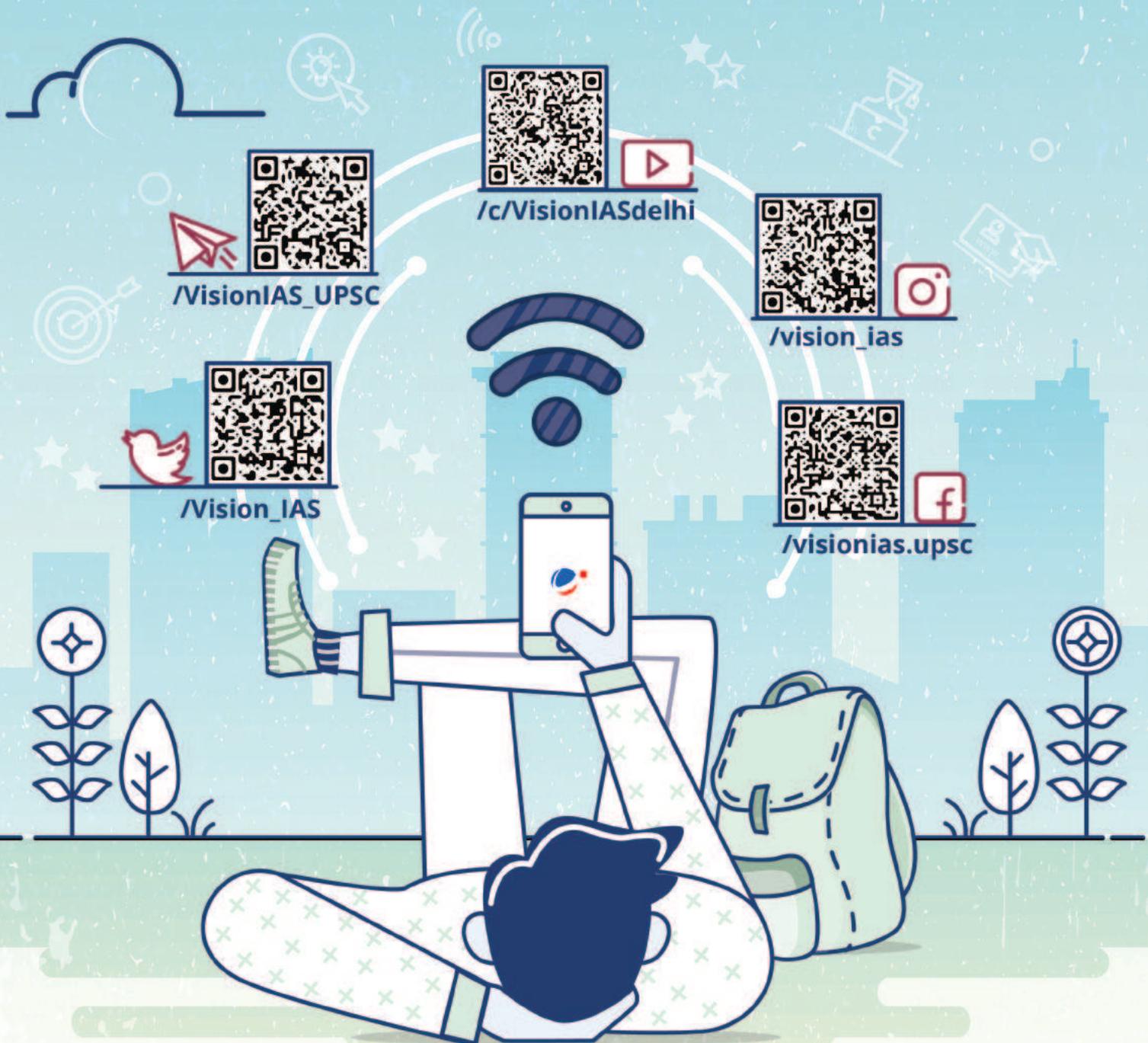
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to all Successful Candidates

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Selections
in CSE 2022**



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AIR**
Ishita Kishore



**2
AIR**
Garima Lohia



**3
AIR**
Uma Harathi N

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Selections
in CSE 2021**



**2
AIR**
ANKITA AGARWAL



**3
AIR**
GAMINI
SINGLA



**4
AIR**
AISHWARYA
VERMA



**5
AIR**
UTKARSH
DWIVEDI



**6
AIR**
YAKSH
CHAUDHARY



**7
AIR**
SAMYAK S
JAIN



**8
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