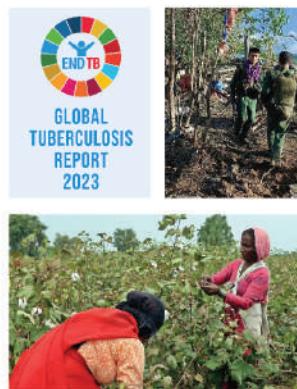
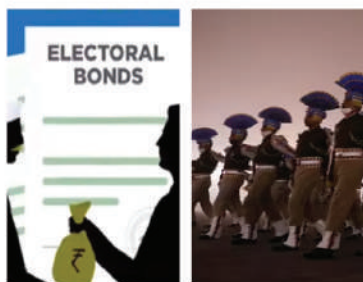




VAJIRAM & RAVI
Institute for IAS Examination

the recitals

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One Portal For Drug Control

The integrated IT platform that apex drug regulator (CDSCO) has been working on will be able to track products right from the stage of procuring raw material, to supply chain, and finally patterns of consumption.

DRUGS Regulation in India

- The Drugs and Cosmetics Act, 1940 and Rules 1945: These have entrusted various responsibilities to central and state regulators for regulation of drugs and cosmetics.
- Central Drugs Standard Control Organisation (CDSCO): The CDSCO under the Directorate General of Health Services, Ministry of Health & Family Welfare, is the National Regulatory Authority (NRA) of India.

- Under the Drugs and Cosmetics Act, CDSCO is responsible for

Approval of Drugs



Conduct of Clinical Trials.



Laying down the standards for Drugs.



Control over the quality of imported Drugs in the country.



Coordination of the activities of State Drug Control Organizations.



Further CDSCO along with state regulators, is jointly responsible for grant of licences of certain specialised categories of critical Drugs such as vaccine and sera, etc.



- The Indian government has announced plans to subject all medical devices, including implants and contraception, to CDSCO scrutiny.
- Drugs Controller General of India (DCGI): DCGI is the head of department of the CDSCO responsible for approval of licences of specified categories of drugs such as blood and blood products, IV fluids, vaccines and sera in India.
- DCGI also sets standards for manufacturing, sales, import, and distribution of drugs in India.

Idea To Create One Portal For Drug Control

- **The idea to create a unified portal** was first proposed during a Chintan Shivir (brainstorming session) earlier this year (in February 2023).
 - **The brainstorming session brought all stakeholders** together to discuss ways to improve the regulatory framework after a series of incidents came to light.
 - **For example**, the Indian manufactured syrups were found to be contaminated and were even linked to deaths of children in the **Gambia and Uzbekistan**.
 - At the same meeting, it was decided that the **global standard for good manufacturing practices** will be made mandatory for all Indian companies.
 - The government has already asked around 8,000 smaller companies that do not comply with it to do so.
- **Now, a team has been formed** that is dedicated to working on developing the portal and getting it up and running.
- The online platform **will need to be compatible with other government portals** such as the Government e-Marketplace, Bureau of Indian Standards and Clinical Trial Registry.

About The Drug Portal And Its Functions

- The government has called for **software service providers to develop the system**.
- Apart from **manufacturers, distributors and retailers** will also need to upload their invoices on the portal for this end-to-end tracking to become possible.
- The portal will create provisions to capture information from various stakeholders routinely **“similar to ITR returns and GST filing”**.

- Once operational, all other portals used by drug regulators will be discontinued. Hence, the portal **will become a single window** for all drug regulatory activities.
- **It will share information** about spurious and not of standard quality medicines with state regulators to tackle the problem of the movement of these drugs across state boundaries.
- **Investigations and prosecution launches** will also be done through the portal in such cases.
- It will also have **a provision to sign documents using authentication mechanisms** like OTP, Aadhaar, PAN card, and DigiLocker.
- It will also **help track all types of court cases** for prosecution and convictions.
- The upcoming portal **will have separate dashboards for separate stakeholders**, allowing them access to custom reports on a need-to-know basis.

Significance Of The Drug Portal

- The integrated IT platform will bring in **transparency and uniformity** in all the processes (of drug manufacture and distribution) and **create confidence in domestic and international markets**.
- The platform **will bring online activities that are still done physically** like periodic safety updates, show cause notices, adverse event reporting and post approval changes.
- **The portal will help improve inspections** by assigning inspectors at random to various sites in a masked manner, randomised allocation of work such as
 - Processing applications for licences and approvals, and
 - Assigning QR codes to samples collected and reports to allow verification at every stage of the process.
- **It will also automatically generate officials' performance reports.**
- **The portal will create searchable registries** of manufacturers, marketers, retailers, pharmacies, and even subject matter experts.



Global TB Report 2023

According to the **WHO's** Global TB report 2023, India accounted for the highest number of tuberculosis (TB) cases in the world in 2022, representing a staggering **27% of the global burden**. Overall, 30 high burden TB countries [like Indonesia (10%), China (7.1%), the Philippines (7.0%), Pakistan (5.7%)] accounted for 87% of the world's TB cases in 2022.

About Tuberculosis (TB)

- It is an **infectious disease** (world's deadliest infectious killer) usually caused by Mycobacterium tuberculosis (MTB) **bacteria**, which generally affects the **lungs** (Pulmonary TB), but can also affect other parts of the body (Extrapulmonary).
- **It is spread** from one person to the next through the **air** when people who have active TB in their lungs cough, spit, speak or sneeze.
- Most infections show **no symptoms**, which is also known as **latent tuberculosis**. People with latent TB do not spread the disease.
- **Prevention of TB:**
 - It involves screening those at high risk, early detection and treatment of cases and vaccination with the **Bacillus Calmette-Guérin (BCG)** vaccine.

- **Drug resistant TB:**

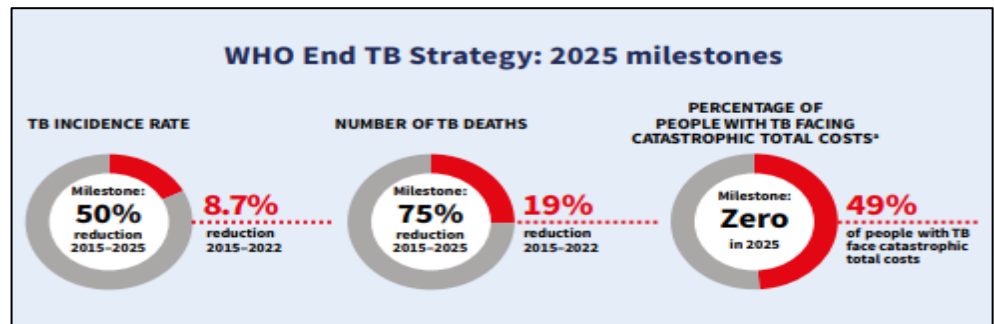
- A person has drug resistant TB if the TB bacteria that the person is infected with, **will not respond to** (or resistant to), at least one of the main TB drugs.
- **There are two main types** of drug resistant TB - MDR (multidrug-resistant) TB and XDR (extensively drug-resistant) TB.
 - **MDR TB** is when the bacteria that are causing it are resistant to **at least isoniazid and rifampicin**, two of the most effective TB drugs.
 - **XDR TB** is defined as strains resistant to isoniazid and rifampin, plus any fluoroquinolone and at least one of three injectable second-line drugs (i.e., amikacin, kanamycin, or capreomycin).

- **WHO's END TB Strategy**

- It was adopted in **2014** with the aim to end the TB epidemic globally by 2035.
- **It aims at 95% reduction by 2035** in the number of **TB deaths** compared with 2015, **90% reduction by 2035** in the **TB incidence rate** compared with 2015 and **Zero TB-affected families** facing catastrophic costs due to TB by 2035.

Highlights of Global TB Report 2023

- Featuring data from **192 countries** and areas, the report reveals that **7.5 million people were diagnosed with TB in 2022**, marking the **highest figure recorded** since WHO began global TB monitoring in 1995.



- The TB incidence rate (new cases per 100,000 population per year) rose by 3.9% between 2020 and 2022, reversing declines of about 2% per year for most of the past two decades.
 - The increase is attributed to **a good recovery in access to and the provision of health services in many countries**.
 - **India, Indonesia, and the Philippines**, which together accounted for over 60% of the global reductions in the number of people newly diagnosed with TB in 2020 and 2021, **all recovered to beyond pre-pandemic levels in 2022**.

Status of TB In India - Findings of The Global TB Report 2023

- **India recorded 2.8 million TB cases in 2022**, with a **case fatality ratio of 12%**.
- The best estimate of **the number of deaths in India** from TB was 3,42,000 (3,31,000 among HIV-negative people and 11,000 among those with HIV).
- The report highlights that **MDR-TB remains a public health crisis**, with 1.1 lakh cases recorded in India in 2022.

Areas Where India Made Tremendous Progress

- India has made tremendous progress in **improving case detection and reversed the impact of COVID-19** on the TB programme.
 - The case detection strategies have resulted in the **highest ever notification of cases** in 2022 - over 24.22 lakh TB cases were notified, surpassing the pre-COVID levels.

- The **treatment coverage has improved to 80%** of estimated TB cases, an increase of 19% over the previous year.
- India's efforts have resulted in **reduction of TB incidence by 16% in 2022** (from 2015) almost double the pace at which global TB incidence is declining (which is 8.7%).
- **The mortality of TB has also reduced by 18%** during the same period in India and globally.

Key Initiatives Launched and Scaled up by GoI

- **What has resulted in significantly bridging the gap in missing cases?**
 - Specialised active case finding drives,
 - Scaling up of molecular diagnostics to block levels,
 - Decentralisation of screening services through Ayushman Bharat Health & Wellness Centres
 - Private sector engagement.
- **PM TB Mukh Bharat Abhiyan:** This has received a tremendous response across the country with over 1 lakh **Ni-kshay Mitras** coming forward to adopt over 11 lakh TB patients.
- **Ni-kshay Poshan Yojana:** About Rs 2613 Cr have been disbursed to over 95 lakh TB patients since its launch in 2018.
- **Newer patient centric initiatives:** Like Family Caregiver Model and Differentiated Care have been introduced to ensure further reduction in mortality and improvement in treatment success rates.
- **National TB Elimination Programme:** India has prioritised TB elimination efforts with investing additional resources to the Programme, which is being implemented under the aegis of the **National Health Mission**.

Way Ahead Recommended in the Global TB Report 2023

- **TB preventive treatment:** For people living with HIV, prevent household contacts of those with bacteriologically confirmed pulmonary TB, and clinical risk groups (e.g., those receiving dialysis).
- **Addressing the co-epidemics of TB and HIV:** Among all incident cases of TB in 2022, 6.3% were people living with HIV; this proportion has been steadily declining for several years.
- **Increasing access to early and accurate diagnosis:** Using a molecular WHO-recommended rapid diagnostic test is one of the main components of TB laboratory-strengthening efforts under the End TB Strategy.
- **Research and innovation:** The diagnostic pipeline has expanded considerably in terms of the number of tests, products or methods in development.
- **Progress towards universal health coverage (UHC)** along with better levels of social protection and multisectoral action on broader TB determinants are all essential to reduce TB burden.
- **Augmenting TB Finance:** There was a decline in global funding available on essential TB services from US\$ 6.5 billion in 2019 to US\$ 5.8 billion in 2022, which is less than half of the global target.



Odisha Readies Draft of PESA Act Rules

Post 27 years of the enactment of the Panchayat (Extension to Scheduled Areas) Act, 1996, Odisha has finally introduced the draft of the Odisha Gram Panchayats Extension to Scheduled Areas (PESA) Rules, 2023.

- ✓ The draft aims to bring clarity regarding gram sabhas' role (a body of all the registered voters of the village) & power in respect to acquisition of land, minor minerals & grant of prospecting license or mining lease, control over intoxicants & prevention of alienation of land in the scheduled areas and control over the markets.

About the PESA Act, 1996 (Enacted to extend the provisions of the 73rd Constitutional Amendment)

- Throughout a significant portion of history, the majority of India's tribal communities operated under their distinct federal governance structures. However, the administration during the colonial era and post-independence significantly altered the traditional Adivasi governance system.
- The PESA Act in 1996 aimed to preserve and support the customary decision-making processes.
- The PESA conferred absolute powers to Gram Sabha, whereas state legislature has given an advisory role to ensure the proper functioning of Panchayats and Gram Sabhas.
 - ✓ Ten states — Andhra Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Rajasthan, and Telangana — have notified Fifth Schedule areas that cover (partially or fully) several districts in each of these states.

What? (Main Aim is to protect tribals from exploitation)

Tribals had a long-standing demand to control their own affairs. Thus, PESA was introduced in the fifth schedule areas (*By Bhuria Committee recommendation*) to enable tribal self-rule and the provisions of Panchayats were extended to the tribal areas of Fifth Schedule states.

Need

1. **Marginalized Sections of Society**- For long, the tribal communities in India have been facing issues like displacement, loss of land and resources, and cultural erosion etc. And been excluded from the mainstream political and economic systems.
2. **Greater Autonomy**- It aims to provide greater autonomy to the scheduled areas which are predominantly tribal and to protect their forest and land rights.
3. **Special Powers to Gram Sabhas**- in Scheduled Areas for managing resources.

Provisions

- **Gram Sabha (village assemblies)**: established as a forum for community participation in the development process and was given the responsibility of identifying development projects, preparing and implementing development plans.
 - ✓ The Act recognizes Gram Sabhas as the decision-making body in tribal areas.
- **Village-Level Institutions**: including Gram Panchayat, Gram Sabha, and Panchayat Samiti to carry out development activities and provide basic services to the community.
- **Powers & Functions**: related to the management of natural resources like Jal, Jungle, Jameen (the three major demands of tribals that is 3J's land, water, and forests), the protection of the environment, and the regulation of economic activities are given to Gram Sabha & Gram Panchayat.
 - ✓ Judicial powers: Dispute resolution as per traditional laws and customs
- **Consultation**: before any development projects or activities to undertaken in the Scheduled Areas should done with the Gram Sabha.

Fifth Schedule of Indian Constitution

[Article 244(1)]

- *It deals with the management and administration of Scheduled Areas and Scheduled tribes in states with predominant tribal population except Assam, Mizoram, Tripura and Meghalaya.*
- *Only the President can declare an area a Scheduled Area or remove the whole or any specified part of a Scheduled Area from Scheduled Area list and only he can increase or decrease the area of any Scheduled Area in a State after consultation with the Governor of that State and alter its boundary lines but only by way of rectification of boundaries.*
 - ✓ **Criteria for Scheduled Area (as per Dhebar Commission)**- preponderance of tribal population (not less than 50%), Compactness and reasonable size, underdeveloped nature of area and lower economic standard of population compared to neighboring areas.
- *A Tribes Advisory Council (TAC) (consisting of 20 members) must be established in each State, having Scheduled Areas to deal with the welfare and advancement of Scheduled tribes in states.*
- *The Governor of each State having Scheduled Areas makes a report to the President regarding the administration of the Scheduled*

• Funds: to be transferred to the Gram Sabha and the Gram Panchayat to enable them to perform their functions. • Land: Consent of tribal communities should be obtained before any land acquisition or transfer to protect their land rights. • Cultural and Social Practices: of the tribal communities in the Scheduled Areas to be protected and prohibits any interference.	<i>Areas in that State.</i>
Significance • Empowerment of tribal communities & Promotion of decentralization: by giving them a greater say in the development process through the Gram Sabha and the Gram Panchayat. • Protection of land rights: as Gram Sabha consent is mandatory before any land is acquired or transferred. This has helped to prevent the exploitation of tribal communities by outsiders. • Preservation of cultural and social identity: by protecting the traditions and way of life of tribal communities and not allowing any external interference. • Improved access to basic services: such as education, healthcare, and drinking water, in the Scheduled Areas.	Limitations • Limited coverage: The act is only limited to the tribal communities living in the scheduled areas and doesn't include tribal communities from non-scheduled areas. • Lack of awareness: Many tribal communities in the Scheduled Areas have no knowledge about their rights and entitlements under the PESA Act. • Limited resources & Lack of trained personnel: with Gram Sabha and Gram Panchayats to carry out their functions effectively. • Political interference: in Gram Sabha decisions as they need to be consulted every time there is a question regarding any land. • Conflicts with other laws: such as the Forest Rights Act and the Wildlife Protection Act, which can hinder PESA implementation.

Extra Mile: Case Studies of Successful Implementation of PESA Act

The effectiveness of PESA implementation often depends on local governance structures, community engagement, and adherence to the principles outlined in the act. Here are a few examples that were reported as relatively successful:

- **Gadchiroli District, Maharashtra:** The district has seen active participation of Gram Sabhas in decision-making processes related to natural resource management, development plans, and cultural preservation.
- **Kalahandi District, Odisha:** This district has witnessed efforts to strengthen Gram Sabhas and involve local communities in decision-making. The implementation of PESA here has led to increased awareness and participation of Scheduled Tribes in the governance of their areas.



IAS Coaching Centers Being Probed by the CCPA

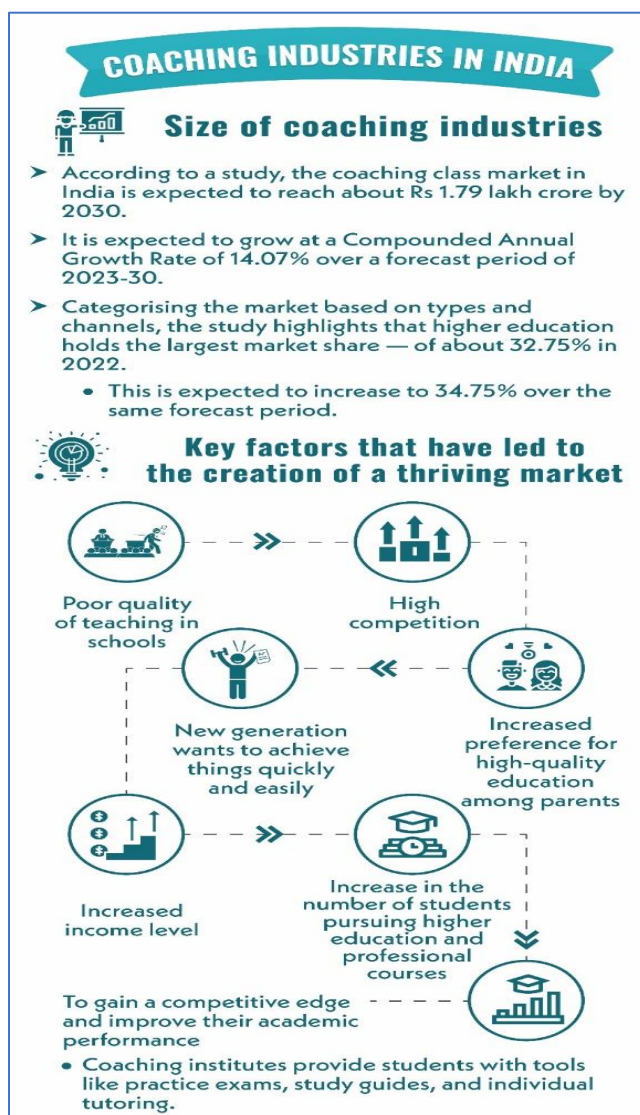
The Central Consumer Protection Authority (CCPA) is probing around 20 IAS coaching institutes and has slapped a fine of Rs.1 lakh on four of them for making misleading claims in their advertisements and for unfair trade practices.

Background

- This action came in response to the results of any competitive exam, including the UPSC Civil Services as whenever the results are announced, coaching institutes go on an advertising spree and use the names and

pictures of the top rankers to indicate their enrolment at the institute without disclosing the nature of enrolment i.e., the course pursued at the institute.

- CCPA observed that most rank holders shown in the advertisements enrolled only for mock interviews at these institutes which were mostly free of cost as it served their own interests. Such information was also not disclosed in the advertisements.
- Some institutes were given an opportunity to make their submissions against the allegations of exaggerated claims which revealed some of the same concerns raised by the CCPA. For example, one coaching Institute claimed that 682 of the 933 selected belonged to their institute out of which 673 students took only mock interviews.
- This behaviour qualified as deliberate concealment of important information and was categorized as a 'misleading advertisement' under Section 2(28) of the Consumer Protection Act, 2019.
 - ✓ *Section 2(28) defines misleading advertisements as any advertisement which-*
 - *Falsely describes any product or service or;*
 - *Gives a false guarantee or misleads the consumers as to the nature, substance, quantity or quality of any product or service or;*
 - *Conveys an express or implied representation which, if made by the manufacturer or seller or services provider thereof, would constitute an unfair trade practice or;*
 - *Deliberately conceals important information.*



About The Consumer Protection Act (CPA), 2019

The CPA 2019 replaced the Consumer Protection Act, 1986 which gave single point access to justice and provided for a three-tier consumer dispute redressal machinery at the National (NCDRC- National Consumer Disputes Redressal Commission/National Commission), State (State Commissions) and District levels (District Fora).

**** Centre notified rules for Consumer Protection (Jurisdiction of the District Commission, the State Commission and the National Commission) Rules, 2021** under which pecuniary jurisdiction for entertaining consumer complaints was revised up to -

- 1) 50 lakhs for District Commissions,
- 2) More than ₹50 lakh to ₹2 Crore for State Commissions and

CONSUMER PROTECTION ACT 1986	PROVISIONS	CONSUMER PROTECTION ACT 2019
No separate regulator	Regulator	Central Consumer Protection Authority (CCPA) to be formed
Complaint could be filed in a consumer court where the seller's (defendant) office is located	Consumer court	Complaint can be filed in a consumer court where the complainant resides or works
No provision. Consumer could approach a civil court but not consumer court	Product liability	Consumer can seek compensation for harm caused by a product or service
District: up to ₹20 lakh State: ₹20 lakh to ₹1 cr National: above ₹1 cr	Pecuniary jurisdiction	District: up to ₹1 cr State: ₹1 cr to ₹10 cr National: Above ₹10 cr
No provision	E-commerce	All rules of direct selling extended to e-commerce
No legal provision	Mediation cells	Court can refer settlement through mediation

3) More than ₹2 Crore for National Commission

Key Provisions-

Consumer has the following six consumer rights under the Act: 1) Right to Safety; 2) Right to be Informed; 3) Right to Choose; 4) Right to be heard; 5) Right to seek Redressal; 6) Right to Consumer Awareness.

Consumer Disputes Redressal Agencies/Consumer protection councils/Commissions: established at three levels- Centre (NCDRC), State (SCDRC) and District (DCDRC) to render advice on promotion and protection of consumer rights under this act.

Procedure for filing the complaint before Consumer Commission:

A complaint 1) Should be in writing; 2) Can be filed in a regular way (offline) or online (e-Daakhil portal)

** E-Daakhil has many features like e-Notice, case document downloads link & VC hearing link, filing written response by opposite party, filing rejoinder by complainant and alerts via SMS/Email.

**A complaint can be presented by the complainant in person or by his agent. It can even be sent by registered post along with the court fee.

** As per the Consumer Disputes Redressal Commission Rules, there will be no fee for filing cases upto Rs. 5 lakh. There are provisions for filing complaints electronically, credit of amount due to unidentifiable consumers to Consumer Welfare Fund (CWF). The State Commissions will furnish information to Central Government on a quarterly basis on vacancies, disposal, pendency of cases and other matters.

Central Consumer Protection Authority (CCPA): It is a statutory body under the Ministry of Consumer Affairs, Food and Public Distribution.

- **Objective-** to regulate matters relating to violation of consumer rights and to promote, protect and enforce the rights of consumers as a class.
- **Composition-** it consists of a chief commissioner as head, and two other commissioners as members, one of whom will deal with matters relating to goods while the other investigates cases relating to services. They are appointed by the central government.
- **Powers & functions-**
 - Conduct investigations into violation of consumer rights and institute complaints / prosecution either *Suo motu* or on a complaint received or on the directions from the central government and recommend appropriate remedial measures for their effective implementation
 - Order recall of unsafe goods and services.
 - Order discontinuation of unfair trade practices and misleading advertisements and impose penalties of up to Rs. ten lakhs.
 - File complaints or Intervene in any proceedings before the district commission or the state commission or the national commission in respect of any allegation of violation of consumer rights or unfair trade practices;
 - Recommend adoption of international covenants and best international practices on consumer rights to ensure effective enforcement of consumer rights;
 - Undertake and promote awareness & research in the field of consumer rights;
 - Encourage non-governmental organizations (NGOs) and other institutions working in the field of consumer rights to co-operate and work with consumer protection agencies;
 - Mandate the use of unique and universal goods identifiers in such goods, as may be necessary, to prevent unfair trade practices and to protect consumers' interest;
- It has an investigation wing headed by a director general (appointed by the central government).
- District collectors on receiving a complaint or on a reference made to him by the central authority or the commissioner of a regional office can investigate complaints of violations of consumer rights, unfair trade

practices, and false or misleading advertisements.

Central Consumer Protection Council (CCPC)

Apart from CCPA, there are Central Consumer Protection Council Rules, provided for the constitution of the CCPC.

- It will be an advisory body on consumer issues, headed by the Union Minister of Consumer Affairs, Food and Public Distribution with the Minister of State as Vice Chairperson and 34 other members from different fields.
- It will have a three-year tenure and will have Minister-in-charge of consumer affairs from two States from each region- North, South, East, West, and North-East Region.

Time limit for filing the complaint

The complaint shall be filed within two years from the date on which the cause of action has arisen. This would mean two years from the day the deficiency in service or defect in goods has arisen/detected. This is also known as the limitation period for filing the complaint.

Simplified Dispute Resolution Process

- The act provides for deemed admissibility of complaints after 21 days of filing if the application regarding admissibility of complaints remains pending.
- Consumer Commissions are empowered to enforce their orders.
- To avoid delay in disposal of complaints, appeals can only be made on question of law after the second stage.
- Provides the facility of e-filing, online payment of fees and hearings via videoconferencing.
- Allows filing of complaints in a Consumer Commission having jurisdiction over the place of residence or work of a consumer.

Role of an Advocate to Represent the Case in Commission

- Consumer Commissions are quasi-judicial bodies to provide simple and speedy justice. These have been kept free from the complicated judicial procedures.
- The manners are quite informal and free from the shackles of the Civil Court. There is no need for an advocate, or any other pleader and consumer can himself or through his representative file and represent his complaint.

Mediation

To provide a faster and amicable mode of settling consumer disputes, the Act also includes reference of consumer disputes to Mediation, with the consent of both parties.

- It provides for Alternate Dispute Resolution (ADR) mechanism wherever there is scope for early settlement. Also, Parties at any stage of complaint can opt for settlement through mediation.
- Mediation cells are attached to consumer commissions and its panel is selected by a committee consisting of the President and a member of consumer commission.
- No appeal can be made against the settlement through mediation.

** There is no fee prescribed for Mediation.

Product Liability

If there is any- 1) manufacturing or design defect or; 2) deviation from manufacturing specifications or; 3) the product doesn't conform to express warranty or; 3) the product fails to contain adequate instructions for correct use or; 4) if the Service provided is faulty, imperfect or deficient

then a manufacturer or product service provider or product seller will be responsible to compensate for injury

or damage caused by defective product or deficiency in services.

Rules On E-commerce and Direct Selling

It empowers the Central Government to implement rules to prevent unfair trade practices in e-commerce and direct selling. It also mandates the e-commerce platforms to acknowledge the receipt of any consumer complaint within forty-eight hours and its redressal within one month of receiving the complaint.

Penalty For Adulteration of Products/Spurious Goods

This Act imposes penalties for misleading advertisements. These penalties include:

- Up to (Rs 10 lakh fine or two years imprisonment or both) for a manufacturer or endorser
- Up to (Rs 50 lakh fine or five years imprisonment or both) for a subsequent offense



Electoral Bonds

A five-judge constitution bench of the Supreme Court (SC) led by the Chief Justice of India (CJI) reserved its verdict while hearing a batch of petitions challenging the constitutional validity of Centre's Electoral Bonds Scheme, 2018.

About the Electoral Bonds Scheme, 2018

What?

- Launched in 2018, this scheme provides for an Electoral Bond (EB) which is a **bearer instrument** like a promissory note that can be used by an Indian citizen or an Indian company to make donations to political parties of their choice. They are payable to the bearer free of interest and demand and can be purchased digitally (NEFT/RTGS) or through demand draft or cheques.
- It was introduced via the Finance Act of 2016 and 2017 by amending Representation of the People Act, 1951, (RPA), the Companies Act, 2013, the Income Tax Act, 1961, and the Foreign Contributions Regulation Act, 2010 (FCRA).
 - ✓ Section 11 of the Finance Act, 2017 amended Section 13A of the Income Tax Act exempting political parties from keeping a detailed record of contributions received through electoral bonds.
 - ✓ Section 135 amended Section 31 of the RBI Act permitting the Union government to authorize any scheduled bank to issue electoral bond[s].
 - ✓ Section 137 introduced a provision to Section 29C of RPA, exempting political parties from publishing contributions received through electoral bonds in "Contribution Reports."
 - Contribution Reports disclose contributions received by parties "in excess of twenty thousand rupees" from companies and individuals.
 - ✓ Section 154 amended Section 182 of the Companies Act, 2013 and removed the upper limit on corporate donation to a political party. Previously companies could only donate up to 7.5 percent of three years of the company's net profits and political parties had to make all the donations received above Rs 20,000 public.
- All payment for the issuance of the Electoral Bonds will be accepted in Indian Rupees only (Electoral Bonds cannot be purchased through foreign currency).
- One cannot get a loan on Electoral Bonds nor pledge Electoral Bonds against purchase of gold & securities. Electoral Bonds are not listed on any Stock Exchange.
- Once the Electoral Bond is purchased it cannot be cancelled and no amount will be refunded to the

Purchaser.	
Objective • To ensure that all donations are accounted for in the party balance sheets without exposing the donor details and make the system more transparent. • To keep a tab on the use of black money for funding elections.	
Process • EBs can be purchased for any value, in multiples of Rs 1,000, Rs 10,000, Rs 1,00,000, Rs 10,00,000 and Rs 1,00,00,000 (There is no maximum limit for Donation) from the specified branches of the State Bank of India (SBI) through accounts complying with KYC norms. ✓ SBI is the only bank authorized to sell these bonds via designated SBI Branches. • The name and other information of the donor are not mentioned on the bond and therefore they are said to be anonymous. But KYC norms will be applicable regardless of whether the applicant is an SBI account holder or a non-SBI account holder. ✓ Electoral Bonds can be purchased either Singly or Jointly with other Individuals but not more than three Applicants per Application Form. No name(s) will be printed on the Bond. • There is no cap on the number of bonds that can be purchased by an individual or a company. • EBs can be purchased for the first 10 days of the beginning month of every quarter (January, April, July, and October each year).	
Eligibility to Receive Funds Through EBs • Political parties registered under Section 29A of the RPA, 1951, securing at least 1% of the votes polled in the last election to the House of the People or a Legislative Assembly are eligible to receive donations through EBs. ✓ Section 29A of the RPA, 1951 deals with the registration of political parties. ✓ Any party seeking registration with the Election Commission of India (ECI) must submit an application to the ECI within 30 days following the date of its formation as per guidelines prescribed by the ECI. ✓ As per the existing guidelines, the applicant association is, inter-alia, asked to publish proposed Name of party in two national & two local daily newspapers, for two days for inviting objections, if any, regarding the proposed registration of the party before the ECI within 30 days from such publication. Notice so published is also displayed on ECI website.	
Documents required from a Political Party for opening a Current Account under this scheme: • Resolution of the Managing Body of such Political Party; Power of Attorney (PoA) granted to any individual(s) to transact on its behalf; PAN of the Political Party etc. ✓ Political Party cannot open more than one Current Account for Electoral Bond redemption. • The political parties should encash the EBs within 15 days of receiving them and that too only through a designated bank account with the authorized bank to fund their electoral expenses. This amount must be disclosed to the ECI. ✓ Electoral Bond can be encashed by eligible Political Party only through a Bank account maintained with Designated SBI Branch.	
Benefits • It helps the political parties to operate in a more transparent manner. • It helps put a check on political parties operating for only collecting funds from the public.	Drawbacks • Under this scheme, political parties are exempt from disclosing donations received through electoral bonds. • Voters have no idea about the source of funding thus, compromises citizen's Right to Information.

• It makes the election funding entirely safe and digitized and discourages cash donation.	• Anonymous funding can lead to an inflow of black money. • Elimination of the 7.5% cap on company donations allows the companies to make unlimited donations.
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The Present Case

The Supreme court is hearing a batch of petitions dealing with following issues-

1 Is the electoral bond scheme constitutional?	2 Does the electoral bond scheme violate the voters' right to information?	3 Can the Scheme allow anonymity with the view to protect donors' right to privacy?	4 Does the electoral bond scheme threaten the democratic process, and free and fair elections?
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Petitioner's Argument 1. Unconstitutional- The Finance Acts were wrongfully passed as money bills to prevent higher scrutiny by the Rajya Sabha. 2. Violation of Right to Information (RTI)- It violates the fundamental right to information under Article 19(1) and the citizens should have the right to know the identity of the ones funding the political parties. 3. Enables Backdoor Lobbying and promotes Corruption- There were kickbacks being paid by corporations via electoral bonds to political parties in power and resulting in quid quo pro (exchanging services). 4. Opportunity for Shell Companies- Removal of cap for companies on political donations and allowing Indian subsidiaries of foreign companies to make donations results in shell companies as the amendments to FCRA meant that even a loss-making company or a company that does no business (a pure shell company) can also donate. 5. Not Entirely Anonymous- The EBs are not completely anonymous as SBI is a government entity and the party in power can easily identify who contributed to whom. 6. Does Not Reduce Black Money- As it fails to pass the test of arbitrariness under Article 14 because the scheme takes away non-anonymous money and puts it as anonymous money. ✓ <i>Test of Arbitrariness- It evolved in E.P. Royappa Vs State of Tamil Nadu case when the court held that the main motive of Article 14 (equality before law/equal protection of the laws) is to Strike out of Arbitrariness from state action to ensure fairness and quality.</i> 7. Disturbs Democracy and Discriminatory in Nature- It doesn't allow a level-playing field between the ruling and opposition political parties and the party in power gets huge share of donations. Also, only the political parties that have received at least 1% of votes in Lok Sabha or the legislative assembly of the respective state can get donations, this leads to discrimination.	Centre's Stand 1. No Right to Information with Citizens- under Article 19(1)(a) regarding the source of funds as there can be no general right to know anything and everything without being subjected to reasonable restrictions. 2. Donor's Right to Privacy- is state's responsibility as donating reflects a citizen's political affiliation and therefore the donor's right to privacy overrides a voter's right to know. 2. Reduced Black Money- The scheme is manifestly arbitrary since there is no possibility of taking cash while purchasing electoral bonds. 3. Puts a check on Shell Company Creation- The scheme aims to disincentivize the creation of shell companies as the profit-percentage based requirement for donation has been removed and the companies can make any amount of donation.
Supreme Court's Observations - The scheme provides "<i>selective anonymity</i>" as the SBI comes within the purview of the Union Government. - There is a need to- a) <u>reduce the cash element</u> in the electoral process, b) <u>encourage the use of authorized banking channels</u> for donations and c) <u>incentivize the use of banking channels with confidentiality</u> along with the	Election Commission's Opinion • It initially opposed the Scheme claiming that it was contrary to the goal of transparency in political

need to ensure transparency in political funding while ensuring that the scheme does not result in legitimizing kickbacks and *quid pro quo* between power centres and benefactors of that power.

3. It objected to the removal of cap on corporate donations stating that the purpose of a company was to carry out business and not to donate to political parties and they should donate only in small amounts with an “*altruistic motive*”.

4. It suggested the government devise another system for political donations to address the flaws in the current EB system and emphasized that the goal should not only be to revert to a cash-only system but to create a tailored system that overcomes the deficiencies of the existing scheme.

5. It reserved its verdict w.r.t. the validity of the Electoral Bond Scheme.

finance and had warned the Union government about the repercussions/impact on the transparency aspect of political finance/funding.

- It alleged that exempting political parties from sharing details regarding contributions would keep information on foreign funding in the dark.

Extra Mile: Electoral Trusts

- The Electoral Trusts (ET) Scheme, introduced by the UPA government in 2013 allowed any company registered under the Companies Act, 1956, to form an electoral trust.
 - ✓ The Companies Act, 1956 primarily regulates the formation, financing, functioning and winding up of companies.
- Any Indian citizen or company registered in India, or a firm or Hindu Undivided Family (HUFs) or association of persons living in India, could donate to an electoral trust. The contributors’ PAN (in case of a resident) or passport number (in case of an NRI) was mandatory for making contributions.
- They have to be renewed every three financial years and donate 95% of the contributions received in a financial year to political parties registered under the Representation of the People Act, 1951.
- ETs ranged from three in 2013 to 17 in 2021-22, but only a few of them make donations every financial year.

Electoral Trusts (ET) vs Electoral Bonds (EBs)

Electoral Trusts (ET)	Electoral Bonds (EBs)
1. It is transparent on contributors and beneficiaries for example if there is only one contributor and one beneficiary of a particular trust, public can easily know the source of funding although the same is not possible in case of multiple contributors.	1. They are exempt from disclosure requirements, and it is impossible for the voters to know the source of funding in this scheme as the bonds don’t bear any information regarding the donor.
2. Data from nine financial years (2013-14 to 2021-22) show that this scheme received lesser funds.	2. As per the data, this scheme received more funds.

** Both schemes were meant to facilitate donations to political parties by corporates & individuals.



UPSC Tightens Rules for Appointment of State Police Chiefs

The Union Public Service Commission (UPSC) has amended the guidelines (as per Supreme Court’s directive) emphasizing specific criteria regarding the appointment of Director-General of Police (DGP) for states.

- ✓ DGP is a three-star rank police officer and is the head of the state police force.

- ✓ Police & Public Order: State Subject (Under Seventh Schedule)

Need for Amendments

- **Avoid Favouritism**- To discourage States from appointing their favourite officers who are on the verge of retirement in a bid to extend their tenure.
- **Put a check on Bypassing Process**- Several States, including BJP-ruled States, choosing to appoint acting DGPs instead of regular DGPs, by-passing the requirement to go through the UPSC-selected panel of eligible officers. States such as Uttar Pradesh, Punjab, Andhra Pradesh, and Telangana have all appointed “incharge DGPs” or “DGPs with full additional charge”.
- **Ensure Transparency**- To ensure transparency and efficiency in the appointment process of the state DGPs that are aligned with the Supreme Court (SC) directives.

Key Amendments

1. **Service Tenure**- Only police officers with at least six months of service left before retirement will be considered for appointment as the Director-General of Police (DGP) of a State.
 - ✓ The intention behind this action is to discourage the practice of granting extensions to officers who are on the brink of retirement due to personal favoritism, thereby fostering impartial selections.
 - ✓ Earlier, in various states, DGPs on the verge of retirement were appointed, and in some cases, acting DGPs were appointed to circumvent the UPSC selection process.
2. **Officers on Central Deputation**- Empanelment Committee constituted by the UPSC will not assess Indian Police Service (IPS) officers on Central deputation for a State DGP's post if the Union Ministry of Home Affairs is unable to relieve them.
3. **Relaxation in Eligibility Criteria**- Officers with 25 years of experience could be appointed as a DGP, against the earlier requirement of a minimum 30 years of service.
 - ✓ This modification expands the range of expert qualified candidates.
4. **Shortlisted Candidates**- The number of shortlisted officers cannot exceed three but there may be less than three officers in exceptional circumstances. Also, officers should be willing to be included in the panel.
5. **Outlined Area of Expertise**- IPS officers to be considered for the DGP post should have a minimum of ten years of experience in law and order, crime branch, economic offenses wing, or intelligence wing, as well as deputation to central bodies like the Intelligence Bureau (IB), Research and Analysis (RAW).

SC Guidelines for Appointing the DGP

<u>2006 Guidelines In Prakash Singh Case</u>	<u>2018 Guidelines</u>
• Selection: DGP of the State to be selected by the State Government from amongst three senior most officers of the department recommended by UPSC. • Tenure- The selected officer should have a minimum tenure of at least 2 years irrespective of his date of superannuation. • Removal- The State government in consultation with the State Security Commission can remove the DGP from his office because of any action taken against him under the All-India Services (Discipline and Appeal) Rules or following his conviction in a court of law in a criminal offence or in a case of corruption, or if he is otherwise incapacitated from discharging his duties.	• No Favouritism- The state government cannot appoint their favourite police officer suiting their political choice as the acting DGP. ✓ The concept of an acting DGP was not a part of 2006 judgement. • Intimation to UPSC- To prevent favouritism, SC directed all the states to send proposals to the UPSC at least three months prior to the date of retirement of the DGP. • No Extension- It must be ensured that if the DGP continues in office post his date of superannuation, it's not beyond a reasonable period.

Extra Mile: Indian Police Reforms

Supreme Court Guidelines on Police Reforms

- In a landmark judgment in the *Prakash Singh v. Union of India, 2006 case*, the SC directed all states and Union Territories to bring in police reforms and issued a list of measures to be undertaken by the state governments to allow the police to do its work without any political interference.

Suggested Measures: Seven Point Directives

1. **DGP Selection**- Selecting the DGP from amongst three senior-most officers of the department empaneled for promotion to that rank by the UPSC and once selected, provide him a minimum tenure of at least two years irrespective of his date of superannuation.
2. **Fixing Tenure**- To ensure no political interference, a minimum tenure was sought for the Inspector General of Police (IGP) to put a check on mid-term transfers by politicians.
3. **Police Establishment Board (PEB)**- To be set up at the state level for inter alia deciding all transfers, postings, promotions and other service-related matters of officers of and below the rank of Deputy Superintendent of Police (DySP) and make recommendations on postings and transfers above the rank of Deputy Superintendent of Police
4. **Police Complaints Authority (PCA)**- to be constituted at the state and district level for looking into complaints against police officers.
5. **Separating Investigation and Law & Order**- functions for improving its working and increasing efficiency. This should start with towns/urban areas having a population of ten lakhs or more, and gradually extending to smaller towns/urban areas also.
6. **State Security Commissions (SSC)**- To be set up with members from civil society.
7. **National Security Commission (NSC)**- to be set up at the Union Level by the central government to prepare a panel for being placed before the appropriate Appointing Authority, for selection and placement of chiefs of the Central Police Organizations (CPOs). The selected chiefs to be given a minimum tenure of two years, with additional mandate to review from time to time measures to upgrade the effectiveness of these forces, improve the service conditions of its personnel, ensure that there is proper coordination between them and that the forces are generally utilized for the purposes they were raised and make recommendations in that behalf.

The Bureau of Police Research & Development (BPRD)

- BPRD was established in 1970 under Ministry of Home Affairs to modernize the police forces of India. The BPRD replaced the Police Research & Advisory Council (established in 1966).
- The BPRD's objectives include Identifying the needs of the police; Researching and studying problems; Suggesting ways to overcome problems; Modernizing police forces.

Crime & Criminal Tracking Network and Systems (CCTNS)

- CCTNS is a Mission Mode Project (approved in 2009) under the National e-Governance Plan (NeGP) of the Ministry of Home Affairs.
- It aims at creating a comprehensive and integrated system for enhancing the efficiency and effective policing at all levels and especially at the Police Station level through adoption of principles of e-Governance.
- The scope of CCTNS spans all 35 States and Union Territories and covers all Police Stations (15,000+ in number) and all Higher Police Offices (6,000+ in number) in the country.
- In 2015, an extra goal was incorporated into the Project, which aimed to establish a foundational platform for an Inter-operable Criminal Justice System (ICJS).

- ✓ ICJS (Phase 2), a Rs 3,500 crore project, is set to be completed by 2026 with increased use of artificial intelligence, fingerprint systems and other tools of predictive policing.

S.M.A.R.T. Policing

- The concept was introduced by the Prime Minister during the 49th annual conference of Directors-General and Inspectors-General of Police in Guwahati in 2014.
- The term SMART stands for S-Sensitive and Strict; M-Modern with mobility; A- Alert and Accountable; R- Reliable and Responsive; T- Trained and Techno-savvy.

Previous Commissions set-up to examine Police Reforms

- ✓ National Police Commission (1977-82, Chair: Mr. Dharma Vira)
- ✓ Ribero Committee (1998)
- ✓ Padmanabhaiah Committee on Restructuring of Police (2000)
- ✓ Malimath Committee on reforms in Criminal Justice System (2002-03)
- ✓ Standing Committee on Home Affairs (2022, Chair: Mr. Anand Sharma)

AMBIS: Case Study of Maharashtra Police

- The Automated Multi-modal Biometric Identification System (AMBIS) is a system used by the Maharashtra police to store data from finger, palm prints, face & iris to aid police investigations.
- The system is used to collect data from convicts or people arrested for any offense. The system aims to create an instant criminal database.
- AMBIS with facial recognition technology feature is an updated version of the Automated Fingerprint Identification System (AFIS), which has been used by Indian law enforcement agencies to search finger and palm prints.

Other state police forces in India are expected to replicate the system.



Broadcasting Services (Regulation) Bill, 2023

The Ministry of Information and Broadcasting recently released a draft of Broadcasting Services (Regulation) Bill, 2023 and invited feedback and comments on the same from variety of stakeholders, including domain experts, broadcasting services providers and public.

About the Broadcasting Services (Regulation) Bill, 2023

What?

- The bill aims to regulate broadcasting services (aims to consolidate the legal framework for the broadcasting sector) and replace the Cable Television Networks (Regulation) Act, 1995 and other Policy Guidelines currently governing the broadcasting sector in the country.
- The Bill seeks to expand the regulatory framework to include Over-the-top (OTT) content; Digital news; TV channels and FM radio. (Which are currently regulated through the Information Technology Act, 2000.)
- ✓ The Cable Television Networks (Regulation) Act of 1995 has been serving as the primary legislation overseeing content on linear broadcasting, including cable networks, for the last three decades.
- The Bill provides comprehensive definitions for contemporary broadcasting terms along with other important technical terms to be defined in the statute for the first time.

Need

1. **To Bring a Single Law for Different Broadcast Services-** such as direct-to-home (DTH), internet- based services like IPTV, OTT platforms (Like Netflix, Amazon Prime) etc. As they are all being regulated by different guidelines and frameworks, drawing powers from the Indian Telegraph Act, 1885, the Cable Television Networks (Regulation) Act, 1995 and/or other relevant laws.
2. **Streamlining the Regulatory Framework-** which will bring clarity, consistency, and flexibility to regulations, while strengthening consumer protection and promoting ease of doing business. It will create a level playing field, foster investment and innovation, adapt to emerging trends, safeguard consumer interests, simplify compliance, and encourage growth and competition.

Key Provisions

1. **Regulation of Various Types of Broadcasting Services** - It focuses on the regulation of broadcasters and cable and satellite broadcasting networks, radio broadcasting networks, internet broadcasting networks and terrestrial broadcasting networks. It authorizes the Central Government to regulate the services closely connected to broadcasting networks and broadcasting services. These regulations encompass eligibility criteria, terms, conditions, and fees.
2. **Compulsory Registration for Broadcasting-** It prohibits a person from providing broadcasting services or operating a broadcasting network without proper registration or intimation. Certain entities like government departments, political parties, and public authorities are not eligible for registration, except for authorized entities like Prasar Bharti or channels operated by Parliament.
3. **Compliance with Rules-** It mandates the broadcasters and network operators to transmit programs in compliance with specified terms and conditions while adhering to the Programme Code and Advertisement Code. They are also expected to comply with government orders and directions to classify their programs into different categories based on factors like content, theme, and target audience along with relevant ratings and descriptors. Broadcasters are required to implement access control measures for programs that are classified as appropriate for restricted viewing (e.g., adult content) to ensure that only the intended audience can access such content.
 - ✓ District magistrates, sub-divisional magistrates and police commissioners are the 'authorized officers' to ensure that the Programme Code is not breached. They will have the power to prohibit transmission of certain programmes in the public interest if it promotes disharmony or feelings of enmity, hatred or ill-will between different religious, racial, linguistic, or regional groups or castes or communities.
4. **Accessibility for Persons with Disabilities-** by including features like adding subtitles, audio descriptions for the blind, sign language translations, and using accessible applications.
5. **Content Evaluation Committee (CEC) for adherence to Programme Code and Advertisement Code** - to be established by every broadcaster or broadcasting network operator with members from various social groups, including women, child welfare, scheduled castes, scheduled tribes, minorities, and others as specified and disclose CEC members' information on their website. Programs certified by the CEC can only be aired except for specific programs exempted by the government. These provisions will come into effect 180 days after the Act's enforcement.
6. **Self-Regulatory Organization (SRO)-** are the bodies formed by broadcasters and network operators or their associations responsible for addressing grievances related to content violations that haven't been resolved by the broadcasters or network operators within a specific time frame. They will also handle appeals filed by complainants against the decisions made by broadcasters or network operators and provide guidance and advisories to their members to ensure compliance with the broadcasting rules.
7. **Grievance Redressal Officer-** to be appointed by Broadcasters and network operators to handle content violations complaints. They must be members of SRO.
8. **Broadcast Advisory Council (to replace existing Inter Departmental Committee)** - to be established by the

government consisting of independent experts and government representatives, to oversee the implementation of the regulations. It will consist of review panels assigned with specific cases or appeals related to content violations which, after examining the case, make recommendations to the government.

9. **Inspection-** The Central Government and its authorized officers have the right to inspect these networks and services. Companies and their responsible individuals can be held liable for contraventions, unless they prove lack of knowledge or due diligence.
10. **Penalties-** can be advisory, censure, warning, and monetary penalties. Non-compliance with the Program and Advertisement Codes can result in removal of objectionable programs, orders, apologies, off-air periods, or cancellation of registration. The government can also prohibit programs or operations for public interest or national security reasons. There are provisions for imprisonment and/or fines for a few serious offences.
 - ✓ The quantum of monetary penalty and fine are dependent on the financial capacity of the entity or individual.
11. **Infrastructure Sharing, Platform Services and Right of Way:** The bill also includes provisions for infrastructure sharing among broadcasting network operators and carriage of platform services. Further, it streamlines the Right of Way section to address relocation and alterations more efficiently and establishes a structured dispute resolution mechanism.
12. **Provisions for Emerging and Future Broadcasting Technologies:** It empowers the Central Government to make the provisions applicable to broadcasting networks that use new technologies and methods if the networks meet certain criteria like existing broadcasting networks, and operate as systematic business, professional, journalistic, or commercial activities.

Concerns Raised

1. **Erasure or Selective Representation-** The bill could lead to the erasure or selective representation of Indian minority communities and might influence how minority communities are portrayed in broadcasting, potentially shaping a dominant narrative.
2. **Ultimate Power to Authorized Officer-** to prohibit the transmission of any program or channel not in conformity with prescribed codes or likely to promote disharmony.
3. **Government Influence (Over regulations might impact on content innovation)-** in the regulatory process and the independence of the authorized officer working under government directions. Decisions of the authorized officer could be influenced by the government in power and could compromise the impartiality of decisions related to program prohibition.
4. **Government Control Over Digital Infrastructure (May Affect autonomy)-** The bill gives the government too much control over digital infrastructure and what people can watch, promoting media ownership by a few big companies.
5. **Pricing regime-** As OTT contents are regulated under the bill, the government may bring the pricing regime for OTT content as it has done for television channels.



Lewis Model

Lewis Model in India

- However, the Lewis Model did not play out similarly in India. Agriculture employed about two-thirds of India's workforce till the early nineties. The share fell from 64.6% to 48.9% between 1993-94 and 2011-12.

- But not much of it was due to manufacturing, whose share in employment rose marginally, from 10.4% to 12.6%, during this period.
- The subsequent period has seen the farm sector's share in the country's employed labour force first drop somewhat slowly, to a low of 42.5% in 2018-19, and then increase to 45.6% and 46.5% in the following two Covid-impacted years.

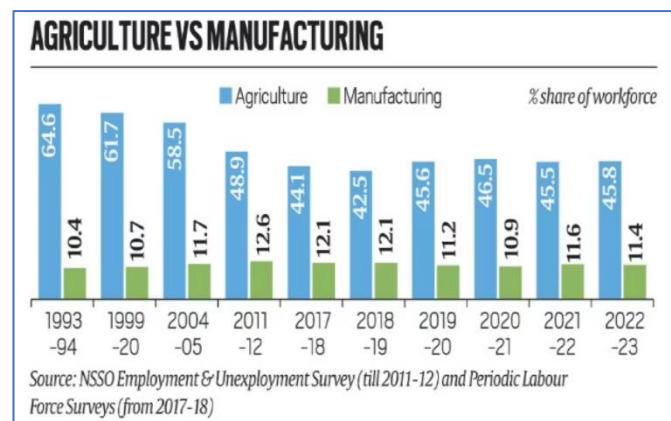
Lewis Model

- In 1954, the Saint Lucian economist William Arthur Lewis (who won a Nobel in Economics), wrote on the huge industrialisation possibilities for underdeveloped countries having an unlimited supply of labour available at subsistence wages.
- The marginal productivity of such labour, engaged in sectors like agriculture, was negligible, zero, or even negative.
- Basically, their withdrawal from farms would, far from reducing agricultural output, make the existing holdings more viable for productivity and enhance mechanisation.
- Lewis' influential essay (Economic Development with Unlimited Supplies of Labour) held that an expanding manufacturing ("capitalist") sector could absorb much of the surplus labour in agriculture and other subsistence sectors.
- All it had to do was pay wages just high enough to make men leave the family farm. In this way, new industries can be created, or old industries expanded, without limit.
- As per Lewis, industrialisation was inevitable for countries with surplus labour populations; he specifically mentioned India.
- The only bottlenecks to this seamless transfer of labour from farms to factories were capital and natural resources, which these countries lacked relative to their populations.
- China is the perfect example of the Lewis Model. From the late 1970s to the 2000s, China utilised its demographic dividend and large pool of surplus rural labour to become the world's factory.

- The current 45.8% share, as per the Periodic Labour Force Survey (PLFS) report for 2022-23 (July-June), is still higher than the pre-pandemic levels.
- At the same time, there is a dip in manufacturing's share, from the 2011-12 high of 12.6% to 11.4% in 2022-23.
- The declining trend, in fact, preceded the pandemic – so much so that this sector now employs less than even the workforce in construction (13%) and trade, hotels & restaurants (12.1%).
- Employment in the latter two sectors is pretty much similar to agriculture – low marginal productivity (output per worker), informal and paying just-about subsistence wages.
- Simply put, the structural transformation, that necessitates a transfer of surplus labour from subsistence to capitalist sectors that Lewis talked about, hasn't really played out in India.
- Instead, the movement of labour has been largely happening with the subsistence sectors.
- The jobs being generated outside agriculture are mostly in low-paid services and construction, *not* in manufacturing and high-productivity services (for e.g. gig workers versus IT professionals).

State Level Scenario

- Manufacturing's share (in employment) is below that of construction and services for states with high percentage of workforce engaged in farming.
✓ Even for less agriculture-dependent states, the



labour force in services is 2-3 times or more that in manufacturing.

- **The exception is Gujarat.** Nearly 24% of its workforce – more than twice the national average – is employed in manufacturing, which is almost as much as in services.
- Gujarat is the only state that seems to confirm closer to the Lewis model of labour shifting from farms to factories.
- Yet, the proportion of its workers in agriculture is much higher than for Punjab, Haryana, Kerala, Tamil Nadu or even West Bengal. Less services sector-dependent would be a more appropriate description for Gujarat.

Way Ahead

- Manufacturing is turning increasingly capital-intensive, with the deployment of both labour-saving and labour-displacing technologies such as robotics, artificial intelligence and machine learning.
- Thus, it is important to rethink the whole model of labour transition from agriculture to industry.
- NITI Aayog, is working on a new economic development model for India, exploring the scope for remunerative job creation **in and around agriculture itself.**
- Such jobs needn't be on the farm, but outside it – in the aggregation, grading, packaging, transporting, processing, warehousing and retailing of produce or the supply of inputs and services to farmers.
- The use of grain, sugarcane and oilseeds as biofuel is already growing, but so can the crop stubble and residues that farmers are now burning in the fields.
- There is also rising demand for bio-based products, in the form of cosmetics and medicines, building materials, polymers and specialty chemicals, insecticides and fertilisers.
- All these can be the next big employment avenues outside, and yet linked to, the farm.

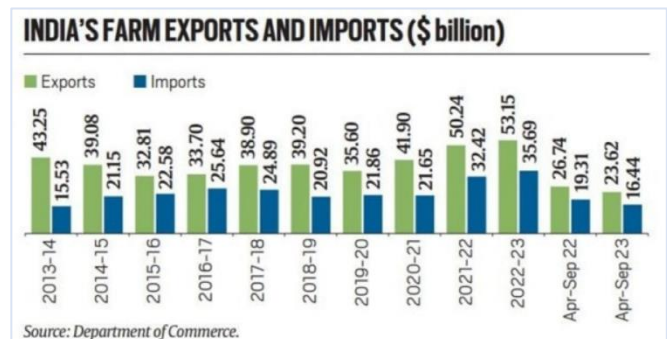


India's Falling Farm Exports

- The Department of Commerce has reported that **exports** of farm commodities have declined to \$ 23.6 billion in April-September 2023, from \$26.7 billion in April-September 2022.
- There has been a drop in **imports** as well, from \$19.3 billion to \$16.4 billion. This has led to a marginal dip in the agricultural trade surplus (exports minus imports) from \$7.4 billion in April-September 2022 to \$7.2 billion in April-September 2023.
- The country's farm exports touched all-time highs of \$50.2 billion in 2021-22 (April-March) and \$53.2 billion in 2022-23, reversing a declining trend from 2013-14 to 2020-21.
- 2021-22 and 2022-23 also saw record imports of \$32.4 billion and \$35.7 billion respectively.
- The current fiscal, in a sense, marks a return to normal with both exports and imports registering contraction.

Impact Of Global Prices

- India's farm trade, especially exports, is strongly correlated with world prices.
- The UN Food and Agriculture Organization's (FAO) **Food Price Index (FPI)** rose from an average of 96.5 points in 2019-20 to 133 points in 2021-22 and 139.5 points in 2022-23.



- In the current fiscal (from April till October 2023), the FPI has averaged 123.2 points.
- India's agricultural exports tend to follow movements in the FPI, which is a weighted average of the international prices of a basket of food commodities over a base period value, taken at 100 for 2014-16.
- Thus, they fell from \$43.3 billion in 2013-14 to \$35.6 billion in 2019-20 along with the FPI (from 119.1 to 96.5 points), and rose with the index rising to unprecedented levels in 2022-23.
- With world prices since coming down, the value of both exports and imports of farm commodities from and into India are set to decline in 2023-24.
- This comes even as supply disruptions from the Russia-Ukraine war have eased.
- In its latest supply and demand brief, the FAO has projected global ending cereal stocks for 2023-24 at an all-time-high of 881.1 million tonnes (mt) and the stocks-to-use ratio at 30.7%, a comfortable supply situation from a historical perspective.

INDIA'S TOP AGRI EXPORT ITEMS (\$ million)

	2021-22	2022-23	Apr-Sep 22	Apr-Sep 23
Marine products	7772.36	8077.98	4119.63	3803.88
Non-basmati rice	6133.63	6356.71	3199.18	2706.58
Sugar	4602.65	5770.83	2636.25	1302.06
Basmati rice	3537.49	4787.65	2278.35	2589.98
Spices	3896.03	3785.36	1926.90	1949.78
Buffalo meat	3303.78	3193.69	1636.10	1734.40
Raw cotton	2816.24	781.43	435.87	393.82
TOTAL*	50240.21	53153.55	26736.48	23621.71

INDIA'S TOP AGRI IMPORT ITEMS (\$ million)

	2021-22	2022-23	Apr-Sep 22	Apr-Sep 23
Vegetable oils	18991.62	20837.70	11097.64	8508.76
Fresh fruits	2460.33	2483.95	1236.66	1131.58
Pulses	2228.95	1943.89	595.78	1265.23
Spices	1299.38	1336.65	755.20	774.55
Cashew	1255.46	1805.67	1412.52	968.79
Raw cotton	559.55	1438.69	1081.43	401.20
Natural rubber	1032.71	937.60	542.18	380.37
TOTAL*	32422.30	35686.20	19311.21	16444.83

*Includes other items.

Source: Department of Commerce.

Impact Of Export Curbs

- The second reason for falling farm exports is related to government bans or restrictions on shipments, in response to domestic availability and inflation concerns.
- In May 2022, the government banned exports of wheat from the country. In September 2022, exports of broken rice were prohibited and a 20% duty levied on all white (non-parboiled) non-basmati grain shipments.
- In July 2023, exports of white non-basmati rice were banned altogether. Henceforth, only exports of parboiled non-basmati and basmati rice were allowed.
- In August 2023, a 20% duty was applied on exports of parboiled non-basmati rice too, while basmati shipments were subjected to minimum export price (MEP) curbs.
- Besides wheat and rice, in May 2022, sugar exports were moved from the "free" to "restricted" category and capped the total quantity that could go out during any year.
- Since May 2023, exports have stopped completely, with no fresh quotas for shipments being issued.

Double Impact

- Declining international prices not only lower the cost competitiveness of the country's agricultural exports, but also make its farmers more vulnerable to imports. This is being witnessed in cotton and edible oils.
- The benchmark global price for cotton is currently quoting at 91.80 cents per pound, compared to a high of 173.45 cents attained in May 2022.
- The price crash has led to India's cotton exports not only plummeting, from \$2.8 billion in 2021-22 to \$781.4 million in 2022-23, but also imports surging 2.5 times from \$559.6 million to \$1.4 billion.
- This transformation from a net exporter to net importer is reflected in the prices of kapas (raw un-ginned cotton).

- These are ruling at Rs 7,000-7,100 per quintal in local market now, as against Rs 9,000-9,100 a year ago and Rs 12,000-plus in May 2022.
- The value of India's edible oil imports more than doubled from \$9.7 billion to \$20.8 billion between 2019-20 and 2022-23. This was primarily due to rising global prices, particularly post the war in Ukraine.
- Prices have since collapsed, but imports of crude palm, soyabean and sunflower oil are still coming in at a low 5.5% duty.



New Flare-up In Myanmar

- The Ministry of External Affairs has expressed deep concern over the ongoing fighting in the Rikhawdar area in Myanmar's Chin State.
 - The area is close to the border with India opposite Zowkhathar in Mizoram.
- This fighting has led to Myanmar nationals crossing to the Indian side.

Background: Ongoing Fighting In The Rikhawdar Area

- Myanmar has been in flames ever since the military seized power on February 1, 2021.
- **Ethnic Armed Organisations** (EAOs) have joined armed civilian groups called **People's Defence Forces** (PDFs) to take on the military.
 - These groups have allied with the country's self-declared National Unity Government in exile.



- These resistance forces have captured two towns close to the India-Myanmar border after fierce fighting.
- The fall of the Rikhawdar, has resulted in the influx of some 5,000 refugees into Mizoram.

The Current Round Of Fighting

- It began on October 27 with surprise attacks in **Shan State** in North Myanmar along the border with China, by the Three Brotherhood Alliance. The alliance is a front of three EAOs:

Myanmar National Democratic Alliance Army (MNDAA)

Ta'ang National Liberation Army

Arakan Army

- The offensive was named Operation 1027, after the date on which it was launched.
- The resistance forces are reported to have overrun more than 100 military outposts in Shan State and seized control of crucial border towns and checkpoints.
 - This includes **Chinshwehaw**, a critical point on the China-Myanmar border trade route, which is an *important source of revenue for the junta*.
- Fighting has also broken out elsewhere in the country, led by various local resistance forces.

Current Situation Is Different From The Protests And Fighting Of The Last Two Years

- **Fierce multi-pronged resistance**
 - The ongoing multi-pronged offensive by the resistance forces is seen as the stiffest challenge to the junta since the coup more than two and a half years ago.
- **Members of the Myanmar army and police are surrendering**
 - Among those who fled to Mizoram after Rikhawdar was captured by Chin fighters, were 73 members of the Myanmar army and police.
 - Rebel groups have claimed that members of the junta forces have surrendered elsewhere, too.
- **Coordination among the various rebel groups:** What distinguishes the current offensive is:
 - the unprecedented level of coordination among the various rebel groups, and
 - the inability of the military to mount an adequate response.
- **Support from China**
 - The resistance in Shan State appears to be receiving tacit support from China, Myanmar's giant neighbour and biggest trade partner.
 - China has been pressing the military government to crack down on the enclaves of scam centres on the Myanmar-China border, which have been targeting Chinese citizens.

Impact On India

- **Creating a balance:** India has so far walked a fine line between expressing concern at the interruption of democracy in Myanmar, and engaging with the junta to protect its vital interests.
- **Refugee influx:** In the current situation, the immediate concern for India is the influx of Myanmarese nationals in the border states of the Northeast.
 - As of November 2023, over 2,000 people from Myanmar have crossed into India's Mizoram state.
 - This too at a time when the situation in Manipur remains volatile.
- **Capturing of two important towns by rebels**
 - The anti-junta forces have captured two important towns close to the only two border crossing points between Myanmar and India. These are:
 - Rikhawdar, close to Zokhawthar in Mizoram, and
 - Khampat in Sagaing region, around 60 km from Moreh in Manipur.
 - The latter (Khampat) is also part of the proposed **India-Myanmar-Thailand trilateral highway project**.



US-China Summit

- The bilateral summit between US President Joe Biden and the Chinese leader Xi Jinping was held in San Francisco on the margins of **Asia-Pacific Economic Cooperation (APEC)**.
 - **The United States is the host of APEC for 2023.**
- This summit is significant amidst the rising tension between the two countries.
 - The two leaders had not met in person since they held talks in Bali in November 2022.
 - Their relations nose-dived after the United States shot down an alleged Chinese spy balloon in February this year.

Key Outcomes

- **Commitment to closer communication:** Both the leaders have agreed to resume military-to-military communications in an effort to ease rising tensions.
 - Both sides also decided to open a presidential hotline.
- **Steps to tackle the flow of fentanyl into the US,** which has contributed to a rise in overdose deaths in the country.
 - **Fentanyl is a powerful synthetic opioid analgesic** that is similar to morphine but is 50 to 100 times more potent.
 - Chinese manufacturing companies are a source not only of the synthetic opioid itself but of precursor chemicals which can be combined to make Fentanyl.
 - Under the deal, China will directly target companies that are producing those precursor chemicals.
- **On artificial intelligence:** The two leaders also agreed to get experts together to discuss the risks of artificial intelligence.
- Deepen cooperation on climate change ahead of the COP28 conference in Dubai.

US-China Truce And India

- **India has little reason to worry**
 - Although, there are always concerns in India about a 'G-2' or a Sino-American collaboration in Asia.
 - However, the current summit was more about organising a truce in a conflictual relationship.
 - Its aim was not to restore the kind of strategic partnership that seemed possible at the turn of the century.
 - India's own rise in the international system allows it to effectively handle any sudden shifts in great power relations.
- **Areas where India needs to pay close attention**
 - To some of the new areas of US-China engagement – such as regulating artificial intelligence.
 - Potential US-China understandings are bound to have a major impact, over the long term, on the evolution of the global rules on AI.
- **Need to focus on productive engagement with the Western capital**
 - The Indian government and business must note the serious bid by President Xi to woo back the US business leaders.
 - India cannot bet that the 'China option' is no longer viable for Western businesses or get complacent about India's attractiveness.
 - Productive engagement with the Western capital should remain a high priority for Delhi.
- **Vigilant eyes on regional security issues**
 - India will also need to monitor the follow-up from the conversation between the two leaders on:
 - regional security issues in the Indo-Pacific,
 - the current crisis in the Middle East and Ukraine war in Europe.

Asia-Pacific Economic Cooperation (APEC)

- It is a regional economic forum and was formed in 1989.
- **Aim** - *"leverage the growing interdependence of the Asia-Pacific and create greater prosperity for the people of the region through regional economic integration"*.
 - The focus of APEC has been on trade and economic issues and hence, it terms the countries as

"economies".

- It has been operating on the basis of non-binding commitments with decisions taken through commitments and consensus undertaken on a voluntary basis.
- **Member Countries:**
 - Currently, APEC has **21 members**.
 - The criterion for membership, however, is that each member must be an ***independent economic entity, rather than a sovereign state***.
 - The grouping's current members are Australia, Brunei, Hong Kong, New Zealand, Papua New Guinea, Philippines, Indonesia, China, Japan, South Korea, Russia, Canada, United States, Mexico, Peru, Chile, Malaysia, Vietnam, Singapore, Thailand and Taiwan.

Significance of APEC:

- Since its formation, the grouping championed the lowering of trade tariffs, free trade, and economic liberalisation.
- In the **Seoul Declaration (1991)**, APEC member economies proclaimed the creation of a liberalised free trade area around the Pacific Rim as the principal objective of the organisation.

India's Willingness to Join the APEC Grouping:

- India, which presently has '**observer**' status, has been very keen to join the economic grouping as a full member.
 - India has expressed interest in joining APEC, and made a formal request in 1991.
 - The request to join was based on India's geographical location, the potential size of the economy, and degree of trade interaction with the Asia-Pacific.
- **India Needs APEC because**
 - **Strength of the grouping** – The grouping represents more than a third of the world population, 47% of global trade and 62% of world GDP.
 - **Aspiration of India** – India aspires to become a \$5 trillion economy and requires \$1 trillion for investment in infrastructure.
 - Outside the west Europe, most of the **capital surplus nations** are in Asia Pacific which can quench India's thirst for investment.
 - **Natural Corollary to "Act East" Policy** – Indian has already become a member of SCO. Joining APEC is a natural corollary to Act East Policy of India.

Why Is India Not A Part Of The APEC Grouping?

- Although many members have been in favour of the inclusion of India, some opposed the idea claiming that it has '**protectionist instincts**'.
 - APEC's guiding motive was to resist protectionist policies by member states, and the promotion of trade liberalisation within the affiliated Asia-Pacific economies.
 - By that description, India did not seem to fit in.
- The main impediment, apparently, has been the opposition of some participants who have held India's record on economic reforms and WTO engagement to be unsatisfactory and unworthy of meriting inclusion as a member in the grouping.
- Another reason for not making India part of the grouping was a **membership freeze which came into force in 1997**. However, it was not extended in 2012.
- A **majority of members now believe that India must be brought into the fold for it has shown progress in reforming and liberalising its economy**.

Conclusion

- Granting India membership status may also act as a catalyst for trade reform among emerging economies.
- Moreover, India's maritime strength and strong strategic relations with the region's major powers could be used to bring strategic balance within the grouping.



Proposed India-UK Free Trade Agreement (FTA)

- Recently, the External Affairs Minister of India discussed the India-UK Free Trade Agreement (FTA) with Britain's PM and Foreign Secretary.
- This round of talks comes amid the bilateral trade between India and the U.K. increased to \$20.36 billion in 2022-23 from \$17.5 billion in 2021-22.

Key Highlights of India-UK FTA

- **Merchandise Trade:**
 - Indian products like petroleum, medicines, diamonds, machine parts, aeroplanes, and wooden furniture worth \$6 billion face no tariffs in the UK, even without the FTA.
 - These will not gain from the FTA.
- **Services:**
 - An area of immediate advantage for India is persuading the UK to issue priority visas to Indian professionals travelling to the UK to perform short-term assignments.
 - However, **obtaining a large number of short-duration business visas from the UK may not be easy**, as the UK erroneously associates visas with immigration, a sensitive issue since Brexit.
- **Rules of origin:**
 - This will ensure that products from third countries only receive FTA benefits if they undergo significant transformation in the exporting country.
 - India prefers conservative rules of origin compared to most developed countries, leading to extended discussions and negotiations.
- **Government procurement**
 - Allowing the UK producers to sell to India's government procurement sector would bring them on par with Indian firms.
 - On the other hand, Indian firms face a competitive and restricted government procurement market in the UK with little business prospects. India needs to be conservative and careful.
- **Labour standards, gender, environment, digital trade, IPRs:** India must make domestic rules/standards before taking commitments under the FTAs. Till then, India must avoid taking onerous obligations on non-trade issues.

Significance of India-UK FTA

- When signed, the India-UK FTA **will serve as a template for an agreement** with India's 2nd-largest trade partner, the European Union (EU).
- Breaking from the look east policy for trade deals that saw widening deficits with Japan, South Korea, and ASEAN countries, **the government is counting on economic integration with Western and African nations to fuel export growth.**

Factors That Have Pushed For India-UK FTA

- **The China factor**
 - The disruption of supply chains during the pandemic brought home to Western companies the risks of over-dependence on China, and the need for a **'China-plus one' policy**.
 - Australia's tensions with China, along with the complementarities with the Indian economy, presented a case for a trade deal with India; **similar factors brought New Delhi and London to the negotiating table**.
- **India exiting from Regional Comprehensive Economic Partnership (RCEP):** India, after exiting the China-dominated RCEP, has been looking at trade deals with the UK, Australia, the EU, to hold off China in the region.
- **Spurred by Brexit:** A trade deal with India is crucial for the UK as the ruling Conservatives face a tough election in early 2025.

What Will India And UK Gain From India-UK FTA?

- **India:**
 - *India's labour-intensive sectors* such as apparel and gems and jewellery have seen a steep decline in market share over the last five years.
 - Indian textile exports face tariffs as high as 10% in the UK; **a trade deal could put India on par with competition such as Bangladesh**, and revive textile exports.
- **UK:**
 - Notably, the average tariff on goods imported from India into the UK is 4.2% but the average tariff in India on goods imported from the UK is 14.6%
 - British exports to India such as cars, Scotch whisky, and wines, face considerable tariffs of 100-150%.
 - **Tariff reductions on these goods will potentially offer UK deeper access into Indian markets.**

Challenges In India-UK FTA

- **Elimination of duty does not automatically result in export growth:**
 - Past deals with Japan and the ASEAN countries have shown that. Also, many Indian exports to the UK already enjoy low or zero tariffs.
- **Warning from the British Parliament:**
 - Granting zero-duty access to Indian textiles under the FTA could bring stress on Least Developed Countries such as Bangladesh.
- **Non-tariff barriers (NTBs):**
 - Modern FTAs go beyond tariff reduction. India could use the negotiations to eliminate NTBs that have historically been a concern for exporters, especially for agri exports.
 - NTBs often come in the form of regulations, standards, testing, certification, or pre shipment inspection that are aimed at protecting human, animal, or plant health and the environment.
- **Issue of carbon tax:**
 - Like the EU, the UK is looking to impose a levy on metal imports based on carbon emissions.
 - An EU-style **carbon border adjustment mechanism (CBAM)** will hurt India's exports to the UK even if India wins significant removal of tariffs.

India To Bring In A National Security Strategy

- After years of deliberations in the military and strategic community, India has kickstarted the process of bringing in a National Security Strategy.
- The **National Security Council Secretariat (NSCS)** is in the process of collating inputs from several Central ministries and departments.
- This is the first time that India would come out with such a strategy.

National Security Strategy

About

- A National Security Strategy document outlines the country's **security objectives, and the ways to be adopted to achieve these.**
- It defines traditional, non-traditional threats and opportunities while introducing accountability of agencies tasked with the implementation of such responsibilities.
- In a nutshell, a national security strategy would guide the military as well as critical defence and security reforms with strategic implications.
- It will provide a holistic view of the overall national security, the threats and the roadmap to address them.

Countries having a National Security Strategy

- Most developed countries with an advanced military and security infrastructure have a National Security Strategy in place, updated from time to time.
- The US, the UK and Russia have published national security strategies.
- China also has such a strategy in place, called the **Comprehensive National Security**, which is closely tied to its governance structure.
- Pakistan, too, has brought out a **National Security Policy 2022-2026**, underlining its national security objectives and priority areas.

Criticism

- Doctrine normally precedes strategy.
 - ***A doctrine is a set of established or agreed principles that guide actions.***
 - ***A strategy is a plan of action that emanates from doctrine.***
- However, we are embarking on the drafting of a National Security Strategy without having specifically articulated our National Security Doctrine.

India's Need For A National Security Strategy

Complex nature of various threats (traditional and non-traditional threats)

- Also, rising geopolitical tensions have given way to uncertainties.

No concrete document to guide the military forces

- As per security experts, the only political direction to the Armed Forces in existence is *Raksha Mantri's operational Directive of 2009*. It needs to be revised.

CONTOURS OF THE STRATEGY BEING DRAFTED BY INDIA

- » The exact contours of the strategy being drafted is not known as it has not been placed in public.
- » However, experts believe, it will likely include the entire range of newer challenges and modern threats facing India, including non-traditional ones such as:

financial and economic security,

food and energy security,

information warfare,

vulnerabilities in India's critical information infrastructure, as well as those associated with supply chains and environment.

- Some experts have also highlighted that major military reforms should ideally flow from a national security strategy.
 - Without such a well-defined strategy, military reforms would be like putting the cart before the horse.

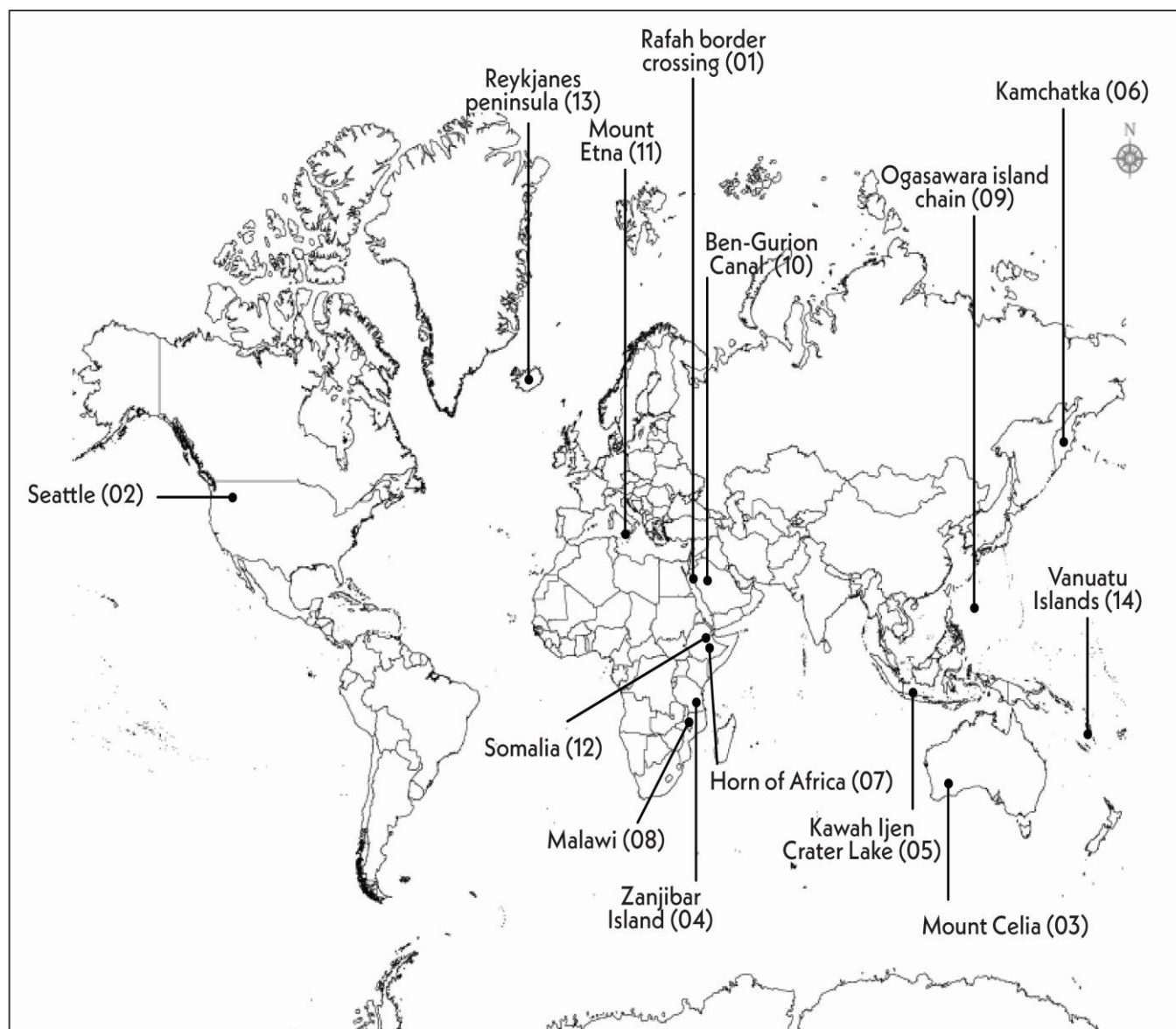
Why Did India Never Have A National Security Strategy?

- In the past, three attempts were made to come out with a national security strategy, but there was hesitation at the political level.
- As per security experts, it could have been because of the accountability it would bring in defence management for the government.
- There have been varying views in the strategic community in the past over why India has not brought out a national security strategy. This varies from lack of a cohesive, whole-of-government effort, to the government deliberately not making public its national security objectives.



MAPS: PLACES IN NEWS

International Places In News

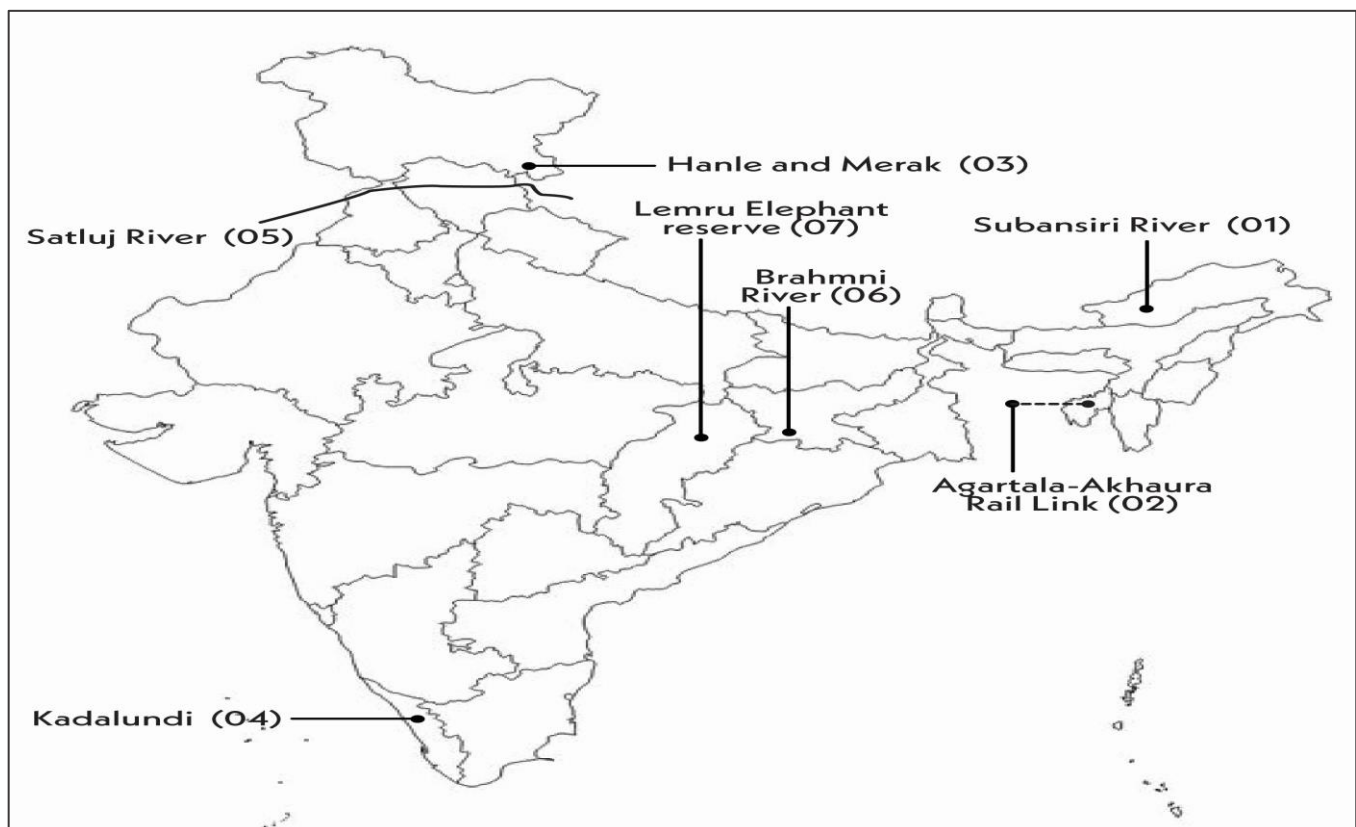


1	Rafah Border Crossing	- Egypt agreed to receive wounded Palestinians from Gaza, and Palestinian dual nationals from its Rafah border crossing. - The Rafah Crossing is the southernmost exit point from the Gaza Strip and shares a border with Egypt's Sinai Peninsula. - Presently both Erez and Kerem Shalom border crossings, controlled by Israel, are closed, making Rafah the primary entry and exit point for Gaza's people and humanitarian aid.
2	Seattle (USA)	India is set to open its sixth consulate in Seattle (apart from Consulates in Atlanta, Chicago, Houston, New York City and San Francisco), a major hub for technology companies such as Microsoft, Amazon and Boeing.
3	Mount Celia Gold Operation (Western	National Mineral Development Council (NMDC) has expanded its mineral portfolio by inaugurating the Mount Celia Gold Operation in Western

	Australia)	Australia. • The Mt Celia project is located 180km northeast of Kalgoorlie. Kalgoorlie is famous for its rich gold mining history. • The “Golden Mile,” a vast stretch of gold-bearing land, is located in the Kalgoorlie-Boulder area, making it one of the most productive gold mining regions in the world
4	Zanzibar Island	• IIT Madras has become the first Indian Institute of Technology to establish an international campus on the picturesque Zanzibar Island in East Africa.
5	Kawah Ijen Crater Lake	• The Copernicus Sentinel-2 mission, which provides optical images of Earth's surface, recently captured stunning images of Kawah Ijen Crater Lake. • It's the world's largest acidic lake. • It is located in the crater of the Kawah Ijen volcano (centre of East Java, Indonesia) • The primary attraction of Kawah Ijen is its stunning turquoise-colored crater lake. This vibrant color is a result of the high concentration of dissolved sulfuric acid and other minerals. • The lake has been included in UNESCO's World Biosphere Reserves.
6	Kamchatka, Russia	• Klyuchevskaya Sopka, recently erupted on the Kamchatka Peninsula in Russia. • Klyuchevskaya Sopka is a stratovolcano, the highest mountain in Siberia, and the highest active volcano in Eurasia.
7	Horn of Africa	• Horn of Africa faced deadly floods due to El Nino-linked 'above average' rains. • It covers countries like Somalia, Ethiopia, Eritrea and Djibouti. • It is Located in northeast Africa along the southern boundary of the Red Sea. • It is located along the south of the Gulf of Aden. • The Horn of Africa is a UNESCO Biodiversity Hotspot and one of the two entirely arid ones.
8	Malawi	• Malawi is battling an outbreak of scabies. • Scabies is a skin disease caused by a parasite named <i>Sarcoptes scabiei</i> which is a tiny insect about 0.3 mm long called a mite. • The female parasite burrows under the skin.
9	Ogasawara island chain	• A new island has now emerged within the vicinity of Japan's Ogasawara island chain, after the eruption of an underwater volcano in late October 2023. • This remarkable event offers an intriguing insight into the Earth's dynamic and ever-changing geological processes.
10	Ben-Gurion Canal	• The Ben Gurion Canal Project is a proposed canal project through the state of Israel. It would connect the Gulf of Aqaba to the Mediterranean Sea. • David Ben Gurion, for whom it would be named, is considered the Founding Father of Israel and was the first Prime Minister of Israel.

		The canal would rival the Suez Canal, which runs through Egypt.
11	Mount Etna	Mount Etna, Europe's most active volcano, lights up the night sky with eruptions as seen from Mount Salto Del Cane, Italy November 12, 2023. Mount Etna is Europe's most active volcano and one of the largest in the world.
12	Somalia	Somalia was heavily flooded due to heavy rain after historic drought. Around 1.6 million people in Somalia could be affected by the heavy seasonal downpours, which have been worsened by the combined impact of two climate phenomena, El Niño and the Indian Ocean dipole.
13	Reykjanes peninsula	- A state of emergency has been declared in Iceland, after a series of powerful earthquakes that rocked the island country's southwestern Reykjanes peninsula. - Iceland is located on the Mid-Atlantic Ridge, between the Eurasian and the North American tectonic plates. It is a seismic and volcanic hot spot as the two plates move in opposite directions. - The Reykjanes peninsula is characterized by immense lava fields, volcanoes, and heightened geothermal activity.
14	Vanuatu Islands	A Magnitude 6.7 Earthquake Jolted the Vanuatu Islands Near Australia recently. Vanuatu, is an island country in the southwestern Pacific Ocean. It consists of a chain of 13 principal and many smaller islands located about 500 miles (800 km) west of Fiji and 1,100 miles (1,770 km) east of Australia. The Lapita sites became Vanuatu's first UNESCO World Heritage Site in 2008.

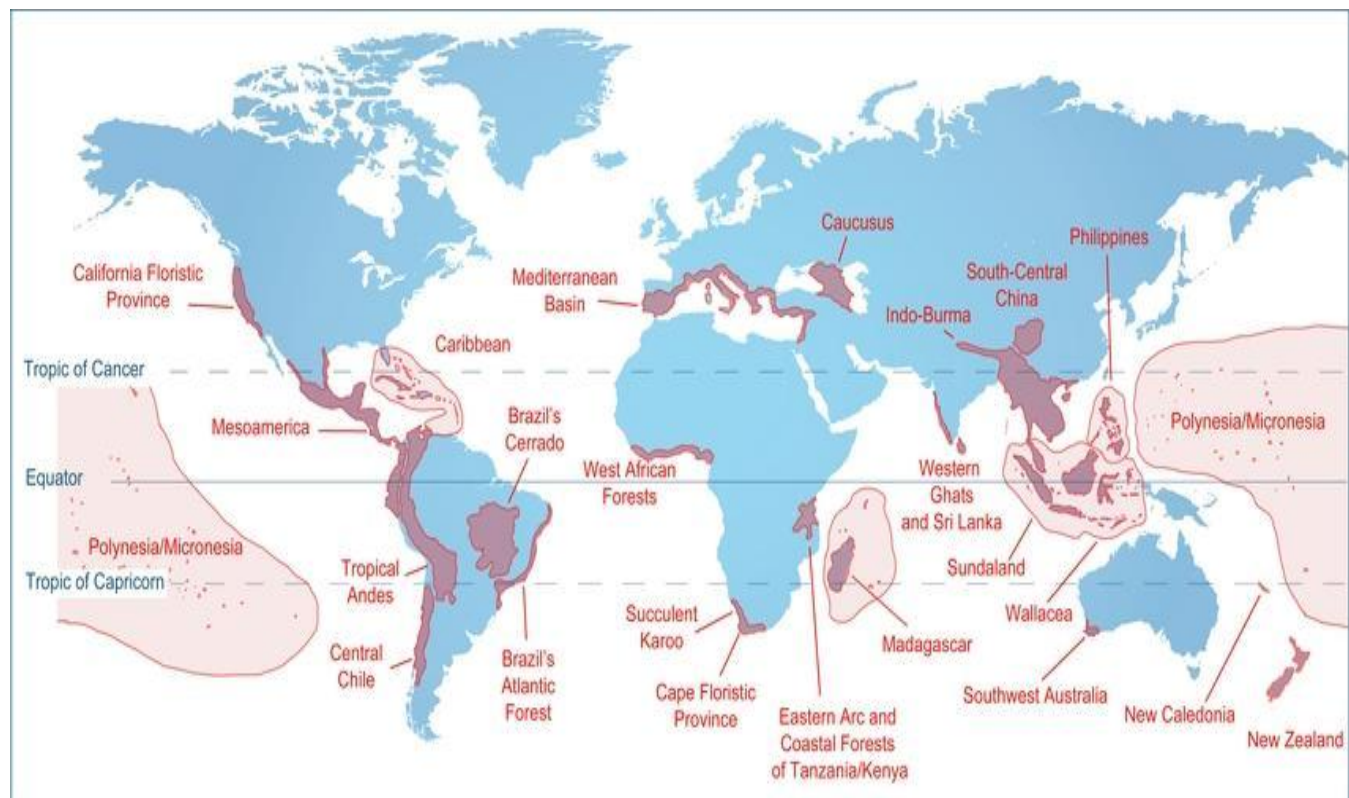
Indian Places In News



1	Subansiri Lower Hydroelectric Project	- The Subansiri Lower Hydroelectric Project faced a setback when a landslide blocked the only functional diversion tunnel and stopped the flow of water downstream of the dam into the Subansiri River, a major tributary of the Brahmaputra. It is India's largest hydel project under construction. About Subansiri River - Subansiri (518km) (also called "Gold River") is a trans-Himalayan River and the largest tributary of the Upper Brahmaputra River. It flows into India through the Miri Hills of Arunachal Pradesh.
2	The Agartala-Akhaura	- It is a railway link established between Bangladesh and India. - It serves to re-establish connectivity between Bangladesh and India's northeast through Tripura. - It will also help India to access the Port of Chattogram in Bangladesh through shorter routes and thus benefit overseas trade.
3	Hanle and Merak (Ladakh)	- The Hanle and Merak observatories in Ladakh, which capture photographs of the night sky, spotted red aurora (a phenomenon uncommon in India). - Hanle is an ideal place to observe the phenomenon as it is India's only dark sky reserve. About Auroras: - They are formed when charged particles from the sun, mainly electrons and protons, interact with the Earth's magnetosphere and atmosphere - Northern lights (Aurora borealis) and southern lights (Aurora australis) are the main auroras. - They are seen in the Northern Hemisphere and Southern Hemisphere,
4	Kadalundi Mudflats	- Sand sedimentation is causing the mudflats of Kadalundi to vanish. - Researchers have identified that Shrinking mudflat ecosystem of Kerala's Kadalundi keeps shorebirds away. - Kadalundi, on the south-west coast, had about 8 hectares of nutrient-rich inter-tidal mudflats in the early 2000s. - Today, the expanse of mudflats in the estuary of the Kadalundipuzha river has reduced to just about 1 hectare. - This too is gradually being covered with sand, depriving prey to thousands of shorebirds that migrate from colder climes in winter to Kadalundi village in Kozhikode district.
5	River Satluj	Recently, a team of researchers from the Indian Institute of Technology (IIT), Ropar, found the presence of tantalum, a rare metal, in the Sutlej river sand in Punjab. About Tantalum:

		- It is a rare metal with the atomic number 73—the number of protons found in one atom of the element. - The rare metal has been named after a Greek mythological figure, Tantalus. - It's grey, heavy, very hard, and one of the most corrosion-resistant metals which is in use today. - It possesses high corrosion resistance because, when exposed to air, it forms an oxide layer that is extremely difficult to remove, even when it interacts with strong and hot acid environments.
6	River Brahmani	- The Odisha government has roped in IIT, Guwahati, for a physical and mathematical modelling study for the rejuvenation of the Brahmani River Delta. - It is a major inter-state east-flowing river amongst the peninsular rivers in India. - The river is known as Dhamra in its lower reaches. - The Brahmani River basin is bounded in the north by the Chhotanagpur plateau, in the west and south by the Mahanadi basin, and in the east by the Bay of Bengal.
7	Lemru Elephant reserve	- The Union coal ministry recently said that Coal India Limited's (CIL) 40 coal blocks in and around the Lemru Elephant Corridor (LEC) will not be auctioned on the request of the Chhattisgarh government. - Its in Korba district of Chhattisgarh.

Major Biodiversity Hotspots In World



1.	The Guinean forests of Western Africa	The areas covered are Benin, Cameroon, Cote d'Ivoire, Equatorial Guinea, Ghana, Guinea, Liberia, Nigeria, Sao Tome and Principe, Sierra Leone, Togo. The Guinean forests of West Africa is a biodiversity hotspot designated by Conservation International, it includes the belt of tropical moist broadleaf forests along the coast of West Africa, running from Sierra Leone and Guinea in the west to the Sanaga River of Cameroon in the east.
2.	The Horn of Africa	The areas covered are Somalia, all of Djibouti, parts of Ethiopia, Eritrea, Kenya, Yemen and Oman, and a small piece of northeastern Sudan and Socotra Archipelago (northeastern Somalia). It is notable for endemic plants, with more than 2700 species. Both the frankincense and myrrh trees are native to this region. It is degraded due to overgrazing and charcoal harvesting. Endemic mammals include the Hamadryas baboon, Speke's pectinator and 3 species of antelope.
3.	Madagascar and the Indian Ocean Islands	The areas covered are Comoros, Madagascar, Mauritius and Seychelles. One of the most notable features of the Madagascar and Indian Ocean Islands Hotspot is the extremely high floral and faunal endemism. Endemism in the hotspot is marked not only at species level, but also at higher taxonomic levels. The global importance of the hotspot is particularly high for mammals, plants and reptiles.
4.	Coastal forests of Eastern Africa	The areas covered are eastern edges of Africa, parts of Somalia, Kenya, Tanzania and Mozambique, islands of Pemba, Zanzibar, Mafia and the Bazaruto Archipelago. It is characterized by tropical dry forests within a mosaic of savannahs, grassland habitats and wetlands areas. Critically Endangered Kipunji monkey (<i>Rungwecebus kipunji</i>) and Vulnerable grey-faced elephant shrew (<i>Rhynchocyon nudzungwensis</i>) are found here.
5.	Himalayan hotspot	It covers both the Eastern Himalayas and the Western Himalayas. Of the estimated 10,000 species of plants in the Himalaya Hotspot, about 3,160 are endemic, as are 71 genera. The largest family of flowering plants in the hotspot is the orchidaceae, with 750 species. A zone of permanent ice and rock begins at about 5,500-6,000 meters.
6.	Indo Burma region	This region consists of numerous countries including North-Eastern India (to the south of the Brahmaputra River), Myanmar, and China's Yunnan provinces southern part, Lao People's Democratic Republic, Vietnam, Cambodia, and Thailand. A wide diversity of ecosystems is represented in this hotspot including mixed wet evergreen, dry evergreen, deciduous, and mountain forests. There are also tracts of shrub-lands and woodlands on limestone outcrops and in some coastal areas, scattered heath forests. It is also characterized by swamps, mangroves and seasonally inundated grasslands.
7.	Japan biodiversity hotspot	It covers the land area of the nation of Japan. The most notable endemic species found in Japan include the Japanese giant salamander, the Amami rabbit, and the Okinawa woodpecker. These species are not found anywhere else in the world and are essential components of their ecosystems.
8.	New Zealand Biodiversity Hotspot	This Biodiversity Hotspot covers the country's three main islands (North Island, South Island and Stewart Island). It also covers two islands namely Lord Howe and Norfolk islands of Australian territories. More than 90 percent of the insects and 80 percent of the vascular plants in New Zealand are endemic to the region.
9.	Philippine Biodiversity Hotspot	Philippines is the world's second largest archipelago, located in the southeast region of Asia and westernmost Pacific ocean. Critically Endangered Philippine eagle (<i>Pithecophaga jefferyi</i>), the second-largest eagle in the world is found here.
10.	Western Sundaland	It covers the western half of the Indonesian archipelago dominated by the islands of Borneo and Sumatra, nearly all of Malaysia, Singapore and Brunei region. A very small

		portion of the Indian Territory also comes under this Biodiversity hotspot in the form of The Nicobar Islands.
11.	The Western Ghats of India and Islands of Sri Lanka	It covers the states of Goa, Maharashtra, Karnataka, Tamil Nadu and Kerala and Sri Lanka. Some of the endangered species found here are Nilgiri Tahr, Lion-tailed Macaque and Nilgiri Langur.
12.	Polynesia and Micronesian Islands	This Biodiversity Hotspot covers all the islands of Micronesia and Polynesia, plus Fiji region, scattered across the Pacific Ocean
13.	California Floristic Province	It lies in the region that extends from Santa Barbara in Southern California to the parallel 30 th in Northern Baja California (about 220 miles from San Diego)
14.	Caribbean Islands Hotspot	This Island Hotspot comprises of 30 nations including countries like Anguilla, Bermuda. With around 1,000 globally threatened species, the Caribbean is one of the most critically endangered hotspots in the world. The Caribbean's diverse fauna includes unique reptiles like the Cuban iguana and the Jamaican boa, as well as iconic bird species such as the Hispaniolan parrot and the Cuban tody.
15.	Chilean winter rainfall (Valdivian) Forests	The Chilean Winter Rainfall-Valdivian Forests covers the central-northern part of the nation of Chile and the far western edge of Argentina, stretching from the Pacific coast to the crest of the Andean mountains. The Valdivian forests of Argentina and Chile are the only temperate rainforests in South America. Olivillo trees, longest living tree species are found here.
16.	The Mediterranean basin	The Biodiversity hotspot of the Mediterranean Basin covers the areas of Albania, Bosnia and Herzegovina, Cabo Verde, Egypt, Jordan, Lebanon, Libya, Montenegro, Morocco, North Macedonia, Tunisia

Draft National Pharmacy Commission Bill 2023

- The Union Health Ministry invited comments from the public and stakeholders on the proposed National Pharmacy Commission Bill 2023.
- Earlier, during the Parliament session (in August), the National Nursing and Midwifery Commission Bill 2023 and the National Dental Commission Bill 2023, were passed.

Salient Provisions of the National Pharmacy Commission Bill 2023

- **National Pharmacy Commission**
 - The bill proposes to constitute a commission with its head office in **New Delhi**.
 - **The Commission shall consist** of a Chairperson, 13 ex-officio members and 14 part-time members.
- **Three boards:** The Central Government shall constitute 3 boards namely the Pharmacy Education Board, the Pharmacy Assessment and Rating Board, the Pharmacy Ethics and Registration Board, which will function under the commission.
- **Establishment of new pharmacy institutions:**
 - The bill prohibits the establishment of new pharmacy institutions or courses without prior permission from the **Pharmacy Assessment and Rating Board**.
 - This Board will evaluate and rate pharmacy institutions and publish assessment documents on its website.
 - Non-compliance with minimum standards may result in actions such as warnings, penalties, reduced intake, admissions suspension, or recognition withdrawal.
- **National Pharmacy Register:** According to the draft, the Pharmacy Ethics and Registration Board will maintain a National Pharmacy Register which will have details of pharmacy professionals to ensure transparency.
- **Implementation:**
 - Every State Government shall, **within one year from the commencement of this Act**, constitute a state pharmacy chapter, where no such state chapter exists in that State by a State Law.
 - This will help in exercising such powers and discharging such duties as may be laid down under the Act.
- **Periodic and transparent assessment** of pharmacy institutions.
- **Other provisions of the bill:**
 - It also encourages professionals **to integrate the latest research into their work**, contribute to research, and uphold high ethical standards.
 - It **proposes flexibility to adapt** to changing needs and seeks to set up an effective grievance redressal mechanism.

The Proposed National Pharmacy Commission Bill 2023:

It aims to replace the Pharmacy Act 1948 and the existing Pharmacy Council of India (PCI) with the National Pharmacy Commission.

- The Act of 1948 regulates the profession of pharmacy whereas it is expedient to make better provision for the regulation of the profession and practise of pharmacy.
- For that purpose, it constitutes the Pharmacy Council of India.

The Bill aims to improve access to affordable, high-quality pharmacy education, and ensure the availability of pharmacy professionals nationwide and seeks to promote equitable healthcare by making pharmacy services accessible to all citizens.

Functions of National Pharmacy Commission

- The commission is tasked with **setting education standards**, facilities, assessments, training, research, and tuition fees.

- It will establish **standards for the pharmacy faculty and clinical facilities**, implement a uniform admission mechanism, and regulate pharmacy education and training policies.
- Additionally, the commission will oversee and regulate pharmacy institutions, research activities, professionals, and associates.
- **Make regulations to ensure the competency of pharmacy professionals.**
- **The commission will evaluate professionals** either through final year undergraduate exam or otherwise,
 - To ensure adequate competence of the pharmacy professionals for enrolment in the National Register or State Register, and
 - For granting licence to practise as a pharmacy professional.
- It will also have the **duty to collaborate with industry and other institutions** for the use of cutting-edge technology and hybrid education to drive innovation and research in pharmacy.
- To ensure the global mobility of professionals, the council will have to **train professionals with soft skills and provide elective courses at educational institutions.**

Debate Over Appropriate Age Of Admission To Class 1

- Schools in Delhi this year will continue to admit students to Class 1 below the age of 6 years.
- This is contrary to recent letters from the Union government to all states, urging them to align the age of entry to Class 1 with the new National Education Policy 2020.
- According to a response furnished by the Union government in the Lok Sabha, there are wide variations in the age criteria among states when it comes to admission to Class 1.
 - There were 14 States and Union Territories, as of March 2022, that allow Class 1 admission for children who have not completed six years.

Opinions Of Academicians On This Issue

- The age of 6 years was identified considering the universal age that most countries across the world have been following, i.e., to admit a child into grade one at the age of 6 or 7.
- This was also the same in **Gandhi's idea of basic education.**
- It was also stated in the report of the **Sargent Commission** (on post-war education development in India), which goes back to the 1940s.

What Is The Age To Start Formal Education Across The World In Various Countries

- Six is the standard age for starting primary school across East Asia, not just in Japan.
- This age is also common in most European countries.
 - It is usual (though not compulsory) for younger children in these societies to attend some sort of preschool.
- However, in the USA and the UK children generally start school at 5.

MARB: Proper Biometric Attendance System must for Increasing Seats in Medical Colleges

- The **Medical Assessment and Rating Board (MARB)** under the National Medical Commission (NMC) underlined the importance of the new Aadhaar Enabled Biometric Attendance System (AEBAS).

What does the NEP 2020 say about the minimum age to admit students in Class 1?

The new NEP pitches for a "5+3+3+4" design for formal schooling corresponding to:

- > the age groups 3-8 years (foundational stage),
- > 8-11 years (preparatory stage),
- > 11-14 years (middle stage), and
- > 14-18 years (secondary stage).



What does the Right to Education (RTE) Act, 2009 say about the age of entry for Class 1?

- RTE Act guarantees education from the age of 6 years to 14 years.
- This means that a child is expected to begin elementary education (i.e., Class 1) at the age of 6 years.
- RTE Act had to specify the entry age for enforcement of formal compulsory education.
- This has been ignored even now by many States leading to the confusion of the actual age for admitting students grade1.

- The AEBAS will be significant for the assessment of new medical colleges or colleges that are looking to increase the number of seats in the upcoming academic year.

How Will The Medical Colleges Be Inspected?

- For colleges looking to increase seats, a physical inspection will be carried out only if they have adequate faculty members with an attendance of at least 75% for the three prior months.
- For new medical colleges, the AEBAS registration of all faculty members should be completed and attendance for at least 10 working days should be available at the time of inspection.
- Government medical colleges that have been running MBBS programmes for at least five years will be **exempted** from physical inspection for increasing PG seats.
- Private medical colleges and government medical colleges starting PG courses will still be physically inspected.

Importance of New AEBAS

- To increase transparency and ensure that medical colleges have adequate faculty and patients throughout the year, the NMC introduced ways of monitoring the colleges remotely throughout the year.
- Along with the AEBAS, medical colleges are required to share their Health Management Information System (HMIS) data that captures how many patients are treated at the hospital.
- The move is essential seeing the increase in the number of medical colleges in the country, **making it difficult to conduct physical inspection all the time.**
- The pipeline dream would be to have no need for physical inspections at all, but this will supplement the physical assessments for now.

Janjatiya Gaurav Diwas

The PM of India launched a Rs 24,000-crore project for vulnerable tribal groups on the **birth anniversary of tribal icon Birsa Munda** ('Janjatiya Gaurav Diwas' - Nov 15) from Jharkhand's Khunti district.

- The PM Janjati Adivasi Nyaya Maha Abhiyan is meant to ensure last-mile welfare scheme delivery and protection for Particularly Vulnerable Tribal Groups (PVTGs).

Initiatives Launched at the 3rd Janjatiya Gaurav Diwas:

- PM Janjati Adivasi Nyaya Maha Abhiyan (PM- JANMAN):
 - The 24,000-crore rupee scheme aims to benefit and saturate the families and habitations with basic facilities.
 - Under PM JANMAN, the government will reach out to tribal groups and primitive tribes most of whom still dwell in the forests.
 - This will protect the tribes on the verge of extinction and nurture



National Medical Commission (NMC)

The NMC is the country's apex medical education regulator, which has been constituted by an act of Parliament known as National Medical Commission Act 2019.

- It replaced the Medical Council of India in September 2020.



Medical Assessment and Rating Board (MARB)

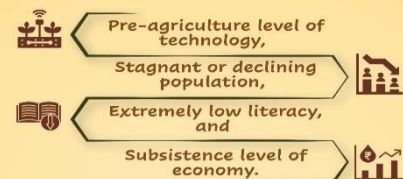
The Government of India has established the MARB (in 2023) under the NMC Act 2019 for assessing and rating of medical institutions (Government and Private) for their compliance with standards laid down by the NMC.

Functions of the MARB

- Grant permission for establishment of a new medical institution, or to start any postgraduate course or to increase the number of seats.
- Carry out inspections of medical institutions for assessing and rating such institutions.
- Conduct, or where it deems necessary, empanel independent rating agencies to conduct, assess and rate all medical institutions.
- Make available on its website or in public domain the assessment and ratings of medical institutions at regular intervals.
- Take such measures, including issuing warning, imposition of monetary penalty, reducing intake or stoppage of admissions, etc.

Who are the PVTGs?

According to the Ministry of Tribal Affairs (MoTA), India has 75 PVTGs, characterised by:



- PVTGs were recognised as a separate category based on the findings of the 1961 Dhebar Commission.
- In 1975, there were 52 PVTGs and, by 1993, the list had been expanded to 75 out of 705 Scheduled Tribes (STs) across 18 states and Union Territories.
- Data from the MoTA and the 2011 Census shows that Odisha has the largest population of PVTGs at 8.66 lakh, followed by MP at 6.09 lakh and Andhra Pradesh (including Telangana) at 5.39 lakh.
- The total PVTG population is more than 40 lakh and the largest PVTG is Odisha's Saura community, numbering 5.35 lakh.

them.

- **Viksit Bharat Sankalp Yatra:** A nationwide programme to reach out to all villages and include those eligible for various central schemes.
- **PM Kisan Scheme:** PM also released Rs 18,000 crore as the 15th installment of PM Kisan scheme for over 8 crore farmers across the country.

Extra Mile: Tribal Welfare Initiatives/Policies/Schemes

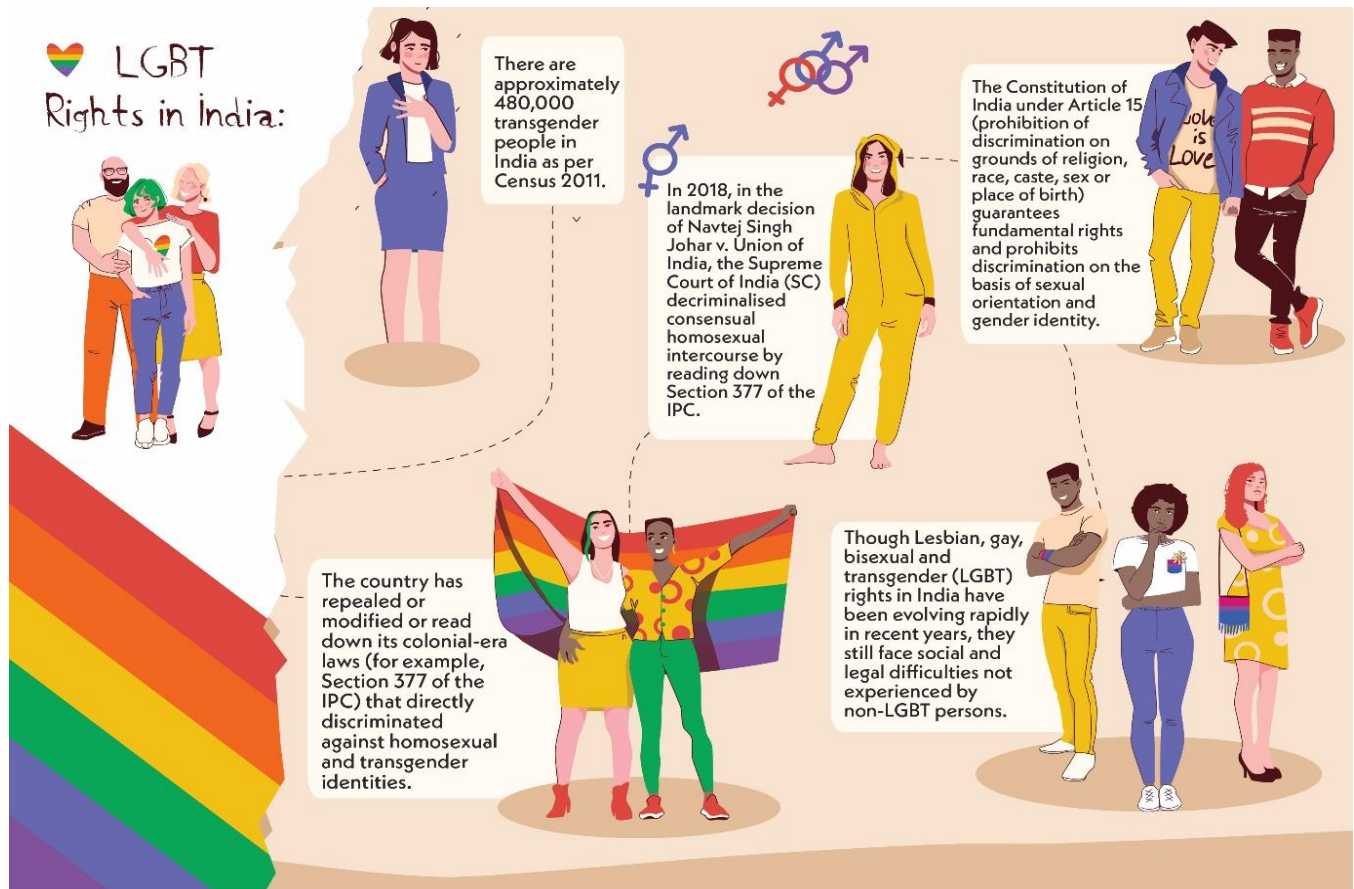
Government of India set up Ministry of Tribal Affairs in 1999 after the bifurcation of Ministry of Social Justice and Empowerment.

- **ST Seats Reserved in House of People (Article 330) and Assembly Constituencies (Article 332):** The constituencies in which seats are reserved for the Scheduled Tribes (STs), are located (as far as practicable) in areas where the proportion of their population to the total is the largest.
- **Article 338A-** It provides for a special officer (Commissioner) for the Scheduled Tribes to be appointed by the President and it shall be his duty to investigate all matters relating to the safeguards provided for the Scheduled Tribes.
- **Scheduled Tribes and Other Forest Dwellers (Recognition of Forest Rights) Act, 2006:** To empower forest-dwelling communities, including Scheduled Tribes, and recognize their rights over forestland and resources. Under this act, the concept of Habitat Rights was introduced, aiming to secure the habitat and livelihood of PVTGs and other tribal communities.
- **Tribal Cooperative Marketing Development Federation of India Ltd (TRIFED):** Established in 1987 with objective of Socio-economic development of tribal people in the country by marketing tribal products, empowering them with knowledge, tools, and information. The G20 Summit witnessed a remarkable showcase of India's rich tribal heritage and craftsmanship, presented by TRIFED.
- **1000 Springs Initiative:** It aims at improving access to safe and adequate water for the tribal communities.
- **PM Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN):** It aims to protect and nurture tribal groups, especially those on the verge of extinction.
- **Viksit Bharat Sankalp Yatra:** The focus of the Yatra will be on reaching out to people, creating awareness and providing benefits of welfare schemes.
- **Van Dhan Vikas Yojana:** It aims to establish a sustainable livelihood for India's tribal population.
- **Pradhan Mantri Janjatiya Vikas Mission (PMJVM):** The scheme has been formulated with the merger of the two earlier schemes for promotion of tribal livelihood, i.e., "Mechanism for Marketing of Minor Forest Produce (MFP) through "Minimum Support Price (MSP) and Development of Value Chain for MFP" and "Institutional Support for Development and Marketing of Tribal Products/Produce".
- **Eklavya Model Residential Schools:** started in 1997-98 with the aim of imparting quality education to children belonging to Scheduled Tribes (ST) in remote areas.
- **Stand Up India Scheme:** Facilitate bank loans between Rs.10 lakh and Rs.1 crore to at least one Scheduled Caste (SC) or Scheduled Tribe (ST) borrower and at least one woman borrower per bank branch for setting up a greenfield enterprise

National / State Scheduled Tribes Finance and Development Corporation (NSTFDC/STFDCs): Under the scheme, the Ministry releases funds in the form of Equity Share Capital assistance to NSTFDC/STFDCs which is deployed for the purpose of giving concessional loans to eligible members of Scheduled Tribes.

Exploring Employment Opportunities for Transgenders in Armed Forces

The Indian Armed Forces are looking at possible employment opportunities for transgenders and the roles they could perform, while examining the Transgender Persons (Protection of Rights) Act 2019 and its implications. A joint study group constituted by the Principal Personnel Officers Committee (PPOC) was tasked with suggesting a way forward for the implementation of the Act in the defence forces.



The Transgender Persons (Protection of Rights) Act 2019

- **Background:**

- In 2014, the SC in **NALSA v. Union of India** held that all persons have the constitutional right to self-identify their gender.
- Further, it directed Union and State Governments to allow transgender persons **to access reservations in public education and employment**.
- Following the judgement and the recommendation of the Parliamentary Standing Committee on Social Justice, the **2019 Act** was enacted and came into force. The Act is under the overall supervision of the **Minister for Social Justice and Empowerment**.

- **Objectives of the Act:**

- It protects the rights of transgenders and prevents their marginalisation and discrimination in healthcare, education, employment, public services and benefits, among others.
- Thus, the Act is an equal opportunity provider to the transgender community.

- **Salient Provision of the 2019 Act:**

- **Definition of a transgender person:** A transgender person as one whose gender does not match the gender assigned at birth.
- **Prohibition against discrimination** including denial of service or unfair treatment in relation to - education, employment, healthcare, etc.

- **Certificate of identity:** A transgender person may make an application to the **District Magistrate** for a certificate of identity, **indicating the gender as ‘transgender’**.
- **Welfare measures by the government:** The act states that the government will take measures (rescue and rehabilitation, vocational training and self-employment, etc) to ensure the full inclusion and participation of transgender persons in society.
- **Offences and penalties:** The act recognise the following offences against transgender persons - forced or bonded labour, denial of use of public places, removal from household and village, etc.
- **National Council for Transgender persons (NCT):** The NCT will consist of the Union Minister for Social Justice as Chairperson, and will -
 - Advise the central government on the impact of policies, legislation and projects with respect to transgender persons.
 - Redress the grievances of transgender persons.

Possibilities of Transgender Persons’ Entry in the Armed Forces

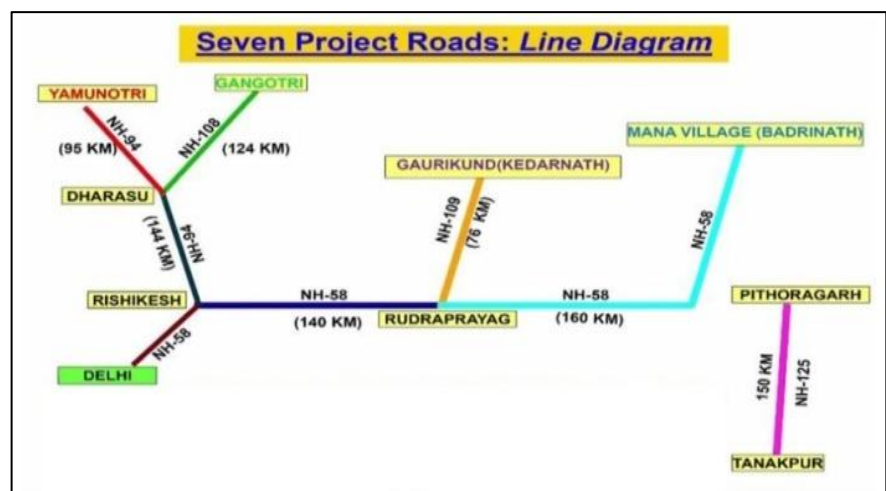
- The Armed Forces, at present, do not recruit transgenders or people identifying as homosexuals.
- A report presented by the **Standing Committee on Personnel, Public Grievances** proposed that the Ministry of Home Affairs should consider extending reservation benefits to transgender people in the Central Armed Police Forces (CAPFs).
- **The joint study group**, which comprises top officers of the three services and the Armed Forces Medical Services (AFMS), recently sought comments on the **feasibility of employing transgenders** in the force.
- As employment in defence forces is selection and merit-based, it will remain equally applicable to transgenders if recruitment to the military is opened to them at any given point.
- **It is learnt that a range of suggestions have been received**, with some insisting on not providing any special concessions to transgenders, while **others pointed to administrative and logistical difficulties** (such as their housing).
- There have also been questions about how they and their spouses (if any) would be identified in the military and **their cultural integration** with other serving military personnel.
- Therefore, **multiple issues will have to be factored in** before any decision is taken as the military cannot be looked at as just an employment opportunity.

Uttarakhand Tunnel Collapse

About 40 workers got trapped inside a tunnel after the under-construction tunnel structure collapsed in Uttarakhand on November 12. The tunnel is a part of **Char Dham all-weather road project** which commenced in 2016.

Char Dham All Weather Road Project

- It is a highway expansion project to widen 889 km of hill roads to provide all-weather connectivity in the Char Dham circuit.
- The project, envisaged in 2016, covers Uttarakhand’s four major shrines — Badrinath, Kedarnath, Gangotri and Yamunotri— in the upper Himalayas.

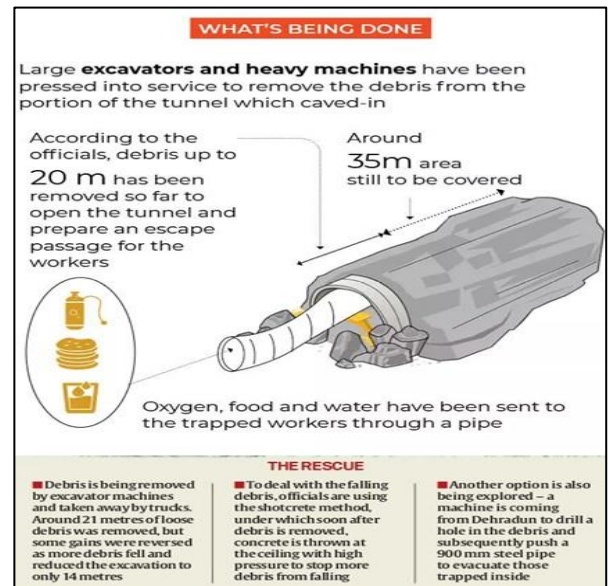
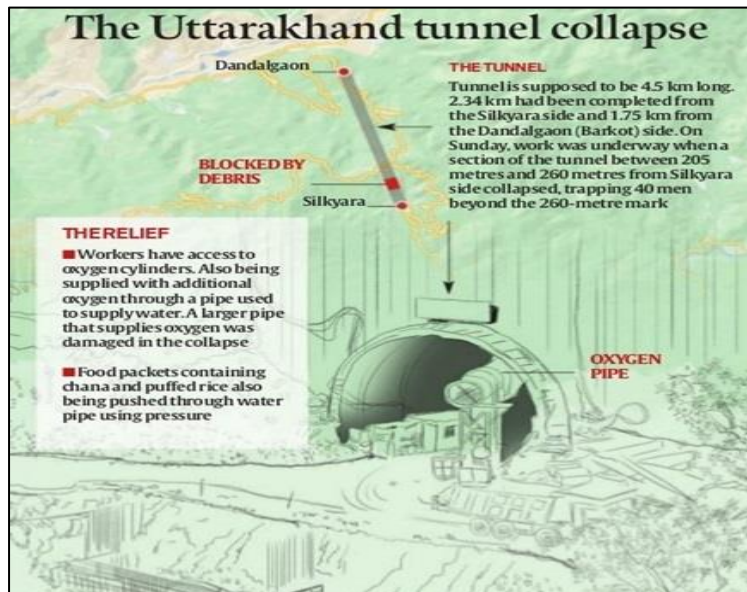


Silkyara Tunnel Accident

- The total length of the tunnel, which is meant to connect **Silkyara to Dandal gaon in Uttarkashi district**, is 4.5 km.
- The double-lane tunnel is pegged as one of the longest tunnels under the Char Dham all-weather road project and aims to reduce the journey from Uttarkashi to Yamunotri Dham by 26 kilometres.
- From the Silkyara side, 2.3km of tunnel has been constructed, while 1.6km of tunneling work has been completed from the Barkot end. Approximately, a 400m stretch of the tunnel is yet to be constructed.

The accident

- The workers are trapped in the **Silkyara Tunnel** located on the Uttarkashi-Yamnotri Road.
- The collapse happened about 270m from the entrance of the Silkyara side.



The Rescue Operations

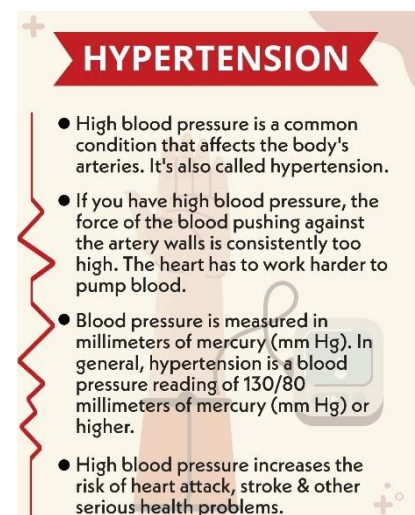
Agencies Involved: The National Disaster Response Force (NDRF), the State Disaster Relief Force (SDRF) and the police are among the main figures in the multi-agency rescue operations.

India's Hypertension Map

A new study finds significant variations in the occurrence and treatment of hypertension among Indian states, and also in districts within the states.

About The Study

- A group of researchers published an analysis of the recent National Family Health Survey data.
- As per the study, there is a significant variation in the level of prevalence, diagnosis, treatment, and control of hypertension among states and even districts within these states.
- The study found that a large proportion of those with hypertension do not get diagnosed, a large proportion of those who are diagnosed do not initiate treatment, and a large proportion of those who start treatment aren't able to control their blood pressure.
 - Only one in three receives a diagnosis, one in five gets treated, and one in twelve achieves blood pressure control.

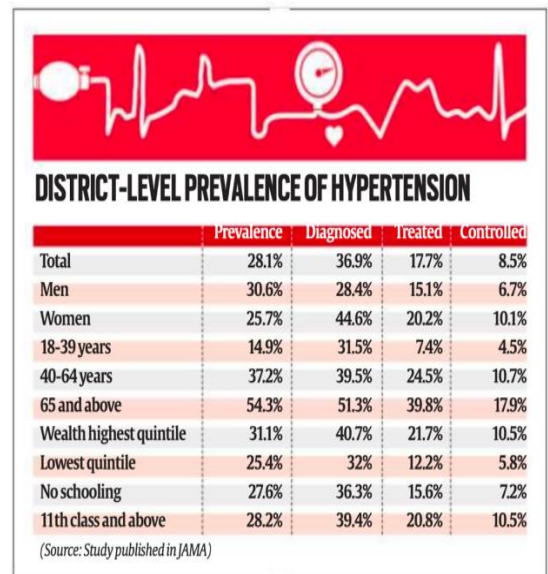


- **At State Level:**

- The study found that the prevalence of hypertension was similar among the southern states but higher than the national average — 29.9% of the population in the southern states as compared to 26.8% across India.
- The proportion of people diagnosed with hypertension in the southern states was similar to the rest of India.
- However, the proportion of people on treatment and with hypertension under control was higher in these states.

- **At District Level:**

- Not only at the state level, there were significant variations within districts, too. The researchers cited the example of two states to demonstrate this.
- In Meghalaya, the prevalence of hypertension was similar in the districts of Garo Hills (21.8%), Jaintia Hills (19.8%), and Khasi Hills (23.1%).
- However, the proportion of those diagnosed was lower in Garo Hills at 18.6% compared to 29.4% in Khasi Hills and 41.1% in Jaintia Hills.
- In Karnataka, four districts — Chikmagalur, Shimoga, Udipi, and Chitradurga — have a similar prevalence of hypertension, but the proportion of people treated and successfully controlled it was higher in Chikmagalur and Udipi.



- **Role of Age, Gender & Education:**

- Even at the national level, there were significant variations in the four levels of the continuum of care depending on the gender, age, socio-economic conditions, and education level of the person.
- While it is well known that men are more likely to have hypertension as compared to women, surprisingly, the data showed that women were much more likely to be diagnosed, be on treatment, and have their blood pressure under control.
- The prevalence, diagnosis, treatment, and control were all higher among those over the age of **65 years as compared to youngsters.**
- When it comes to socio-economic conditions, the prevalence, diagnosis, treatment, and control of hypertension was found to be highest among the wealthiest fifth of the population.
- While the prevalence of hypertension was similar among those who had no schooling and those who had passed class 11, diagnosis, treatment, and control were higher among those who had completed schooling.

- **Significance of District-level Data:**

- This district-level break-up of data can help state governments plan where and which level of care needs more resources.
- For example, in a district where medicines are not available at regular intervals, the proportion of treatment is likely to be poor.
- The local government then has to ensure that medicines are available regularly and at centers close to people's homes.

What Needs To Be Done To Control Hypertension In India?

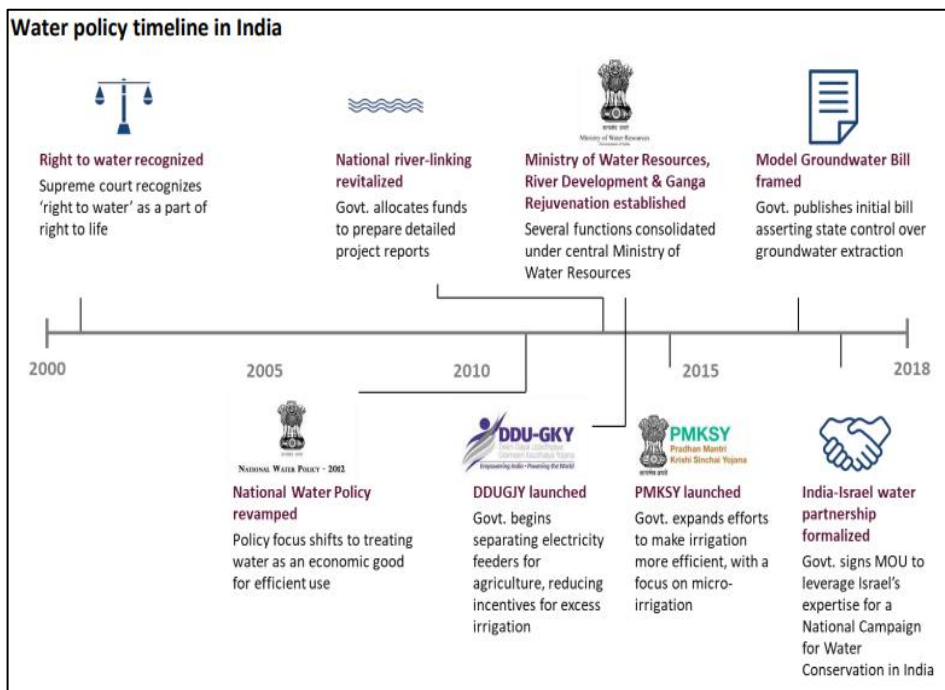
- A recently released WHO report on hypertension said **nearly 4.6 million deaths can be averted in India by 2040 if just half of the hypertensives were able to control their blood pressure.**
- To tackle the issue, the government this year launched an ambitious initiative to **put 75 million people with hypertension or diabetes on treatment by 2025.**
- Further, a focus on active screening of people, and ensuring follow-up will help in controlling hypertension in the country.

Composite Water Management Index (CWMI): NITI Aayog Weighs Discontinuing Key Water Report

- NITI Aayog is learnt to have marked the reports on states progress on water management for 2018-19 and 2019-20 for “internal use” after having publicly released the previous editions.
- Called the **‘Composite Water Management Index’ report**, the first edition launched five years ago in June **2018** brought India’s water challenges into spotlight and ranked states in terms of efficacy based on 28 parameters.
 - **The first edition** of the CWMI provided data for 2015-16 and 2016-17
 - **Second edition** launched in August 2019 was for 2017-18.
 - ✓ According to the report for 2019-20, **Gujarat** tops the list with continuous improvements year on year and is **closely followed by Rajasthan, Andhra Pradesh and MP** in terms of performance.
- Recently, the NITI Aayog wrote to the Union Ministry of Jal Shakti, **seeking the government’s perspective on the “use and applicability” of the Index and whether the CWMI should continue.**
 - There has been **no response from the Ministry**, even as the third and fourth editions are awaiting release.
 - **The latest report** maps the performance of states for 2018-19 and 2019-20, and points out that water scarcity is a “national problem”.
- The average annual per capita water availability is **expected to reduce to 1,486 cubic meters per person per year by 2021** from 1,545 cubic meters per person per year in 2011.

Background In Which The Composite Water Management Index (CWMI) Launched

- Currently, **600 million Indians face high to extreme water stress** and about two lakh people die every year due to inadequate access to safe water. The crisis is only going to get worse.
- **By 2030, the country’s water demand is projected to be twice the available supply**, implying severe water scarcity for hundreds of millions of people and **an eventual ~6% loss in the country’s GDP.**
 - As per the norms, the availability

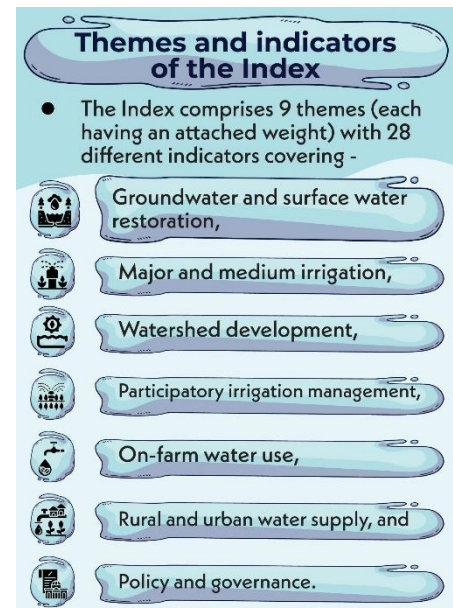


value of less than 1,700 cubic meter/person/year indicates **water shortage**.

- Water availability below 1,000 cubic metre/capita/year is considered as “**scarcity**”.
- The **UN University** - Institute for Environment and Human Security (UNU-EHS), had warned that India is close to reaching its groundwater risk tipping point.
 - **Environmental tipping** points are critical thresholds in the Earth’s systems, beyond which abrupt and often irreversible changes occur.

What Is The CWMI?

- **About**
 - **NITI Aayog** has developed the CWMI in **2018** to enable effective water management in Indian states in the face of this growing crisis.
 - The report is being prepared **in association with ministries**- Ministry of Jal Shakti and Ministry of Rural Development.
- **Objectives of the Index**
 - **To bring about much-required improvements** in water resource management and conservation in India in a coherent and collaborative manner.
 - **It will be a public platform** that provides an annual snapshot of the water sector status and the water management performance of the different states /UTs.
 - **It will measure both the overall progress** made by states in water management and the **incremental improvement** in performance across time.
- **Significance of the Index:**
 - It is meant to **foster a culture of evidence and data-backed policy-decisions for sustainable and efficient management of water resources**.
 - It is expected to promote the spirit of '**competitive and cooperative federalism**'.
 - The data included in the Index will be **made publicly available to researchers and entrepreneurs to drive innovation** in the sector.



State Food Safety Index (SFSI) 2023

Four years after the FSSAI published a state-wise index - State Food Safety Index (SFSI), to spur food safety improvement, 19 out of 20 large states recorded a drop in their 2023 scores from 2019. After adjusting for a new parameter included in the 2023 index, 15 out of 20 states recorded lower 2023 scores compared to 2019.

What Is The State Food Safety Index (SFSI)

- **To encourage States/UTs to improve and work towards food safety in their jurisdiction**, the FSSAI (**Food Safety and Standards Authority of India**) releases the SFSI **annually** for each financial year **on 7th June** on the occasion of **World Food Safety Day**.
- **The Index is a dynamic quantitative and qualitative** benchmarking model that provides an objective framework for evaluating food safety across all States/UTs.
- **The 1st SFSI** was released in June, 2019 based on the information submitted by States/UTs.

SAFETY MEASURE	
Parameter	Weight
Compliance	28
Consumer Empowerment	19
Human Resources and Institutional Data	18
Food Testing Infrastructure	17
Improvement in SFSI Rank (added in 2023)	10
Training and Capacity Building	8
TOTAL	100

- In the 2023 index, a new parameter called 'Improvement in SFSI Rank' was added, which assesses improvement in each state's rank from the year before.

The SFSI 2023 - Comparing With 1ST SFSI

STATES WITH STEEPEST INDEX FALL		
State	2019	2023
Maharashtra	74	45
Bihar	46	20.5
Gujarat	73	48.5
Andhra Pradesh	47	24
Chhattisgarh	46	27

Source: SFSI reports; all scores out of 100

- **'Food Testing Infrastructure' parameter:**
 - This parameter measures availability of adequate testing infrastructure with trained personnel in each state for testing food samples.
 - The worst drop has been observed in this parameter, which was given the 4th highest weightage of 17% in 2023 (20% in previous years).
 - ✓ Maharashtra's score for this parameter dropped to 4 points out of 17 in 2023 from 17 points out of 20 in 2019.
 - ✓ Both Gujarat and Kerala were the best performers in 2023 with 13.5 points out of 17 while Andhra Pradesh performed the worst.
- **The 'Compliance' Parameter**
 - This has been given the highest weightage of 28% in 2023 (30% in previous years), measures licensing and registration of food businesses, inspections conducted, special drives and camps organised, etc.
 - In 2023, Jharkhand received 4 points out of 28, the lowest score for compliance, whereas Punjab and Himachal Pradesh received 18 points each, the highest score.
- **The 'Consumer Empowerment' Parameter**
 - This has been given the second highest weightage of 19% in 2023 (20% in previous years).
 - It measures a state's performance in various consumer empowering initiatives of FSSAI including participation in Food Fortification, Eat Right Campus, BHOG (Blissful Hygienic Offering to God), etc.
 - Bihar's score in this parameter dropped to 1 point out of 19 in 2023 from 7 points out of 20 in 2019.
 - The top performer for this parameter in 2023 was Tamil Nadu with 17 points out of 19, followed by Kerala and Madhya Pradesh with 16 points each.
- **The 'Human Resources and Institutional Data' parameter:**
 - This has been given the third highest weightage of 18% in 2023 (20% in previous years).
 - It measures availability of human resources including number of Food Safety Officers, Designated Officers, and facility of adjudications and appellate tribunals in each state.
 - Top performers in 2019 like Tamil Nadu and UP, with each receiving 17 points out of 20, got merely 10.5 and 9.5 points respectively in 2023.
- **The 'Training and Capacity Building' parameter:** This is the only parameter which recorded significant improvement, which was given the least weightage of 8% in 2023 (10% in previous years).
- **The 'Improvement in SFSI Rank' parameter:** It carried a weightage of 10% in 2023, 14 out of 20 large states received 0 points.

Parliamentary Committee's Recommendation on Adultery

The Parliamentary Committee on Home Affairs has suggested that adultery should be re-instituted as a crime in the Bharatiya Nyaya Sanhita (BNS), 2023.

- BNS 2023 is the proposed law to replace the Indian Penal Code (IPC), 1860.

Key Takeaways Of The SC Judgement

- **Discriminatory Nature of Section 497**

- Section 497, and its manifest arbitrariness in punishing only men for adultery, was one of the grounds. As per the SC, Section 497 was violative of Articles 14, 15, and 21 of the Constitution.
- The court underlined the autonomy of women as a facet of human dignity and declared that the husband is neither master of his wife, nor does he have legal sovereignty over her.
- **Adultery Does Not Fit Into The Concept Of Crime**
 - If it is treated as a crime, there would be immense intrusion into the extreme privacy of the matrimonial sphere.
 - To treat it as a criminal offence will offend the two facets of Article 21 of the Constitution:
 - dignity of husband and wife, as the case may be, and
 - the privacy attached to a relationship between the two.
- **Section 497 was replete with anomalies**
 - An adulterous relationship would not be an offence if the married woman had her husband's consent.
 - Also, a wife could not prosecute her husband or his lover, even if they committed this offence.

What Has The House Committee Recommended?

- The report on the BNS 2023, which was adopted by the Committee recently, said that adultery should be reinstated as a criminal offence.
- However, the report said that it should be made gender-neutral — that is, both men and women should be punished for it.
- The Committee was of the view that the institution of marriage is considered sacred in Indian society and there is a need to safeguard its sanctity.

Can The Supreme Court's Decision In This Case Be Undone?

- A ruling of the SC is the law of the land. Parliament cannot simply pass a law that contradicts a ruling of the top court.
- However, it can pass a law that removes the basis of the court's judgment. Such a law can be both retrospective and prospective.
 - In the **Madras Bar Association vs. Union of India** case in 2021, SC held that to check if a law fixing a problem is valid, one needs to see if the court's decision would have been the same if the corrected situation existed when the judgment was made.
 - In simpler terms, if the issue raised in the court was fixed by the new law, the basis of the court's decision is no longer valid.



LEGAL POSITION ON ADULTERY

Before SC Judgement of 2018

- Until 2018, Section 497 of IPC defined adultery as a criminal offence that attracted up to five years in prison, or a fine, or both.
- However, only men could be punished under Section 497, not women.
 - ▶ As per this section, the wife shall not be punishable as an abettor.
- This was contrary to both the common understanding and the dictionary definition of adultery.
- As per these, adultery is simply voluntary sexual intercourse between a married person, man or woman, and someone other than that person's current spouse or partner.

SC Judgement of 2018

- In *Joseph Shine vs Union Of India* (September 2018), a five-judge Bench of the Supreme Court *unanimously struck down Section 497 of the IPC on grounds that included discrimination.*

ENCORE Software

ENCORE (Enabling Communications on Real-time Environment) is an in-house software designed by the Election Commission of India for candidate and election management.

Objective

To provide a seamless facility for Returning Officers (ROs) to process candidate nomination, affidavit, Voter turnout, counting, results and data management

Structure- It consists of various applications:

- **ENCORE Counting Application-** An end-to-end application for returning officers to digitize the votes polled, tabulate the round-wise data and then take out various statutory reports of counting.
- **ENCORE Scrutiny Application-** To allow the ROs to scrutinize the nominations filed by the candidates on-line. After verification, the nomination status is marked as Accepted, Rejected or Withdrawn helping the Returning Officer to prepare the final list of contesting candidates and assign the symbols.
- **Candidate Affidavit Portal-** for displaying information about a candidate's finances, assets and their liabilities.
- **Nodal Application-** Using this application, various departments like fire, education, police, environment, CPWD give 'no objection' certificate before any permission request received from political party or candidates for holding rallies, road shows and meetings.

Extra Mile

ICT Innovations of Election Commission of India (ECI)

Phase 1: Non-Election Phase

- **Voter Portal:** The portal provides the facility of searching names in the electoral roll by using the EPIC (*Electors Photo Identification Card*) number or personal details, registration of new voters, corrections of particulars, and migration cases inside or outside the assembly constituency.
- **Tollfree Number:** 1950 is one universal number available across India by which any user can call from any mobile operator and can talk to election-related issues in more than 22 languages.
- **SVEEP Portal:** This application, very active during the non-election period, is called the Systematic Voters' Education and Electoral Participation program. It provides for voter education, spreading voter awareness and promoting voter literacy in India.

Phase 2: Pre-election (Planning Phase)

- **EVM Management System (EMS):** The EMS is designed to manage inventory of EVM units i.e. tracking of units from manufacturer to state, state to state, and district to district.
- **ERONET:** Apart from Machine movement, various electoral exercises like improvement of health of electoral roll, new voter registration and updating of records are done by using this App.

Phase 3: In-election (Date Of The Announcement To Date Of Poll)

- **cVIGIL app:** The cVIGIL which stands for Citizen *Vigilance* is a mobile application designed by the ECI, with an opportunity to report election code violations directly by citizens. The app automatically enables a geo-tagging feature as soon as the user switches on their camera in the cVIGIL to report a violation. This means that Authority could know precise location of a reported violation, and the image captured by citizens could be used as evidence in the court of law.
- **Booth App:** This App facilitates faster identification of voters using quick search of the electors based on serial number/EPIC number/name. This reduces the queue in the polling station, helps with faster polling.

- **Voter Turnout App:** This provides approximate voter turnout percentage of each assembly constituency/ Parliamentary constituency to the larger public. This voter turnout app is exclusively used by citizens and also has been the primary method used by media houses.
- **Results ECI portal:** To ensure fast and authentic results of the elections, a very important application has been developed. This connects the counting centres across India in a secured manner and the counting data is calculated through this software and entered. Once the correctness is verified by the Counting staff, the results are submitted online.

Phase 4: Post Elections

- **Election Expenditure App:** The monitoring of election expenses has to be done on a regular basis during the campaign period so as to properly and correctly account every election expenditure incurred by the candidates and political parties during this period.
- **Index card:** This card is an important module of ENCORE. The final statistical report of the election is managed in the Index card App. Every detail of the election is reconciled with the physical record, validated and verified by the Returning Officers and Chief Electoral Officer of the State.

The 'SHREYAS' Scheme

SHREYAS (Scholarships for Higher Education for Young Achievers Scheme) has been proposed to be implemented from 2021-22 to 2025-26.

- It will place two ongoing Central Sector schemes for Other Backward Classes (OBC) and others namely – (i) National Fellowship for OBC and (ii) Dr. Ambedkar Central Sector Scheme of Interest Subsidy on Educational Loans for Overseas Studies for OBCs and Economically Backward Classes (EBCs).

About SHREYAS

What?

- 1) It is an umbrella scheme under the Ministry of Social Justice and Empowerment (Nodal Ministry).
- 2) SHREYAS is a programme basket comprising the initiatives of three Central Ministries, namely the Ministry of Education (Formerly Human Resource Development), Ministry of Skill Development & Entrepreneurship (MoSD&E) and the Ministry of Labour & Employment (MoLE) viz the National Apprenticeship Promotion Scheme (NAPS), the National Career Service (NCS) and introduction of BA/BSc/BCom (Professional) courses in the higher educational institutions.

Objective

Empowering OBC & EBC students educationally by awarding them fellowship (financial assistance) for obtaining quality higher education and interest subsidy on educational loan for overseas studies.

Components: It has two components-

1. National Fellowship for OBC students

- **Aim-** Providing financial assistance to the OBC students through 1000 Junior Research Fellowships (750 for NET-JRF and 250 for UGC-CSIR) for obtaining M.Phil and Ph.D degrees.
- These 1000 slots will be over and above the OBC Students selected under the normal reservation policy of the Government.
 - ✓ At least 5% of the total number of seats will be reserved for students with disabilities.
- **Eligibility-**

2. Dr. Ambedkar Scheme of Interest Subsidy on Educational Loans for Overseas Studies for OBCs & EBCs.

- **Aim-** To provide an interest subsidy to OBC and EBC students on a moratorium period for Education Loans for Masters, M.Phil. and Ph.D. degrees overseas.
- The maximum loan will be Rs 20 Lakhs.
 - ✓ 50% of the total financial assistance is reserved for women candidates.
- **Eligibility-**

1. National Eligibility Test-Junior Research Fellowship (NET-JRF) of UGC (for Humanities/Social Sciences) 2. UGC-Council of Scientific and Industrial Research (UGC-CSIR) NET-JRF Joint Test (for sciences) • <i>Implemented By-</i> Ministry of Social Justice & Empowerment through the designated Central Nodal Agency; National Backward Classes Finance and Development Corporation and all universities/institutions recognized by the University Grants Commission (UGC).	➤ Students should have admission in approved courses at Masters, M.Phil or Ph.D levels abroad ➤ Total income of the employed candidate or his/her parents/guardians in case of unemployed candidate shall not exceed present Creamy Layer criteria for OBC candidates and Rs. 5 lakh per annum for EBC candidates. • <i>Implemented By-</i> Canara Bank
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AAINA Dashboard

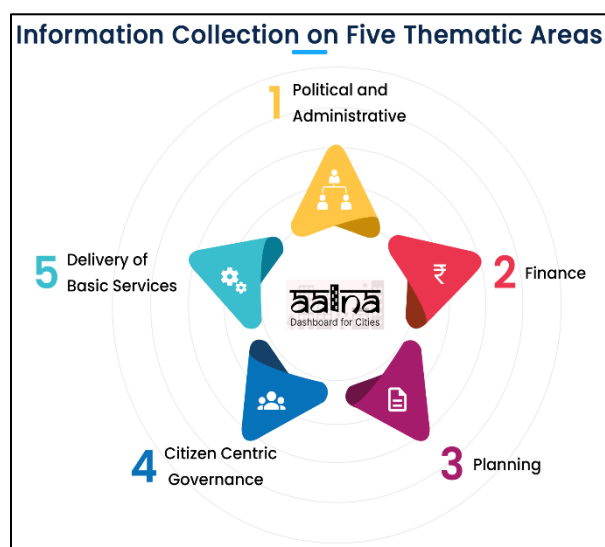
The Ministry of Housing and Urban Affairs (MoHUA) recently launched the 'AAINA Dashboard for Cities' portal www.aaina.gov.in for comparing similarly placed Urban Local Bodies (ULBs) and promoting peer learning amongst ULBs.

Objective

1. **Information-** To provide information on status and progress of the ULBs based on 5 thematic areas.
2. **Inspiration by Healthy Competition-** To help the ULBs to monitor their performance & learn by comparing it with others.

Features

- **Database of Key Performance Metrics-** The portal allows the ULBs to submit their data, including audited accounts, and self-reported performance metrics and update the information initially provided by them, anytime on the portal as per need.
- **Regular Updation-** It will be a permanent platform for ULB related data and will be updated on a regular basis.
- **Accessible by All-** This robust database of the key performance metrics of ULBs will be accessible to all stakeholders, and subsequently open for public view once it gets populated.
- **Support by Digital India Corporation-** will be provided to ULBs / States in the data submission process on a need basis.



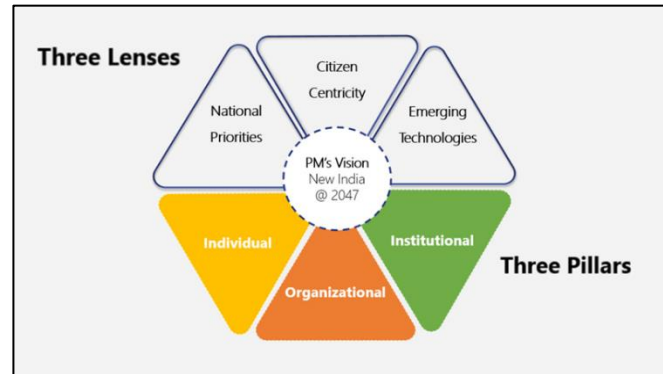
Annual Capacity Building Plan

Ministry of Heavy Industry recently launched 'Annual Capacity Building Plan (ACBP)' for 2023-24 outlining key strategic areas with focused capacity-building initiatives within the Ministry to enhance capability across all levels to achieve maximum governance to fulfill the vision of Mission Karmayogi (National Programme for Civil Services Capacity Building (NPCSCB) Plan).

About the Annual Capacity Building Plan (ACBP)

- It is a comprehensive document prepared by the Capacity Building Commission (CBC) detailing all the realistic and time-bound capacity building interventions required to enhance the competencies of individual officials within a ministry/department as well as the capacity of the MDO (Ministry, Department & Organization).

- For the implementation of this scheme, 2.5% budgetary outlay of the salary head of the department will be fixed. Under this scheme, training will be given to officers in both online and offline mode.
- The plan is based on three focus areas (given in the figure)
- To fulfil the mandate on facilitating development of ACBP, every MDO have been requested to form a Capacity Building Unit (CBU) comprising of officials from the respective MDO.
- CBU has three functions according to three pillars-



With respect to Individual	With respect to Organization	With respect to Institution
Human Resource Development- for equipping employees with understanding, skills, access to knowledge and training that enables them to perform effectively.	Organizational Development- for simplifying structures and procedures, within government departments through various training and non-training interventions.	Institutional Framework Development- for making systemic changes to create an enabling environment for example, institutionalize, creation of ACBPs

Extra Mile: Capacity Building Commission (CBC)

- It is an independent body established by the Government of India in April 2021.
- The CBC is responsible for driving standardization and harmonization across the Indian civil services. The CBC is also the custodian of civil services capacity building reforms.
- The CBC is a three-member Commission with full executive power. It is supported by an internal Secretariat headed by a secretary.

Operation Nanhe Farishtey

The Railway Protection Force (RPF) played a pivotal role in reuniting more than 601 children with their families which were separated for various reasons under the mission "Nanhe Farishtey".

Other Initiatives Taken up by the RPF

- **Anti-Human Trafficking Efforts (Operation AAHT):** to thwart the sinister plans of human traffickers.
- **Operation "Jeevan Raksha" - Saving Lives:** of passengers who had come close to getting run over by trains, at platforms and railway tracks.
- **Empowering Women Passengers - "Meri Saheli" Initiative:** to provide security assurance to lady passengers and acting against individuals found in coaches reserved for women.
- **Cracking Down on Touts (Operation "Uplabdh"):** for fighting against touts and taking legal action against them as per the law.
- **Operation "NARCOS" - Combating Drug Crimes:** for arresting individuals and seizing narcotics.
- **Swift Response to Passengers' Concerns:** for promptly addressing security-related passenger complaints through Rail Madad Portal and the helpline (No. 139 integrated with Emergency Response Support System No. 112).
- **Operation "Yatri Suraksha" - Protecting Passengers:** for preventing and detecting crimes against railway passengers.
- **Ensuring Safety through "Operation Sanraksha":** to maintain passenger safety and protect railway

services from acts such as stone pelting on running trains.

- **Assisting Those in Need (Operation Seva):** for aiding elderly, sick, or injured passengers during their rail travels.
- **Curbing Illegal Goods Transport (Operation Satark):** for seizing illegal tobacco products and illegal liquor.
- **Operation Amanat:** Assisting passengers who forget their belongings on the train

New Chief Information Commissioner (Chief IC) Appointed

Former information commissioner Heeralal Samariya was recently appointed as the chief of the Central Information Commission (CIC) making him the first person from the Dalit community to hold the post.

About Central Information Commission (CIC)

What?

It is a statutory body constituted under section 12 of the Right to Information (RTI) Act, 2005 for ensuring smoother and greater access to information envisaged under the RTI Act to Indian citizens through a citizen-centric approach.

Objectives

- To receive and inquire into citizen complaints under Section 18 of the RTI Act.
- To receive and decide upon the second appeals from any citizen under Section 19 of the RTI Act.
- To exercise the powers conferred on CIC under the RTI Act, 2005.
- To perform the duty of "Monitoring and Reporting" under Section 25 of the RTI Act.

Appointment

It consists of a Chief Information Commissioner (Chief IC) and not more than 10 Central Information Commissioners (ICs) appointed by the President on the recommendation of a committee consisting of-

- The Prime Minister (Chairperson);
- Leader of Opposition (LoP) in the Lok Sabha; and
- A Union Cabinet Minister nominated by the Prime Minister.

** Section 15 of the RTI Act provides for a State Information Commission (SIC) consisting of a State Chief Information Commissioner and not more than ten State Information Commissioners. They are appointed by the Governor on the recommendation of a committee consisting of 1) Chief Minister as Chairperson; 2) Leader of Opposition in the Legislative Assembly and; 3) State Cabinet Minister nominated by the Chief Minister.

Removal

The President can remove the members of the CIC (Governor in the case of SIC) if a member has been-

- ✓ Adjudged insolvent.
- ✓ Convicted of an offence involving moral turpitude.
- ✓ Engages in paid employment outside his office.
- ✓ Declared unfit to continue in office due to infirmity of mind or body.
- ✓ Acquired such financial or other interest that can affect his functioning as a chief information commissioner or information commissioner.
- The President/Governor can also remove the members on the ground of proved misbehavior or incapacity. Such cases must be referred to the Supreme Court (SC) for an enquiry and if the SC upholds the cause of removal and advises so, then the President (for CIC) /Governor (for SIC) can remove him.
- ✓ The member can be suspended or prohibited from office during SC enquiry.

Eligibility

- Chief & Members of CIC and SIC should be persons of eminence in public life with wide

Term of Office and Re-appointment

- The members shall hold office for the term prescribed by the Central Government or until they attain the age of 65

knowledge and experience in law, science and technology, social service, management, journalism, mass media or administration and governance. • The members should not be a Member of Parliament (MP) or Member of the Legislature of any State or Union Territory or hold any other office of profit or connected with any political party or carrying on any business or pursuing any profession.	years, whichever is earlier. • Chiefs of CIC and SIC are not eligible for reappointment. • Information Commissioners are eligible for appointment as the CIC, but their term of office cannot not be more than five years in aggregate as the IC and the CIC.
Powers and Functions 1.Receive & Enquire into Complaints: received from any person regarding information requested under RTI Act 2005 when- ✓ an appellant is unable to submit his/her RTI application ✓ information is denied or information has not been provided in the time limit provided. ✓ Excess fee is being charged ✓ incomplete, misleading or false information is provided. 2.Adjudication in the second appeal: If the appellant is not satisfied with the decision of the first appellate authority, a second appeal can be filed with the Information Commission within 90 days of the date of the first decision. 3.Imposition of penalties: by CIC and SIC if the Public Information Officer, either at the central or state level, has not performed his duty and, without reasonable cause, rejects or refuses to entertain the application made by the complainant. 4.Access to all public records: under the control of a public authority. 5.Suo-moto Power: It can order an inquiry into any matter with reasonable grounds. 6.Powers of a Civil Court: with CIC/SIC in respect of summoning, requiring documents, etc. The decision of the Commission on an appeal is binding & is not subject to further appeal in a court of law. 7.Secure Compliance: with its decisions from the public authority. 8.Annual Report: is submitted to the Union Government which places it before Parliament. ✓ The SIC submits an annual report to the State Government which places it before the State Legislature.	
Jurisdiction- Extends all over India (all over state in case of SIC).	
Additional Information Regarding CIC 1) Are there any public authorities exempt from providing information? Yes, intelligence and security organizations specified in the Second Schedule to the Act are exempt from furnishing information under the Act. However, this exemption does not apply if the requested information pertains to the allegations of corruption and human rights violations. 2) In which language a request may be made for seeking information? As per section 6 (1) of the RTI Act, a request may be made in English or Hindi or in the official language of the area in which the application is made. 3) How is information about disposal of a case conveyed to the parties? After hearing of the cases by the Chief IC or IC concerned, a formal order is passed, a hard copy of which is provided to the complainant/appellant and the CPIO concerned free of cost. A copy of the order passed is also uploaded on the website of the Commission.	

4) Has this Commission power to compensate the complainant for any loss or other detriment suffered by him?

Yes, in appropriate cases this Commission may order the public authority to compensate the complainant.

5) Is facility of hearing through video conferencing available?

Yes, the facility of hearing through video conferencing is available at almost all district headquarters of National Informatics Centre (NIC) in the country.

Challenges Faced by CIC/SIC

1.Lack of transparency: in case of selection and working of CIC and SIC. Recently, SC commented on former bureaucrats being appointed as commissioners, observing that only one category of persons is always being preferred than persons belonging to other categories.

2.Poor Record Management Practices: In such a scenario, government departments would be unable to locate important information, either to meet the needs of citizens or even for simple auditing or accounting purposes and would hamper the information being sought.

3.Vacant Posts: as vacancies are not being filled in a timely manner leading to vacant posts and a backlog of cases. As per the Satark Nagarik Sangathan's report card for 2021-22, three posts of commissioner have been vacant in CIC even though the backlog of appeals/complaints currently stands at nearly 26,800 cases.

4.Lack of capacity building: Lack of knowledge in public authorities dealing with RTI applications results in a delay in replying to the query.

5.Delay in disposal of appeals and complaints: in case of the Second Appeal, as RTI Act provides a time limit within which First Appeal needs to be disposed of but there is no limit provided within which the Second Appeal to CIC must be heard and disposed of. As of June 30, 2021, 2.56 lakh appeals were pending with 26 information commissions in the country.

6.Poor quality of the information: provided to the applicant which often leaves the information seeker unsatisfied.

7.Lack of Public Awareness: regarding the RTI act makes it less effective.

8.No Penalties: Government officials hardly face any punishment for violating the law and the penalties were imposed only in 2.2% of cases regardless of 59% violations which should have been imposed penalty.

Extra Mile

Other Initiatives By CIC

- The CIC has proposed to set up a *National Institute of Accountability and Transparency* as its extended arm which will act as a single point of contact for undertaking research on accountability and transparency issues and setting up a database of best practices undertaken around the world.
- It is considering the possibility of setting up a call center for providing guidance to the public, and senior citizens, to help them submit their RTI applications with ease without running from pillar to post.

About Right to Information (RTI) Act, 2005

- It is derived from our fundamental right of Expression under Article 19 of the Constitution of India to provide the right to information to Indian citizens.
- **Jurisdiction:** It applies to all States and Union Territories of India.
- **Objective:** To allow any citizen to request information from a public authority by making an application in writing or through electronic means without giving any reasons for seeking information.
- **Time Limit:** In the normal course, reply to an RTI application should be given within 30 days of the receipt of the application and within 48 hours if the information sought concerns the life or liberty of a person.

- **Public Information Officer (PIO):** The act mandates every public authority to designate some of its officers for giving information to a person who seeks information under the RTI Act.
- **Computerized Records:** It requires every public authority to computerize their records for wide dissemination and to proactively publish certain categories of information so that the citizens need minimum recourse to request information formally.
- **Exemptions:** It exempts certain security and intelligence organizations from the purview of the act except the information pertaining to the allegations of corruption and human rights violations.
 - ✓ Recently, the Union Government added CERT-In among the list of organizations exempted from the ambit of RTI act.

Kunbi Certificates Being Issued to Identified Kunbi Marathas in Record

The Maharashtra government accepted the first report of the Shinde committee to grant Kunbi caste certificates to the Marathas (who are being identified as Kunbi in different official records) in the Marathwada region & subsequently whole Maharashtra amid indefinite fast by activist Manoj Jarange for the Maratha quota and incidents of violence over the demand in some parts of the state.

- ✓ Shinde Committee headed by retired High Court Judge Sandeep Shinde is a five-member panel appointed to decide the standard operating procedure (SOP) for giving kunbi certificates to the Maratha community whose ancestors were referred to as Kunbis in Nizam-era documents.
- ✓ The Marathwada region of present-day Maharashtra was part of the Hyderabad state until 1948.

Background

The Marathas

They are a group of peasants, landowners and Kshatriyas (warriors), constituting nearly 33% of Maharashtra's population.

Who Are Kunbis?

- When Marathwada was part of the Hyderabad province, the community in the region was counted as Kunbis (farmer community). After the Marathwada region became part of Maharashtra, the community got counted as Marathas.
- Now Marathas of Marathwada region are demanding Kunbi caste certificate and the government has told them to provide documents to prove their Kunbi status during Nizam era.

Historical Evolution

- Large sections of Maratha population migrated to other parts of India during Maratha conquests of 17th and 18th century in Western, North, and South India and established a host of Maratha dynasties across the country.
- Like the Gaekwads ruled the Baroda princely state, the Scindias ruled the Gwalior princely state, and Bhonsles ruled Thanjavur in Tamil Nadu.
- They were divided into two categories- the Kshatriyas (warriors) category consisting of Marathas with surnames like Deshmukh, Bhonsle, More, Shirke, Jadhav and Kunbis with people belonging to predominantly agrarian background.
- But their prosperity started to decline over the years due to land divisions and agrarian problems among middle class and lower middle-class Maratha.

Maratha v/s Marathi

While most Marathas are Marathi-speaking, not all Marathi-speaking people belong to the Maratha community.

The Maratha Reservation Demand History and Present Scenario

MARATHA QUOTA: A TIMELINE

A brief history of the political war over Maratha reservation

1902: Chhatrapati 'Rajarshi' Shahu Maharaj launches affirmative action measures in his princely state of Kolhapur, reserves 50 per cent jobs for those who are not Brahmins, Shenvis (Saraswats), Prabhus and Parsis

1930s: The erstwhile Bombay government declares 228 communities, including the Marathas, as intermediate and backward classes and grants political quotas

1955: Report of the first national backward classes commission led by Gandhian Kakasaheb Kalelkar identifies 2,399 backward communities

Mar. 1982: Annasaheb Patil, legislator and an iconic leader of the Mathadi (head load) workers, organises a protest in Mumbai seeking quota on economic status. When his demands are unmet, he fulfils his suicide threat

1980: The B.P. Mandal Commission submits its report, which estimates 52 per cent of India's population across 3,743 classes as backward and excludes Marathas. It is implemented by the V.P. Singh government a decade later

Apr. 1965: Maharashtra brings 10 per cent quota for backward classes and 4 per cent for de-notified and nomadic tribes in jobs based on the B.D. Deshmukh panel report. This was in addition to the 13 per cent for SCs and 7 per cent for STs

Jun. 2004: Based on Justice S.N. Khatri (retd) commission's report, Maratha-Kunbis and Kunbi-Marathas are added to the OBC category. This is in addition to the Kunbis, already categorised as OBCs

2014: Congress minister Narayan Rane-led committee recommends quotas for the Marathas; later, the Congress-NCP government approves 16 per cent quotas for them and 5 per cent for Muslims. The Bombay HC stays the move

2018: The state backward classes commission led by Justice M.G. Gaikwad (retd) classifies the Marathas as backward. Earlier, three panels had rejected the demand as had the National Commission for Backward Classes in 2000

May 2021: The SC junks the Maratha quota law, calls it unconstitutional. It holds that the Marathas are not socially and educationally backward, and hence not eligible for affirmative action

Nov. 2018: The Devendra Fadnis government approves 16 per cent quotas for Marathas in jobs and education. The bill is unanimously approved by the state legislature. Later, the Bombay HC upholds the law, but slashes the quotas to 13 per cent and 12 per cent in jobs and education, respectively

- After the SC struck down the Maratha quota law under the state's Socially and Educationally Backward Class (SEBC) Act, 2018 in its 2021 judgement, the demand for Maratha quota among the OBC reservation arose.
- They now want to be identified as Kunbis, which would entitle them to benefits under the quota for Other Backward Classes (OBCs).

State's Response

- The Maharashtra government is of the view that the poor among the Marathas could not benefit from the EWS quota upheld by the SC in its 2022 judgement unless the issue of Maratha reservation is resolved.
- Therefore, it pleaded with the apex court to review its 2021 decision which was denied. Following this, the state said it would file a curative petition.
 - ✓ A Curative Petition is the last available remedy where the Court can revise its judgment.
- The state government also set up the Shinde commission to carry out a detailed survey of the "backwardness" of the community and look into the demand of issuing the community kunbi certificates.
- This committee submitted its first report recently based on which the government started the process of issuing kunbi certificates.
- The state government has also decided to collect fresh empirical data to assess the educational and social backwardness of the Maratha community and to set up a three-member panel headed by retired judge Dilip Bhosale and retired judges Shinde and Maroti Gaikwad to advise the government on the legal issues related to the Maratha quota demand.

Haryana's Private Sector Quota Struck Down By High Court

The Punjab and Haryana High Court quashed the Haryana State Employment of Local Candidates Act, 2020 that provided 75% reservation in private jobs to state residents terming it unconstitutional as it violated fundamental rights and discriminated among citizens.

- ✓ The court also said that the law was against the principles of justice, equality, liberty, and fraternity.

About the Haryana State Employment of Local Candidates Act, 2020

What?

The law directs the State employers to reserve 75% of jobs with a monthly salary of less than Rs. 30,000 (originally 50,000) for local residents (anyone domiciled in Haryana for the past five years).

Applicability

- All private entities in the State including companies, trusts, societies, partnerships, limited liability partnerships (LLP).
- Any person employing 10 or more persons on salary, wages, or other remuneration.
- Central or state governments or organizations owned by them were kept outside the ambit of the Act. Or Any entity that may be notified by the government.

Key Provisions

- Local candidates will have to mandatorily register themselves on a designated portal to avail the benefits of this reservation and employers should make recruitments only through this portal.
- Companies can seek an exemption if they do not find local candidates with desired skill or qualification. However, this claim could be rejected by government officials if they doubt its legitimacy.
- Employers found to be violating the Act are liable to a fine between Rs.10,000 and Rs.2 lakh.

Why Was The Law Challenged?

Several industry associations challenged the validity of the law on the ground that-

1. It violates Article 19(1)(e) which guarantees the right to reside and settle in any part of the Indian territory and Article 19(1)(g) guaranteeing the right to practice any profession, business or trade.
2. It infringes Article 14 (equality before the law) and Article 15 (prohibition of discrimination on grounds of religion, race, caste, sex or place of birth).
3. It creates a wedge between persons domiciled in different States and is contrary to the concept of common citizenship envisaged in the Constitution.
4. Forcing the employers to employ local candidates in private sector violates the federal structure framed by the Constitution of India, whereby the government cannot act contrary to public interest and cannot benefit one class.

State's Defence

- It contended that the law intends to protect the right to livelihood of people domiciled in the State and was introduced in the backdrop of rising unemployment in the state.
- The government is empowered to create such reservations under Article 16(4) of the Constitution, which states that the right to equality in public employment does not prevent the State from making any provision for the reservation of appointments or posts in favour of any backward class of citizens which, in the opinion of the State, is not adequately represented in the services under the State.

The High Court Verdict

The HC termed the law as violative of Part III of the Constitution (Fundamental Rights) and declared it to be ineffective from the date it came into force while noting that-

- The provisions of the law which “required employers to submit quarterly reports” and “authorized the officers to call for documents or verification” amounted to Inspector Raj that furthered absolute control of state over a private employer. and
- The law is unconstitutional as it violates a person’s right to carry on occupation, trade, or business under Article 19(1)(g) of the Constitution.
- The law discriminates against individuals not belonging to a certain State by putting up artificial walls throughout the country.

- Article 35 bars the State legislature from legislating on matters that fall within the purview of Article 16(3) of the Constitution (equality of opportunity in matters of public employment) since only the Parliament can pass laws on such subjects. Therefore, the state is unauthorized to frame such law.
- ✓ Article 35 empowers the Parliament and bars the State Legislature to make law with respect to any of the matters under Article 16(3), Article 32(3), Article 33 and Article 34.
- ✓ Article 32(3) allows the Parliament to empower any other court to issue directions/orders/writs within the local limits of its jurisdiction.
- ✓ Article 33 empowers the Parliament to make laws restricting the application of fundamental rights to members of the Indian Army and intelligence organizations.
- ✓ Article 34 restricts fundamental rights when martial law is in force in any area.

After the verdict, the Haryana government decided to move the Supreme Court and file an SLP (Special Leave Petition under Article 136) after thoroughly examining the HC order.

Similar Laws (But did not come into reality due to change in government / Judiciary Verdict)

1. Similar laws have been enacted in other states which include Maharashtra (up to 80 percent), Karnataka (75 percent), Andhra Pradesh (75 percent), and Madhya Pradesh (70 percent) to provide reservations for their local citizens in the private sector.
2. Telangana allowed tax concessions to industries that reserved jobs for locals in the state.
3. Madhya Pradesh government declared it would reserve all government jobs in the state for students of the state who have cleared Class 10 and 12 examinations from a school in the state.
2. The Andhra Pradesh Employment of Local Candidates in the Industries/Factories Bill, 2019 passed by the Andhra Pradesh legislative assembly reserved three-fourths of jobs for local candidates within three years of the commencement of the Act. This law was subsequently challenged in the High Court, which believed the legislation may be unconstitutional'. However, the final verdict is still awaited in this case.

Extra Mile: Reservations

Recent debates around reservations including domicile-based reservation, women reservation, sub-categorization of castes, creamy layer in SC/ST, reservation in judiciary, triple test criteria for reservation have brought the focus back on reservation which can be defined as a system used to provide preferential treatment to certain groups of society in the fields of education, jobs, and other areas.

Reasons for Rising Demands for Reservations

1. **Jobless Growth & Shrinking Employment Opportunities:** The private sector is failing to generate enough jobs for the increasing population because of which people are turning towards government jobs for a secure career.
2. **Lack of Opportunities in Rural Areas:** Agriculture and rural economy have been growing at a very slow pace in the last recent years resulting in lack of opportunities for people living in these areas. They are further affected by instances of drought, floods, pest attacks which force them to look for a more secure option of earning as a means of livelihood.
3. **Lack of Quality Education:** Although the number of education institutes are increasing with the increasing population, the ones providing quality education are still very few and to get admission in these quality institutes is a challenging task which seems easier with the help of reservation.
4. **Representation to Deprived Classes:** It provides representation opportunity to deprived classes who have almost nil representation in jobs and educational institutes. They seek reservation for equal opportunities, greater representation along with increased access to resources.
5. **Political Motives:** Political parties often play the card of reservation for increasing their vote bank.

Arguments Against Reservation System

1. **Against merit system:** as they allow for relaxed entry criteria that inflate moderate credentials instead of promoting merit-based opportunities and further demotivates a person who fought his way out with hard work to get into a position which someone gets based on reservation.
2. **Balancing Fundamental Rights and State Intervention:** By reservation, the State government intervenes in the fundamental rights, (Article 19: to carry on their business and trade).
3. In the case of Dr. Pradeep Jain v Union of India (1984), the Supreme Court deliberated on the matter of legislation pertaining to the concept of "sons of the soil." The court expressed the view that policies favoring local residents could potentially be deemed unconstitutional, although it refrained from explicitly delivering a verdict on the matter.
4. **Caste consciousness:** It promotes casteism in society rather than weakening it as intended by the constitution.
5. **Elite culture within caste:** The benefits of reservation policies are often used by the dominant ones in the caste or the ones who have already benefitted from reservation leaving the most marginalized members of those castes still marginalized. Families of public officials, high-income professionals, and others above a certain income should be removed from the reservation system irrespective of their caste.
6. **Divisions among employees:** Reservation in jobs results in division and animosity among government employees, creating a toxic work environment.

For more information on "Reservations", please refer to *The Recitals (August 2023) edition*

Anticipatory Bail (Pre-arrest Bail)

The Supreme Court recently gave the power to the Sessions Court or High Court to grant interim/transit anticipatory bail, even when the FIR has been registered in another state.

- The Supreme Court of India has proposed the introduction of a comprehensive bail law in India to deal with the rising pendency of bail applications.

About Bail System in India

What?

It refers to the provisional release of an accused from judicial custody on the condition that the accused will appear in court on a later date.

** Though there isn't any separate law in the Indian legal system that defines bail, the related provisions are mentioned in the CrPC and punishments under the IPC including categorisation of offenses as bailable and non-bailable.

Legal Status

- **Article 21 of the Indian constitution:** gives every person the right to life and personal liberty and therefore allows a person to seek bail when detained by any law enforcement entity.
 - ✓ Interpreted In the 1980 Gurbaksh Singh Sibbia vs State of Punjab case, a five-judge Supreme Court bench led by then Chief Justice Y V Chandrachud.
- **Section 438 of Code of Criminal Procedure (CrPC), 1973:** states that anticipatory bail is only granted in case of non-bailable offences and is based on the proposal of the Law Commission of India's 41st Report, which suggested the inclusion of an anticipatory bail provision.
- **Article 11 of the Universal Declaration of Human Rights (UDHR)** establishes the concept of bail, particularly anticipatory bail founded on the presumption of innocence, which states that everyone accused of a crime is presumed innocent until proven guilty.

Types (On The Basis Upon The Stage Of The Criminal Matter)

1. **Regular Bail-** is generally granted to a person who has been arrested or is in police custody. The Accused is entitled for Bail as a matter of right, may be before Police station itself, or if forwarded to Magistrates Court, before Magistrate.
2. **Interim Bail-** is granted for a short period of time before the hearing for the grant of regular bail or anticipatory bail.
3. **Anticipatory Bail-** is granted to a person in anticipation and apprehending arrest. Any individual who discerns that he may be tried for a non-bailable offence can apply for anticipatory bail in a High Court or Sessions Court. The Police cannot arrest a person who has been granted anticipatory bail. The main objective of this type of bail is to protect an individual from false accusations or charges made against him/her.
4. **Transit Anticipatory Bail-** is sought when a case against a person has been or is likely to be filed in a state different from the one in which the person is likely to be arrested. Its purpose is to allow the person bail, so that he can approach the appropriate court in the state in which the case has been filed for an anticipatory bail. There is no legal provision in Indian law for this type of bail, but it has found its identity through judicial practice and legal precedents.
5. **Statutory Bail-** is granted when the police fail to file a complaint within the specified time limit.

More About Anticipatory Bail (Pre-arrest bail) in India

The Supreme Court (SC) of India has held that the power to grant pre-arrest bail is an extraordinary power to be exercised only in exceptional cases.

- **Applicability:** Anticipatory bail can be sought by a person who anticipates arrest in connection with a non-bailable offense. It is not applicable for offenses that are punishable with death or life imprisonment.
- **Factors Considered by the Court:** The court, while deciding on anticipatory bail, considers factors such as the nature and gravity of the accusation, the individual's criminal record, the likelihood of the person absconding, and the need to cooperate with the investigation.
- **Conditions Imposed by the Court:** The court, while granting anticipatory bail, may impose certain conditions on the individual, such as cooperating with the investigation, not leaving the jurisdiction without permission, and appearing before the police for questioning.
 - ✓ The court may also impose a monetary bond, which the person seeking anticipatory bail will have to pay if they fail to appear before the court or violate the conditions imposed.
- **Duration of Anticipatory Bail:** Originally, Anticipatory bail is usually granted for a specific period, and the individual must surrender to the custody of the court or the investigating agency at the end of that period unless the bail is extended.
 - ✓ In a five-judge Constitution bench (In 2020) headed by Justice Arun Mishra held that the protection granted under Section 438 of the Code of Criminal Procedure (CrPc) "should not invariably be limited to a fixed period".
- **Notice to the Public Prosecutor:** The court, before granting anticipatory bail, is required to give notice of the application to the public prosecutor, allowing them an opportunity to present their case.
- **Circumstances Justifying Anticipatory Bail:** Courts may grant anticipatory bail when there is a possibility of the accused being falsely implicated, or when the accusation is based on malice or ulterior motives.

**** P. Chidambaram v. Directorate of Enforcement (2019)-** In this case, while rejecting a prayer for anticipatory bail with respect to an offence of money laundering and proceeding to grant custody to the ED, the court stated that a money laundering case involves many stages of placement and layering of funds for which a 'systematic and analyzed' investigation is required and granting a pre-arrest bail in this scenario frustrates the investigation process.

Bailable Offence	Non-Bailable Offence
• In this case, the police may grant bail to the offender at the time of arrest or detention. • There should be sufficient reasons to believe that the accused has not committed the offence and to conduct further enquiry into the matter. • If the person is not accused of any offence punishable with death, life imprisonment or imprisonment up to 10 years.	• In this case, bail cannot be granted as a matter of right unless ordered by a competent court. • The penalty in this case is three years or more. • A bail can be granted for a non-bailable offence if- ✓ the accused is a woman or a child. ✓ there is a lack of evidence. ✓ there is a delay in lodging FIR by the complainant. ✓ the accused is gravely sick.

Digital Advertisement Policy

The Union government unveiled a Digital Advertisement Policy allowing its advertising wing, the Central Bureau of Communication (CBC) to undertake **advertisement campaigns** on social media, OTT platforms and other digital media.

The Central Bureau of Communication (CBC)

- The CBC was set up in 2017 under the Ministry of Information and Broadcasting by integrating the erstwhile Directorate of Advertising and Visual Publicity (DAVP), Directorate of Field Publicity (DFP), and Song & Drama Division (S&DD).
- It provides 360 degrees communication solutions to Ministries, Departments, Public Sector Undertakings (PSUs), and autonomous bodies.
- It is engaged in the process of educating people, both rural & urban, about the Government's policies & programmes through different vehicles of communication viz., Print Media advertising, Audio Visual Campaigns, dissemination via Exhibitions, Outdoor Campaigns & Digital Media etc.

About Digital Advertisement Policy

What?

The new policy will empower the CBC to empanel websites with a minimum of 2.5 lakh unique users per month such as YouTube and other digital platforms such as OTT and podcasts for publicity campaigns.

Objective- To enhance the Digital Outreach of the Government and improve information dissemination to the Citizens.

Features- The policy enables the CBC for following functions:

- **Expansion to Digital Platforms:** Empanel agencies and organizations in the OTT, Video on Demand Space and digital audio platforms like podcasts to leverage their growing number of users. CBC now for the first time will be able to Channelize its public service campaign messages through Mobile Applications too.
- ** It mandates that the websites, mobile apps, OTT platforms and digital audio platforms need to be at least a year old to be eligible to apply under the scheme.
- Place advertisements for government clients on social media platforms as they are becoming one of the popular channels for public conversations now.
- **Effective use of OTT Platforms:** OTT platforms can be empanelled not only for placing advertisements during regular content but also for the production of embedded/in-film advertisements, promotions, or branding activities as per CBC's Letter of Intent.

- Empanel Digital Media Agencies to enhance its outreach through various platforms.
- On board New and Innovative Communication Platforms in Digital Space with the approval of a duly constituted committee.
- **Advertisement Rates:** Advertising rates will be linked to the subscriber base and viewership numbers, and will introduce competitive bidding for rate discovery, ensuring transparency & efficiency and the rates discovered will be valid for three years & applicable to all eligible agencies.
- **Budget allocation for Advertisement:** As a part of government schemes, 2% of the total outlay is usually marked for publicity and outreach activities, and it is this fund that the CBC uses for advertisements and campaigns.

Significance

- **Cost Effectiveness-** Effective Delivery of Citizen Centric Messages through digital advertising in a targeted manner will be cost effective in public oriented campaigns as the digital universe has a huge subscriber base and is coupled with technology enabled messaging options.
- **Enhanced Outreach-** Government's Digital India program has led to a huge growth in the number of users connected to the internet, social and digital media platforms (As per TRAI's Indian Telecom Services Performance Indicators January–March 2023, the internet penetration in India as of March 2023, is over 880 million, and the number of telecom subscribers as of March 2023 is over 1172 million).

Therefore, this policy will help the CBC to enhance its digital outreach and improve information dissemination to the Citizens.

Governors Cannot Keep Bills Pending Indefinitely

The Supreme Court recently ruled that Governors are not empowered to keep a Bill pending indefinitely without any action whatsoever.

- ✓ The court also stated that governors are entrusted with constitutional powers but cannot use them to stop the normal process of lawmaking by state legislatures.

Background

Punjab vs State Governor	Petition by Other States
• The Punjab Government had proposed three money bills that were proposed to be presented by the State during a Special Session of the fourth Budget Session in October. So, these Bills were forwarded to the Governor for his prior approval ahead of the Special Session. • However, while withholding his approval, the Governor said since the Budget Session already stood concluded in June, any such extended session was illegal, along with any business to be conducted during it. • As a result, the Session was adjourned just hours after it began in October due to the stalemate. • The Punjab government then filed a writ petition in the Supreme Court, challenging the inaction by state Governor in giving	• Similar petitions have been filed by the Kerala, Telangana and Tamil Nadu governments. • Kerala in its plea argued that three Bills have been pending with the Governor for more than two years, and three Bills for more than a year. A PIL on this issue in the Kerala High Court had made the state government a respondent, but the HC refused to intervene, prompting the state to move the SC. • Telangana has argued that more than 10 key Bills are pending with the Governor and that seven of those Bills were passed by the Assembly and sent for the Governor's assent in September 2022. • Tamil Nadu has argued that the Governor by not signing "remission orders, day to day files, appointment orders, approving recruitment orders, granting approval to prosecute Ministers, MLAs involved in corruption including transfer of investigation to CBI by Supreme Court, Bills passed by Tamil Nadu Legislative Assembly"

assent to the bills passed by the State assemblies or proposed to be tabled by the government.	is bringing the entire administration to a halt and creating adversarial attitude by not cooperating with the State administration.
Pending Bills for Indefinite Time: Broader Impact/Consequences • Policy Stagnation: Pending bills represent unaddressed policy issues, leading to a stagnation in policy development and implementation. This can hinder progress in critical areas such as economic reforms, social justice, and infrastructure development. • Uncertainty for Stakeholders: Businesses, investors, and citizens may face uncertainty due to the delayed passage of bills which ultimately can affect long-term planning and decision-making. • Missed Opportunities: Pending bills may contain proposals that address emerging challenges or opportunities. Delays in passing these bills mean missed opportunities for the government to proactively address issues and capitalize on positive developments. • Legal and Judicial Consequences: Delayed bills may lead to legal and judicial consequences (Undermines the Democratic Process), especially if the legislation is essential for resolving legal ambiguities or addressing pressing issues within the legal system. • Diminished Global Competitiveness: Delays in passing bills related to economic reforms, trade policies, and international relations can affect India's global competitiveness. It may impact the country's ability to attract foreign investment and engage in international partnerships.	

Governor's Power (Legislative)

1. Constitutional Provisions • While Article 163 of the Constitution deals with the powers of the Governor, Article 200 specifically deals with the issue of granting assent to Bills (Legislative Powers). • Article 200 states that when a Bill passed by the state legislature is presented to the Governor for their assent, they have four options: ✓ grant assent to the Bill; ✓ withhold assent to the Bills; ✓ return the Bills for reconsideration; or ✓ reserve the Bill for the consideration of the President. Is there any time limit within which a bill should be returned? • The article states that the Governor may, <u>as soon as possible</u>, return Bills other than money Bills, requesting the House to reconsider it in parts or in whole. But if the State Legislature sends the bill again with/without any amendments, then the governor is bound to give his assent to the bill. ✓ The court's judgment stated that the expression "as soon as possible" conveys a constitutional imperative of expedition. It also stated that keeping a bill pending for indeterminate periods is inconsistent with that expression.
2. Supreme Court's Opinion • The Supreme Court in various cases including the Shamsher Singh case (1974) has held that the Governors do not exercise their discretionary powers while withholding assent or returning a Bill to the State Legislature. They are required to act as per the advice of the Council of Ministers (under Article 154). • They can 'withholding assent' in case of a Private Members' Bill (bill by any Member of State Legislature other than a Minister) passed by the State Legislature, which the council of ministers do not want to be enacted into a law. In such an instance, they would advise the Governor to 'withhold assent'.

- If the incumbent government whose Bill has been passed by the legislature falls or resigns before it is assented to by the Governor, the new council may advise the Governor to 'withhold assent'. The return of any Bill to State Legislature for reconsideration is also to be done based on ministerial advice.
- The SC in its landmark 2016 ruling in the Arunachal Pradesh Assembly case (**Nabam Rebia and Bamang Felix vs Deputy Speaker**) discussed this aspect briefly. It said that the Governor cannot withhold assent to a Bill indefinitely but must return it to the Assembly with a message and this could include his recommendation for amendments to the Bill.
 - ✓ A Governor cannot be made a party before the Supreme Court. Generally, therefore, the court issues notice to the Secretary of the Governor in such disputes.

3. Recommendations by Various Commissions

- **Sarkaria Commission (1983)** – Set-up to look into Centre-state relations, the commission submitted that it is only the reservation of Bills for President's consideration that too under rare cases of unconstitutionality, that can be implied as a discretionary power of the Governor. Such bills should be disposed of within six months maximum by the President and if the President decides to withhold his assent, the reasons for the same should be communicated to the State Government wherever possible. Otherwise, the Governor must discharge his functions under Article 200 as per the advice of ministers.
- **Punchhi Commission (2007)** – recommended that the Governor should take a decision with respect to a Bill presented for their assent within a period of six months.
 - ✓ The commission proposed setting up a committee comprising the Prime Minister, Home Minister, Vice President, Speaker, and the concerned Chief Minister to choose the Governor.
 - ✓ It also recommended deleting the "Doctrine of Pleasure" from the Constitution but backed the right of the Governor to sanction the prosecution of ministers against the advice of the state government.
 - ✓ It also argued for a provision for impeachment of the Governor by the state legislature.

When Can A Governor Reserve A Bill?

The Governor can reserve certain Bills for the consideration of President if-

- Against previous rulings of SC or it reduces the powers of the High Court.
- against the provisions of the Constitution (opposed to the Directive Principles of State Policy (DPSP))
- against the larger interest of the country or of grave national importance
- deals with the compulsory acquisition of property under Article 31A of the Constitution.

Suggestions/Way Forward

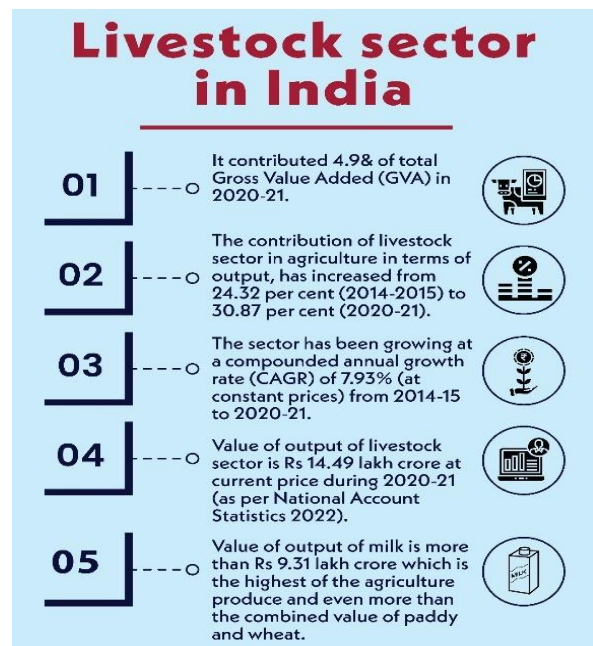
- **Timeframe for assent:** In the broader context of federalism within the country, the Supreme Court may contemplate establishing a reasonable timeframe within which Governors are expected to make decisions on Bills passed by the Assembly. For Example, In the past, the court has reluctantly fixed timelines for the Speaker's office to decide disqualification cases.
- **Dialogue between the Centre and States:** As the Supreme Court observed, the Constitution may be amended to provide that the Chief Ministers are consulted before appointing the Governors.
- The recommendation of the Punchhi Commission that Governors may be removed through an impeachment by the State Legislature can also be considered as this would arm the State legislatures with the power to remove an uncooperative Governor.
- **Proactive People Participation:** Promoting public awareness and activism (Civil society groups, media, and citizen forums) is crucial to ensuring adherence to constitutional provisions by spotlighting the issue and exerting pressure on authorities to act in the public interest.

World Food India 2023

- The second edition of the 'World Food India 2023' mega food event was inaugurated at Bharat Mandapam, Pragati Maidan, in New Delhi, with the Prime Minister presiding over the event.
- The event was organised by the **Ministry of Food Processing Industries**.
- During the inauguration, the Prime Minister provided Seed Capital Assistance to over one lakh Self Help Group (SHG) members, reinforcing the support for these groups.
- The primary **objective** of the event is to present India as the **food basket of the world** and commemorate 2023 as the International Year of Millets.
- The event featured sessions covering various aspects of the industry, including financial empowerment, quality assurance, innovations in machinery and technology, e-commerce, and logistics.
- With the food processing sector being recognized as a 'sunrise sector,' investments exceeding Rs 50,000 crore in FDI over nine years were highlighted.
- The event concluded with the signing of MoUs worth Rs 33,129 crore, with companies like Amul, ITC, Mondelez, Kellogg's.

National Level Monitors for Livestock Schemes

- The Centre has decided to deploy National Level Monitors (NLM) to oversee the implementation of its livestock schemes.
- At present, the department monitors the schemes' implementation through monthly, quarterly and yearly progress reports, management information system, regional review meetings and video conferencing session with participating states.
- The department has decided to involve the NLMs to ensure its schemes' monitoring is unbiased and objective.
- The NLMs will be third-party independent monitors — individuals and institutions deployed by the government. Individual NLMs will be selected from among retired Civil/Defence Services Officers, and academia.



Monitoring Guidelines

- Two types of monitoring will be conducted by NLMs — **regular and special**.
- The objective of this monitoring is to find whether the programmes are implemented according to guidelines prescribed by the Ministry and if prescribed implementation processes are being followed.
- It will also determine **villagers' views** on the programmes, consider their suggestions for improvement and whether the selection of beneficiaries under a programme has been transparent, unbiased and fair.
- It will determine if incentives to para-vets/technicians/ farmers have been distributed as per the scheme.
- And whether data generated on vaccination, disease monitoring and artificial insemination has been uploaded on the **National Digital Livestock Mission** on a real time basis.
- In case of complaints of a serious nature from people's representatives, farmers etc. regarding the misutilisation of funds, irregularities, etc., NLMs will be deputed to verify facts or do a preliminary enquiry with the approval of the Secretary.

Bharat Atta

- The Ministry of Consumer Affairs, Food and Public Distribution recently flagged off 100 mobile vans for sale of wheat flour (Atta) under the 'Bharat' brand.
- This initiative aims to provide affordable atta to consumers, with a MRP of Rs 27.50 per kilogram.
- It will be available in over two thousand outlets across the country including Kendriya Bhandar, National Agricultural Cooperative Marketing Federation of India Limited (NAFED), and National Cooperative Consumers Federation of India Limited (NCCF).
- The objective is to create a price stabilisation in the market and support both the farmers and the consumers of the country.



NAFED

- NAFED is an apex organization of marketing cooperatives for agricultural produce in India. It is registered under Multi State Co-operative Societies Act
- It was launched in 1958 to promote the trade of agricultural produce and forest resources across the nation.
- It is now one of the largest procurements as well as marketing agencies for agricultural products in India.

NCCF(National Cooperative Consumers Federation of India)

- NCCF was established in 1965 to function as the apex body of consumer cooperatives in the country. It is also registered under the Multi-State Co-operative Societies Act, 2002.

Stabilising Essential Food Prices

- The launch of Bharat brand Atta will increase supplies in the market at affordable rates, and will help in continued moderation of prices of this food item.
- Under the Open Market Sale Scheme (OMSS), 250,000 metric tonnes of wheat at Rs 21.50/kg have been allocated to organisations like Kendriya Bhandar, NCCF, and NAFED for conversion into Atta and selling it under the 'Bharat Atta' brand.
- Additionally, the government is selling "Bharat Dal" (Chana dal) at Rs 60/kg and onions at Rs 25/kg through Kendriya Bhandar, NAFED, and NCCF.
- Moreover, the Food Corporation of India (FCI) conducts weekly **e-auctions** to release wheat into the market, ensuring regular supply and preventing hoarding.
- Under the Price Stabilisation Fund (PSF), the government maintains buffer stocks of pulses and onions, allowing calibrated release to stabilise prices.

Krishi 24/7

- The Department of Agriculture and Farmers Welfare (DA&FW) in collaboration with Wadhwani Institute for Artificial Intelligence (Wadhwani AI) has developed Krishi 24/7.

- Krishi 24/7 is the first-ever AI-powered solution for automated agricultural news monitoring and analysis, with support from google.org.
- The tool scans news articles in multiple languages and translates them into English.
- It addresses the need for an efficient mechanism to identify and manage agricultural news articles of interest to aid timely decision-making.
- It will aid DA&FW to identify relevant news, generate timely alerts, and take prompt action to protect farmers' interests and promote sustainable agricultural growth through improved decision-making.

World Local Production Forum (WLPF)

- The second World Local Production Forum was organised at **The Hague, Netherlands**.
- The WLPF is a platform created at the initiative of the WHO with the aim of increasing access to medicines and other health technologies.
- The **Local Production and Assistance (LPA) Unit** serves as the **WLPF Secretariat**.
- Over the past two decades, there has been an increasing emphasis on the importance of local production and related technology transfer in the context of promoting equitable access to medicines and other health technologies.
- The WLPF provides Member States and the global community with a regular platform to shape strategies and collective action and encourage partnerships on sustainable local production.
- It serves as a platform to generate actionable recommendations and outcomes that support local production and improve global health security.

Baler Machine

- With the problem of farm fires being taken up by the Supreme Court, Baler machines have been in demand in Punjab.
- Baler machines have been around for a decade, and currently around 2,000 of them operate in Punjab. Of these 1,268 are highly subsidised (50-80%) under the Centre's **Crop Residue Management (CRM) scheme**.

Need Of The Machine

- Upon harvesting, the paddy crop leaves a stubble on the ground. Farmers need to get rid of this stubble before the next crop can be sown.
- Farmers burn the stubble, the smoke from which becomes one of the largest air pollutants around November each year.
- More environment-friendly methods include incorporation of the stubble into the soil using machines such as super seeders (**in situ management**).
- However, this leaves fields vulnerable to insect attacks, necessitating the use of toxic insecticides. Thus, ex situ management is preferable. This is where baler machines come in.

Crop Residue Management (CRM) Scheme

- CRM is Central Sector Scheme (100% central share) launched in 2018-19.
- It was launched to support the efforts of government of Punjab, Haryana, Uttar Pradesh and NCT of Delhi to address air pollution caused due to stubble burning.

Objective	Assistance
- Protect environment from air pollution and prevent loss of nutrients and soil micro-organisms caused by burning of crop residue. - Promote management of crop residue by retention into the soil or collection for further utilization using mechanization inputs. - Promote Farm Machinery Banks for custom hiring of CRM machinery to address the issues due to small landholding and high cost of individual ownership. - Create awareness among stakeholders through demonstration, capacity building activities and differentiated Information, Education and Communication strategies for effective utilization and management of crop residue.	- Under it, financial assistance at 50% is provided to the farmers for purchase of crop residue management machinery. - And financial assistance at 80% is provided to Cooperative Societies, FPOs and Panchayats for establishment of Custom Hiring Centres (CHCs). - The scheme promotes the usage of machines such as Super Straw Management Systems, Happy Seeder, Super Seeder, Smart Seeder, zero till seed cum fertilizer drill, Mulcher, Paddy Straw Chopper for in-situ management of crop residue. - It also promotes Balers & Rakes which are used for straw collection for other ex-situ uses of straw.

Mechanism of a Baler Machine

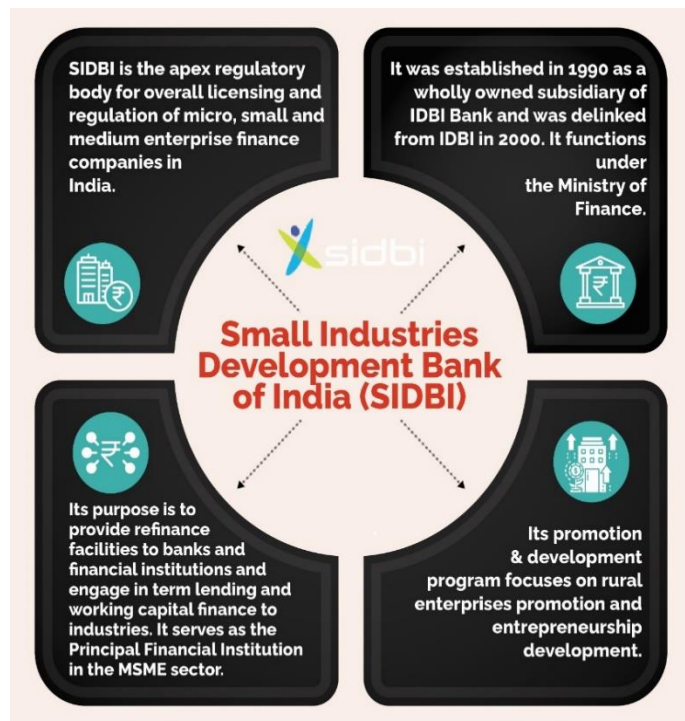
- Balers compress agricultural residue into manageable and transportable bales (large bound bundle) of 25-30kg each.
- Before using a baler machine, farmers cut the crop residue with a tractor-mounted cutter. After two days of drying, a rake arranges the stubble in straight lines.
- A tractor-mounted baler machine then compresses the stubble into **compact bales** using netting. These bales are transported to factories or dumping sites.
- In fields where balers are used, farmers can immediately plough the field and sow the next crop.

Inadequate Units

- Each baler can cover 15-20 acres in a day. Weather permitting, they operate for around 45 days.
- Currently, Punjab has around 32 lakh hectares of rice fields. Depending on how many days they operate, only 15-18% of this area can be covered by the available balers in the state.

DAY-NRLM SIDBI MoU for Women-led Enterprises

- Deendayal Antyodaya Yojana - National Rural Livelihood Mission (DAY-NRLM) under the Ministry of Rural Development and the Small Industries Development Bank of India (SIDBI) have signed an MOU.
- The MoU that has been signed for **two years**, aims at **promoting women-led enterprises** among experienced members of Self-Help Groups (SHGs).
- The primary focus of this collaboration is to demonstrate on-the-ground activities that establish a reliable and sensitive support structure for the capacity enhancement of women entrepreneurs (WEs).
- Furthermore, it aims to institutionalize standard protocols, systems, and procedures for streamlined access to formal finance and development of a comprehensive framework for new financial products and schemes.



Key Outcomes Expected

- Enhanced capacity and ability of State Rural Livelihood Missions (SRLM) teams to promote the graduation of seasoned SHG members into micro-entrepreneurs.
- Establishment of a *reliable and sensitive support architecture for women-led enterprises*.
- Formation of partnerships with financial institutions and a network of financiers.
- Design and implementation of new financial schemes, such as credit guarantees and interest subventions.
- Creation of clear, scalable models for promoting women-led enterprises which can be replicated nationwide.

Index of Eight Core Industries

- The combined **Index of Eight Core Industries (ICI)** increased by 8.1 per cent in September 2023 as compared to the Index of September 2022.

- ICI gives an indication of the production performance of the industries which are of a 'core' nature.
- It measures combined and individual performance of production in **eight core industries** viz. Coal (weight 10.33%), Crude Oil (8.98%), Natural Gas (6.88%), Refinery Products (28.04%), Fertilizers (2.63%), Steel (17.92%), Cement (5.37%) and Electricity (19.85%).
- These industries have a major impact on the Indian economy and significantly affect most other industries as well.
- The eight core industries comprise **40.27 percent of the weight of items included in the Index of Industrial Production (IIP).**
- The **base year of ICI is 2011-12** and it is prepared every month and released by the **Office of the Economic Adviser, DPIIT.**

Index of Industrial Production (IIP)

IIP maps the change in the volume of production in Indian industries.

It chooses a basket of industrial products — ranging from the manufacturing sector to mining to energy, creates an index by giving different weight to each sector and then tracks the production every month.

The index value is compared to the value it had in the same month last year to figure out the economy's industrial health.

Department for Promotion of Industry and Internal Trade (DPIIT)

↑ DPIIT is a central government department under the Ministry of Commerce and Industry.

↑ It is responsible for formulation and implementation of promotional and developmental measures for growth of the industrial sector.

↑ Individual administrative ministries look after the production, distribution, development and planning aspects of specific industries allocated to them. However, DPIIT is responsible for the overall industrial policy.

↑ It is also responsible for facilitating and increasing the FDI flows to the country.



Global Lighthouse Network

- The Lighthouses Live 2023 event was held recently.
- **Lighthouses** are manufacturers showing leadership in applying Fourth Industrial Revolution (IR) technologies at scale to drive financial, operational and sustainability improvements by transforming factories, value chains and business models.
- As of September 2023, the Global Lighthouse Network is comprised of 132 lighthouses.
- Formed in 2018, the Global Lighthouse Network is a **World Economic Forum (WEF)** community of leading global manufacturers who are pioneers in using 4IR technologies.

EU Approves Glyphosate

- The European Union today approved the use of the controversial herbicide Glyphosate for another 10 years.
- Glyphosate is an **herbicide** used to kill weeds — undesirable plants that compete with crops for nutrients, water and sunlight.
- It is a **broad-spectrum herbicide** that can control a wide range of weeds, whether **broadleaf or grassy**.
- It is also non-selective and **can kill all plants coming into contact** with it. This is because the chemical cannot ordinarily distinguish between crop and weed.
- Hence, it can be used in tea or rubber plantations, but not in fields where the crops and weeds are at almost the same level.

Shortcomings of Glyphosate

- The use of glyphosate has been a source of controversy since the WHO concluded in 2015 that it was probably carcinogenic to humans.
- It can also lead to death of insects including bees, that are important pollinators

Ladakh Gets GI Tag for Sea Buckthorn

- The Geographical Indication Registry, operating under the Ministry of Commerce & Industry, has officially granted the GI tag for Sea buckthorn to Ladakh.

- The berries have been used over centuries as food, traditional medicine, and skin treatment in various parts of the world.

Benefits of Sea buckthorn plant

- Sea buckthorn is a **soil-binding plant** which prevents soil-erosion, reduces siltation in rivers and helps to preserve floral biodiversity.
- As a folk medicine, sea buckthorn has been widely used for *treating stomach, heart and skin problems*. In the last few decades, scientific research worldwide has supported many of its traditional uses.
- Its fruit and leaves are rich in vitamins, carotenoids and omega fatty acids, among other substances, and it can help troops in getting used to high-altitude areas.
- It is an important source of fuelwood and fodder and also has commercial value, as it is used in making juices, jams, nutritional capsules etc.
- Thus, every part of the plant – fruit, leaf, twig, root, and thorns has been traditionally used as medicine, nutritional supplement, fuel and fence.
- Therefore, Sea Buckthorn is popularly known as ‘Wonder Plant’, ‘Ladakh Gold’, ‘Golden Bush’ or ‘Gold Mine’ of cold deserts.
- However, wild sea buckthorn cannot sustainably supply raw material to the industry, and the plant needs to be cultivated on a large scale as is being done in China.

Sea buckthorn

- Sea buckthorn is a shrub which produces an orange-yellow coloured edible berry, which are sour in taste but rich in vitamins, especially Vitamin C.
- It is native to cold temperate regions of Europe and Asia. More than 90% of the world's natural sea buckthorn habitat is found in China, Mongolia, Russia, northern Europe, and Canada.
- In India, it is found above the tree line in the Himalayan region, generally in dry areas such as the cold deserts of Ladakh and Spiti. It is naturally distributed over 11,500 hectares in the Ladakh region.
- Tree line is the altitude above which trees cannot grow due to cold temperature, lack of moisture etc.
- The shrub can withstand extreme temperatures from minus 43 degrees Celsius to 40 degrees Celsius and is considered drought-resistant. These two characteristics make the shrub an ideal plant species to establish in cold deserts.

The National Mission on Seabuckthorn

- It is part of Green India Mission which is part of India's National Action Plan on Climate Change (NAPCC).
- This mission aims to promote seabuckthorn as a priority species for afforestation with goal of Achieving good health and poverty alleviation in the Indian Himalayan region.

Extra mile: About GI Tag

- A GI right enables those who have the right to use the indication to prevent its use by a third party whose product does not conform to the applicable standards.
- GIs are covered as a component of intellectual property rights (IPRs) under the Paris Convention for the Protection of Industrial Property.
- At the international level, GI is governed by the World Trade Organisation's (WTO's) Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS).
- In India, Geographical Indications registration (under the Ministry of Commerce & Industry) is administered by the Geographical Indications of Goods (Registration and Protection) Act, 1999.
- This GI tag is valid for 10 years, following which it can be renewed.
- The first product in India to be accorded the GI tag was Darjeeling tea in the year 2004-05.

Onattukara Sesame

- Efforts are being made to expand the cultivation of geographical indication (GI)-tagged Onattukara sesame.
- Onattukara sesame is currently grown on around 600 hectares spread across 43 local bodies in three districts of Alappuzha, Kollam and Pathanamthitta in Kerala.
- Onattukara Vikasana Agency, registered owner of the GI-tagged sesame seeds, plan to increase the area under sesame cultivation to 2,000 hectares from current 600 hectares.

- Compared to other places, Onattukara sesame contains high levels of **Vitamin E** and **antioxidants**. It also contains oleic acid, linoleic acid, palmitoleic acid which help in maintaining good health.

World Fisheries Day

- World Fisheries Day is celebrated every year on **21st November**.
- Started in 1997, the main purpose of this day is to highlight the importance of sustainable stocks of fisheries in the world.
- It also aims to strengthen human rights for the small scale fishing communities, to make a true difference in the working conditions of fishing communities and to eliminate illegal, unreported and unregulated fishing.
- It aims to draw attention to overfishing, habitat destruction and other serious threats to the sustainability of the marine and freshwater resources.

Fisheries Status in India

- With 8% share in global fish production, India is the 3rd largest fish producer, 2nd largest aquaculture producer, largest shrimp producer and 4th largest seafood exporter in the world.
- The sector is key in providing sustainable incomes and livelihoods to 3 crore fishers and fish farmers in the country.

International Sugar Organisation

- The International Sugar Organisation (ISO), announced India to be the **Chair** of the organisation for the year 2024.
- ISO is the apex international body on sugar and related products with about 90 countries as members. It is devoted to improving conditions on the world's sugar market.
- **Headquartered in London**, ISO was established under the International Sugar Agreement 1968.

Sugar Production In India

- Broadly there are two distinct agro-climatic regions of sugarcane cultivation in India, tropical and subtropical.
- Tropical region where sugar is grown includes the states of Maharashtra, Andhra Pradesh, Tamil Nadu, Karnataka, Gujarat and Madhya Pradesh.
- Sub-tropical region covers the state of Uttar Pradesh, Uttarakhand, Haryana, Punjab, and Bihar.
- India has been the **largest consumer and second largest producer** of sugar in the world.
- With about **15% share in global sugar consumption** and about **20% production of sugar**, Indian sugar trends affects the global markets significantly.
- With Brazil in the Western Hemisphere, India is the market leader in Eastern Hemisphere for sugar market.
- India is now the 3rd largest country in the world in **ethanol production** after USA & Brazil.
- Ethanol blending percentage in India has increased from 5% in 2019-20 to 12% in 2022-23 while the production has increased from 173 crore litres to more than 500 crore litres during the same period.
- With this, India has shown commitment towards green energy and its capability to turn the challenges of surplus sugar in domestic market to solution of fossil fuels imports and a tool to meet COP 26 targets for India.
- India has a unique distinction of being the **Payer of the Highest Cane Price** to its farmers and still efficient enough to make profits and operating in self-sufficient manner.

- The era of pending cane dues of farmers has become a thing of past. More than 98% cane dues of last season 2022-23 have already been paid and more than 99.9% cane dues of previous seasons are clear. Thus, cane dues pendency is at all time low in India.
- India has set the example by not only taking care of farmers and industry but also by putting consumers first. Domestic sugar retail prices are consistent and stable.
- While the global prices are hiked by about 40% in one year, India has been able to contain sugar prices within 5% increase from last year without putting additional burden on the industry.

India OPEC Energy Dialogue

- The 6th High-Level Meeting of the India-OPEC Energy Dialogue was held at the OPEC Secretariat in Vienna, Austria.
- The discussions focused on key issues related to oil and energy markets, with a specific emphasis on ensuring availability, affordability and sustainability, which are necessary in ensuring the stability of energy markets.
- The two sides discussed the important role of India in global economic growth and energy demand.
- As per the World Oil Outlook 2023 forecast India would be the fastest-growing major developing economy, averaging long-term growth of 6.1 per cent between 2022-2045.
- Moreover, India will account for over 28 per cent of incremental global energy demand during the same period.
- It was highlighted that, as the third-largest energy consumer, crude oil importer and the fourth-largest global refiner, close ties between India and OPEC are not only essential but also natural.

OPEC

- The Organization of the Petroleum Exporting Countries is an intergovernmental organization of 13 nations, founded in 1960 in Baghdad by the first five members (Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela), and headquartered since 1965 in Vienna, Austria.
- Current OPEC members are Algeria, Angola, Equatorial Guinea, Gabon, Iran, Iraq, Kuwait, Libya, Nigeria, Republic of the Congo, Saudi Arabia, United Arab Emirates and Venezuela. Ecuador, Indonesia and Qatar are former members.
- Its **mission** is to ensure the stabilization of oil markets, in order to secure an efficient, economic and regular supply of petroleum to consumers, a steady income to producers, and a fair return on capital for those investing in the petroleum industry.
- The organization is also a significant provider of information about the international oil market.
- The formation of OPEC marked a turning point toward national sovereignty over natural resources, and OPEC decisions have come to play a prominent role in the global oil market and international relations.
- OPEC members have **79.5% of world's proven oil reserves** and produce **39.7% of global oil production**.
- India is the third largest importer of crude oil behind only United States and China. **India's imports from OPEC countries constitutes 60% of its total crude imports.**

Rapid Innovation and Startup Expansion

- Atal Innovation Mission (AIM), NITI Aayog in partnership with CSIRO Australia's national science agency has launched a new accelerator called **Rapid Innovation and Startup Expansion (RISE)**.
- AIM is the Indian government's flagship initiative to promote a culture of innovation and entrepreneurship.

- The India Australia RISE Accelerator, is a program to support and accelerate Indian and Australian start-ups through joint support from the Indian and Australian innovation ecosystem stakeholders.
- The program focusses on startups and SMEs that have mature technologies and a desire to expand between India and Australia.
- The first round of the program aligns with CSIRO's *Circular Economy for Missions initiative, which is focused on creating a sustainable future built on waste innovation.*
- Over nine-month, the RISE Accelerator program, will help startups navigate early steps in a new region, fast-track connections to the right partners, customers and talent, and build credibility to succeed in international markets.
- There is no charge for startups to participate in the program. Participating startups may also be eligible for up to INR 40,00,000 in non-equity grants.

Focus Themes

- With a focus on **Environment** and **Climate Technology**, the program will be tailored to accelerate start-ups working on a range of areas:

Climate Smart
Agriculture

Clean Energy

Circular Economy and
Waste Management

Climate Smart
Mobility

Circular Economy

- A circular economy is a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products for as long as possible.
- It aims to tackle global challenges such as climate change, biodiversity loss, waste, and pollution by emphasizing the design-based implementation of the three base principles of the model.
- The three principles required for the transformation to a circular economy are: designing out waste and pollution; keeping products and materials in use; and regenerating natural systems.

Decentralised Autonomous Organisations

- Decentralised Autonomous Organisations (DAOs) have arisen as a groundbreaking innovation in the domain of blockchain technology and governance.
- DAO is **an organisation represented by rules encoded as a computer program that is transparent**, controlled by the respective organisation members, and not influenced by a government.
- The idea behind DAOs is to create **self-sustaining, community-driven entities governed by smart contracts** on blockchain networks.
- Thus, these digital entities **operate without centralised control** and are governed by smart contracts and the consensus of their members, often **utilising cryptocurrencies as a means of decision-making** and resource allocation.
- These smart contracts automatically execute predefined rules without the need for intermediaries, ensuring trust through code rather than traditional authorities.
- Participants, often referred to as token holders, can propose and vote on decisions related to the organisation's goals and resources. This decentralised decision-making process ensures that no single entity holds undue influence.

Applications

- In the domain of **decentralised finance**, platforms like Compound and MakerDAO have introduced **lending and borrowing services**, enabling users to participate in the global financial ecosystem without relying on traditional banks.

- In the **art world**, artists are tokenising their creations and utilising DAOs to manage royalties and maintain control over their intellectual property.
- **Supply chain management** is another arena where DAOs are gaining traction, as they offer transparency and traceability in global supply chains, ensuring the authenticity and quality of products.
- Even in the **governance of online communities**, DAOs have emerged as tools for decision-making, with platforms like DAOstack facilitating decentralised governance structures for internet communities.
- The above examples showcase the versatility of DAOs, demonstrating their potential to reshape industries across various sectors.

Significance For The Digital World

- DAOs are **decentralising entities**, shifting power away from centralised authorities and placing it in the hands of the collective.
- **Decision-making** within DAOs becomes a **democratic process**, where token holders have a direct say, resulting in a more equitable distribution of influence.
- **Transparency and trust** are fundamental principles of DAOs. Smart contracts that support DAO operations are transparent and immutable (unchangeable), leading to trust among participants.
- Rules are predefined and require consensus for alteration, **minimising the need for intermediaries**. This transparency can potentially disrupt traditional industries by eliminating the opacity often associated with centralised organisations.
- DAOs also **promote inclusivity**, by democratising access to resources and opportunities. They overcome geographical and socio-economic barriers, enabling global participation.
- This inclusivity not only promotes diversity but also promotes innovation, as individuals from various backgrounds collaborate to create innovative solutions.
- Lastly, DAOs inspire new forms of collaboration. They **facilitate global cooperation**, allowing participants with shared goals to unite without the need for intermediaries.
- This dynamic environment promotes innovation and cooperation as ideas flow freely, without the burden of hierarchical structures.
- Together, these principles highlight the transformative potential of DAOs, leading to a more **decentralised, equitable, and collaborative digital future**.

Challenges

- The journey of DAOs has not been without hurdles. The infamous DAO hack in 2016 exposed vulnerabilities in the code, leading to a controversial hard fork in the Ethereum blockchain.
 - A hard fork refers to a change in a network's protocol that makes previously invalid blocks and transactions valid, or vice-versa.
- This incident highlighted the **need for rigorous security audits** and raised questions about the immutability of blockchain systems.
- Moreover, the **legality and regulatory framework** surrounding DAOs are yet to be resolved. Traditional legal systems are still catching up with the decentralised nature of these entities, creating uncertainty in many jurisdictions.
- **DAO tokens**, often representing ownership or participation, **can potentially be considered securities**, subjecting them to complex regulatory requirements and compliance challenges.
- **Imposing legal liability** within DAOs is difficult, as decentralised decision-making and automated smart contracts make it difficult to assign responsibility for actions taken. Taxation of transactions within DAOs, identity verification, and compliance with Anti-Money Laundering (AML) and Know Your Customer (KYC) regulations further add complexity to the legal framework.

- **Dispute resolution**, often relying on code-based solutions, present a unique challenge in the absence of traditional legal mechanisms.

Way Ahead

- It is imperative that legal experts, blockchain developers, and policymakers engage in ongoing discussions to create a legal framework that allows DAOs to utilise their transformative potential while following the complexities of the law.
- Finding this balance is essential for the future coexistence of decentralised innovation and legal compliance.

State of Food and Agriculture 2023

The Food and Agriculture Organization (FAO) has released the 2023 edition of The State of Food and Agriculture.

Key Findings

- The prevalence of moderate or severe food insecurity at the global level remained unchanged for the second year in a row after increasing sharply from 2019 to 2020, but was still far above pre-COVID-19 pandemic levels.
- About **29.6 %** of the global population — **2.4 billion people** — were moderately or severely food insecure in 2022, of which about 900 million (11.3 per cent of people in the world) were severely food insecure.
- It is estimated that between **691 and 783 million people in the world faced hunger in 2022**. Considering the midrange (about 735 million), 122 million more people faced hunger in 2022 than in 2019, before the global pandemic
- Almost **600 million** people will be **chronically undernourished** in 2030. This is about 119 million more than in a scenario in which neither the pandemic nor the war in Ukraine had occurred, and around 23 million more than if the war in Ukraine had not happened.
- Among the nine south Asian countries, **India had the third highest prevalence of undernourishment** (233.9 million) in the total population, after Afghanistan and Pakistan.
- The share of undernourished people in India, however, had come down from 21.4 per cent of the population in 2004-06 to 16.6 in 2020-22.

Consumption of Processed Foods

- Consumption of highly processed foods is increasing in peri-urban and rural areas of some countries.
- This is driven by urbanisation, changes in lifestyle and employment profiles of both women and men, as well as increasing commuting times.
- This new evidence also challenges the conventional thinking that purchase patterns between urban and rural areas differ.
- The researchers found, the spread of processed foods across the rural-urban continuum was similar and quite extensive for both high- and low-food-budget countries
- Penetration of highly processed foods was observed in rural areas, even those 1-2 hours or more from a city or town.
- On average, the share of total processed foods and food away from home was 29 per cent in high-food-budget countries and 25 per cent in low-food-budget countries.
- While consumption of processed foods, including highly processed foods, is already advanced in Asia and Latin America, it is spreading quickly in Africa as well.

Cost of Unhealthy Diet

- Unhealthy diets, high in ultra-processed foods, fats and sugars drove a huge hidden cost of over \$7 trillion a year on health and environment.

- The losses attributed to such food products, which cause obesity and non-communicable diseases and lower labour productivity, were particularly elevated in high- and upper-middle-income countries.
- Overall, the current agrifood systems impose hidden costs equivalent to at least \$10 trillion a year, representing almost 10 per cent of the global gross domestic product (GDP).
- Low-income countries were the hardest hit by hidden costs of agrifood systems, which represent more than a quarter of their GDP, as opposed to less than 12 per cent in middle-income countries and less than 8 per cent in high-income countries.

Way Ahead

- The world is facing escalating global challenges of food availability, food accessibility and food affordability; climate crisis; biodiversity loss; economic slowdowns and downturns; worsening poverty; and other overlapping crises.
- The report advocates regular and detailed analysis by governments and the private sector of the *hidden or 'true' costs of agrifood systems via true cost accounting (TCA)*, followed by actions to mitigate these harms.

True Cost Accounting

- The TCA approach is defined as a holistic and systemic approach to measure and value the environmental, social, health and economic costs and benefits generated by agrifood systems.
- This broad definition allows a variety of methods to be adopted, depending on a country's resources, data, capacity and reporting systems.
- TCA is not a new concept. Rather, it is an evolved and improved approach that goes beyond market exchanges to account for all flows to and from agrifood systems, including those not captured by market transactions.
- It will facilitate improved decisions by policymakers, businesses, farmers, investors and consumers.

Food and Agriculture Organization (FAO)

- The FAO is a specialized agency of the United Nations that leads international efforts to defeat hunger and improve nutrition and food security. Its Latin motto, '*fiat panis*', translates to "let there be bread".
- Founded in **1945**, it is headquartered in **Rome, Italy** and operates in over 130 countries.
- It helps governments and development agencies coordinate their activities to improve and develop agriculture, forestry, fisheries, and land and water resources.
- It also conducts research, provides technical assistance to projects, operates educational and training programs, and collects agricultural output, production, and development data.

INTERNATIONAL RELATIONS

Earthquake In Nepal

- At least 157 people were killed and over 160 others injured when a powerful 6.4 magnitude earthquake, struck Himalayan nation's (Nepal) remote mountainous region.
- While the epicenter was at **Ramidanda in Jajarkot district**, about 550 km from Kathmandu. The tremors were felt in New Delhi and parts of north India too.
- This quake was the country's deadliest since 2015, when about 8,000 people were killed in two earthquakes, measuring 7.8 and 7.3 on the Richter scale.
- The epicentre - both Rukum and Jajarkot, are remote areas of western Nepal and are Maoist-controlled areas.
 - This area is believed to be the birthplace of the insurgency that Nepal witnessed for a decade from 1996.

Rafah Border Crossing

The Rafah border crossing between the **Gaza Strip and Egypt** has opened for the first time since the Israel-Hamas war broke out in early October.

The Rafah Border Crossing

- **About:** The crossing is the main entrance and exit point to the tiny Palestinian enclave from Egypt. It is controlled by Egypt.
 - It is the southernmost post of exit from Gaza and borders Egypt's Sinai Peninsula.
- **Other two border crossing in Gaza**
 - There are only two other border crossings from and into the Gaza Strip.
 - One is, **Erez**, a crossing into Israel in northern Gaza, which is for people.
 - The other is **Kerem Shalom**, a solely commercial goods junction with Israel in southern Gaza.
 - Both of these crossings are shut.



Humanitarian Pause in Gaza

- Israel and Hamas have agreed to a humanitarian pause in fighting in Gaza.
- This was agreed upon to allow for the release of 50 hostages held by the militant group in exchange for 150 Palestinians held in Israeli prisons and also to allow for more aid to enter the enclave.
- Facilitated by Qatar, Egypt and the United States, the pause will last for four days, subject to extension.

Humanitarian Pause

- The United Nations defines a "humanitarian pause" as a temporary stop to fighting for the sole purpose of humanitarian aid.

- These pauses typically have a specific time frame and are limited to a particular area where aid activities are happening.
- The humanitarian pause simply provides some relief amidst the relentless hostilities with an aim to help civilians in distress.

Ceasefire

- A ceasefire is more extensive than a humanitarian pause.
- According to the UN, a ceasefire is an agreement between conflicting parties to temporarily stop fighting.
- This pause is usually part of a **political process**, aiming to create an opportunity for dialogue and potentially reach a lasting political resolution.
- Simply put, unlike a humanitarian pause, a ceasefire is a longer-term arrangement to stop fighting in order to arrive at a political/diplomatic solution.

India, Australia 2+2 Talks

- India and Australia held 2+2 Ministerial Dialogue to step up defence cooperation and deepen the strategic relationship in sectors such as critical minerals and trade and investment.
- The discussion covered critical areas including:
 - **anti-submarine warfare** and **air-to-air refuelling**,
 - security in the vast Indo-Pacific region amid China's rising influence,
 - hydrography cooperation and
 - strengthening ties in sectors such as critical minerals, space, education, and science & technology.
 - The two sides are in an advanced stage of discussion to conclude implementing arrangements on hydrography cooperation and cooperation for air-to-air refuelling.
- The 2+2 dialogue is the outcome of a decision made at the India-Australia leaders' virtual summit in June 2020.
 - During this summit, both sides decided to **elevate bilateral relations to a comprehensive strategic partnership**.
 - As per the agreement, Foreign and Defence Ministers meeting in a '2+2' format is to discuss strategic issues at least every two years.

2+2 Talks Between India And Allies

- India has 2+2 dialogues with five key strategic partners: the **US, Australia, Japan, Russia and the UK**.
- Besides Russia & UK, the other three countries are also India's partners in the Quad.
- The inaugural India-UK 2+2 Dialogue was held in New Delhi in October 2023.
- The inaugural 2+2 dialogue with Australia was held in September 2021 in New Delhi.
- India held its first 2+2 dialogue with Russia in December 2021.
- The first India-Japan talks in the 2+2 format were held in November 2019 in New Delhi.
- The inaugural 'two-plus-two dialogue' between India and the US was held in 2018

India – Australia Growing Defence Cooperation

- **Cooperation in QUAD**
 - Both India and Australia are members of Quad.
 - Maritime Domain Awareness (MDA), subsurface domain awareness, and anti-submarine warfare have been major focus areas for the Quad.

- In information sharing, the Quad's Indo-Pacific MDA (IPMDA) is currently in the implementation phase.
 - IPMDA is a technology and training initiative to increase maritime domain awareness in the Indo-Pacific region. It was introduced at Tokyo summit in 2022.
- **Bilateral cooperation**
 - India and Australia signed a Mutual Logistics Support agreement in 2020.
 - The two Navies signed the 'Joint Guidance for the India-Australia Navy to Navy Relationship' document in August 2021.
 - Australia also has a Liaison Officer at the Indian Navy's Information Fusion Centre for the Indian Ocean Region.
- **Several firsts in 2023 in bilateral defence cooperation**
 - There have been several firsts this year in bilateral defence cooperation:
 - the maiden visit of an Indian Navy submarine to Australia;
 - Canberra hosting the Malabar naval exercise; and
 - Indian Navy Dornier and Air Force C-130 visiting Cocos Keeling island.

Fifth India-U.S. 2+2 Ministerial Dialogue

- Indian Defence Minister and External Affairs Minister met their counterparts from the US government for the fifth 2+2 Ministerial Dialogue held in New Delhi.
- The 2+2 meetings have been held annually with the US leaders since 2018.

Defence and Strategic Agreements Under 2+2

- India and the US have signed a troika of foundational pacts for deep military cooperation.
- These include the Logistics Exchange Memorandum of Agreement (LEMOA) in 2016, followed by the Communications Compatibility and Security Agreement (COMCASA) after the first 2+2 dialogue in 2018.
- After that, both the sides signed the Basic Exchange and Cooperation Agreement (BECA) in 2020.

India To Be Added To U.K. Safe States List

- The United Kingdom has announced its plan to include India to its list of safe states, a move that effectively **limits** asylum rights for illegal migrants from the country.
- The decision, announced by the UK Home Office, aims to streamline immigration procedures and enhance border control measures.

Key Highlights

- **Aim of This Move:** Strengthening the country's immigration system and help prevent abuse by people making unfounded protection claims.
 - Currently, people are exploiting country's immigration system and making dangerous and illegal journeys to the UK from fundamentally safe countries.
- **Countries Included In The Safe List**
 - India, Georgia, Albania, Switzerland, as well as the European Union (EU) and European Economic Area (EEA) states have been included in the list
 - The EEA links the EU member states and three EFTA states (Iceland, Liechtenstein, and Norway) into an internal market governed by the same basic rules.
 - A country can only be added to the UK's safe states list if the Home Secretary is satisfied that:
 - there is, in general, no serious risk of persecution of its nationals, and;

- removal of nationals to that country cannot go against the UK's obligations under the Human Rights Convention.

Significance For India

- The inclusion of India in the safe states list implies that the UK government considers the country to be generally safe, stable, and free from widespread human rights abuses, ruling out their chance of seeking asylum in Britain.
- As a result, Indians who travel from the country illegally will have their chances of seeking asylum in Britain diminish.
- It will enable the detention and prompt return of individuals who enter the UK illegally, either to a safe third country or their country of origin.

[Also refer the topic “**The U.K.’s illegal migration Bill**” from The Recitals – July 2023.]

India, US Work On Pact For Quick Return Of Stolen Antiquities

- India is close to signing an agreement - **the Cultural Property Agreement (CPA)** - with the United States.
- Under CPA, the process for the return of stolen antiquities will be hugely simplified.

Background of the Cultural Property Agreement (CPA)

- According to government data, **over 400 antiquities have been brought back to India since 2014**.
- The protection and return of cultural property is **a priority for India and for the US**, and the US has been working closely with the Union Ministry of Culture and the Indian Embassy in Washington on the CPA for close to two years.
- It was during the Indian PM's state visit to the US (in June 2023) that the two countries reached an understanding to work on this agreement.

About the Cultural Property Agreement (CPA)

- **The agreement imposes import restrictions** that stop looted and stolen cultural property from entering the US while encouraging the legal sharing of such objects for scientific, cultural, and educational purposes.
- **How do the import restrictions work?**
 - As per the agreement, **the US will intercept smuggled goods** at the border and return them expeditiously.
 - When objects are seized and forfeited under import restrictions, there is a simplified process for returning objects to the partner country.
 - The partner country does not have to prove the item is theirs. Rather, the US automatically offers it to them for return.

Significance of Cultural Property Agreement (CPA)

- A bilateral CPA **would help to prevent illegal trafficking of cultural property** from India to the US.
- This will also **eliminate key sources of funding for terrorists and transnational organised crime**.
- Instead of India having to prove that the item in question belongs to it, the US will **automatically** offer it for return once the CPA comes through.
 - **The verification stage** - which is generally most time-consuming - can also be done away with in many cases.
 - This will **simplify** the current process of repatriation and **ensure early return** of antiquities.
- From this template agreement, **India is looking to sign such agreements with several countries** where a lot of Indian art objects are believed to have been smuggled.

Israel Lists Lashkar-E-Taiba As A Terror Organisation

- 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.
 - Israel's move comes at a time when it has asked India to proscribe Hamas as a terrorist outfit.
 - Experts view this step as a part of Israel's global diplomatic campaign to isolate Hamas.
- The listing has been done by Israel on its own, without any request from India.
 - Designation is done based on specific criteria and can attract a range of curbs, including the freezing of assets and the takeover of the properties of the designated organisation.

India's Stand On Hamas

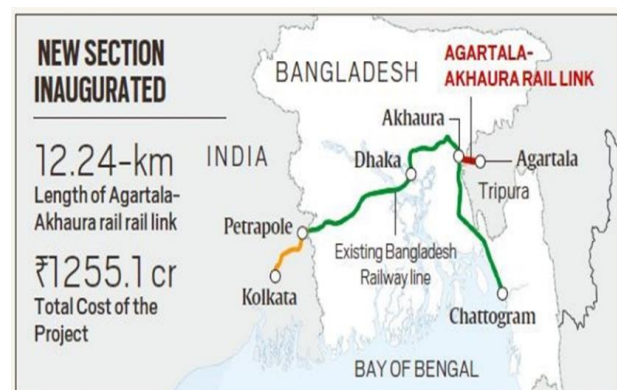
- **Background - India's policy towards terrorism**
 - India designates a group as a terrorist organisation under the Unlawful Activities (Prevention) Act (UAPA).
 - The UAPA was amended in 2019 to include the provision of designating an individual as a terrorist.
 - As of February 2023, there were a total of 44 designated terrorist organisations under the 1st Schedule of the Act.
 - The last major international organisation banned by India was ISIS in 2015.
- **India's stand on Hamas**
 - So far, India has not declared Hamas as a terrorist organisation.

Why Has India Not Declared Hamas As A Terrorist Organisation?

- **Balancing act in West Asia**
 - While it has traditionally supported Palestine and has an old friendship with the Arab world, its ties with Israel are growing.
- **Significant Muslim population in India**
 - Support for Palestinians is consistent across Muslim populations, including in India, home to the third-largest Muslim population in the world.
- **Very localised requirements to ban an organisation**
 - UAPA has very localised requirements for groups to be added to its terrorism listing.
 - This includes having activities such as operations, finances, and recruitment within Indian territories where Indian laws are applicable.
 - Hamas has had no such known history in the country.

Akhaura-Agartala Rail Link

- Prime Minister Narendra Modi and Bangladesh's Prime Minister Sheikh Hasina virtually inaugurated a rail link connecting Northeast India with Bangladesh.
- It links Bangladesh's Akhaura, through an international immigration station at Nischintapur, to the outskirts of Agartala, capital of Tripura.
- This railway link is part of the 16 transit routes that have been declared allowing cargo transportation from Chattogram or Mongla port, in Bangladesh, to Indian states.



Funding Pattern

- The project is wholly funded by the Government of India.
- The **Ministry for Development of North East Region** (DoNER) funded the work on the Indian side while **Ministry of External Affairs** funded the expense for Bangladesh's side.

Significance of the Project

- Tripura shares an 856 km-long international border with Bangladesh. The state's only road connectivity with the rest of the country is through Assam and a narrow strip of land in West Bengal's Siliguri.
- With successful completion of Akhaura–Agartala line, **the travel time will be reduced to roughly 10 hours**.
 - The distance between Agartala and Kolkata will effectively reduce from 1,600 km to 500 km now.
- The rail link will also **enable goods trains to reach the north eastern region** via Bangladesh at a much lesser transportation cost.
- Further, it will also provide a **direct access between landlocked north eastern India and Chittagong port of Bangladesh**.

India, Bhutan Agree To Expand Connectivity, Trade

Bhutan King Jigme Khesar Namgyel Wangchuck, on his official visit to India in November, met Prime Minister Narendra Modi in Delhi. The two leaders held discussions on the entire gamut of bilateral cooperation and regional and global issues of mutual interest.

Key Highlights Of The Visit By King Of Bhutan

- **9 steps to expand ties**
 - The two sides announced 9 steps to expand ties in trade, technology, cross-border connectivity, mutual investments, education and people-to-people contacts.
 - India also agreed to positively consider Bhutan's request for concessional financing in skill development and capacity-building.
- **Rail link**
 - The two sides agreed on a final location survey for the proposed cross-border rail link connecting Kokrajhar in Assam to Gelephu in Bhutan.
 - The two sides also agreed to consider establishing a rail link between Banarhat in West Bengal and Samtse in Bhutan.
 - It was also decided to designate Haldibari (West Bengal) to Chilahati (Bangladesh) rail route as an additional trade route for Bhutan's trade with Bangladesh.
- **Bridge Financing**
 - India also decided to provide bridge financing for the period between 12th and 13th Five-Year Plans of Bhutan for India-assisted projects and schemes.
- **Immigration check post between Bhutan and India**
 - Both sides agreed to designate Darranga (Assam) and Samdrup Jongkhar (Bhutan) as immigration check post between Bhutan and India.
 - This is to facilitate the entry and exit of third country nationals by land route for enhancing connectivity, and promoting tourism.
- **Strengthen trade infrastructure**
 - This includes suitable upgradation of the existing Land Customs station at Dadgiri (Assam) to Integrated Check Post through India's support along with development of facilities on the Bhutanese side at Gelephu.

- **Other announcements**

- Both the leaders decided to
 - safeguard the ecological diversity of the region,
 - allocate additional MBBS seats for Bhutanese students in medical colleges in Assam
 - double the outlay under Ambassador's scholarship for Bhutanese students pursuing higher education in India.
- The leaders agreed to extend the existing India-Bhutan energy partnership in hydro to non-hydro renewables, such as solar as well as green initiatives for hydrogen and e-mobility.

IIT-Madras Campus Inaugurated In Zanzibar

- An IIT-Madras campus was inaugurated in Zanzibar, becoming the first campus of an IIT to be opened abroad.
 - Zanzibar is an archipelago in the Indian Ocean off the coast of Tanzania, and is a semi-autonomous province of Tanzania.
- The pioneering venture is part of the central government's initiative to project India's education system onto the global stage.

India, EU Sign Semiconductor Pact

- India and the European Union signed an MoU on semiconductors that will help in building a "robust supply chain" and support innovation.
- Under this MoU, India and the EU are expected to:
 - share experiences, best practices and information on respective semiconductors ecosystems;
 - identify areas of collaboration in research, development and innovation among universities, research organisations and businesses.
- The semiconductors drive the digital world have emerged as a strategic commodity. This is true especially in the post-COVID period when diversifying away from China-dominant supply chains have gathered steam.

Visa-Free Travel To Malaysia For Indians

- Malaysia decided to grant visa-free entry to Indians for stays of up to 30 days starting December 1.
 - Earlier, Thailand announced a similar visa exemption for Indian travellers from November 10 to May 10 next year.
- The visa exemption — which has also been extended to Chinese citizens — will last until December 31, 2024.
- India and China are among Malaysia's top five source markets for tourism.
- India emerged as the largest source market for outbound travellers in Asia in 2022.
- As per Ministry of Tourism data, the top five destinations for Indians are the UAE, Saudi Arabia, USA, Singapore and Thailand.

SUMMITS AND ORGANISATIONS

NATO Announces Formal Suspension Of The Treaty Of Conventional Armed Forces In Europe

- NATO announced the formal suspension of a Cold War-era security treaty named - **the Treaty of Conventional Armed Forces in Europe**.
- This was announced in response to Russia's withdrawal from the treaty.

Treaty of Conventional Armed Forces in Europe (CFE)

- It was signed in Paris in November 1990 after the fall of the Berlin Wall. The **CFE set constraints on conventional arms and equipment**.
- Its purpose was to stop Cold War rivals from building up forces that could be used in a swift assault.
 - Its main objective was to reduce the possibility of a surprise armed attack and the triggering of major offensive operations in Europe.

The Treaty

- Established comprehensive limits on key categories of conventional military equipment in Europe (from the Atlantic to the Urals)
- Mandated the destruction of excess weaponry
- Eliminated the Soviet Union's overwhelming quantitative advantage in conventional weapons in Europe

The infographic is titled "North Atlantic Treaty Organization (NATO)" in a blue header. It features a compass rose icon in the top right corner. The main content is divided into two columns. The left column, titled "Functions", lists key facts about NATO: formed in 1949, 31 member countries, Finland's recent joining, its goal to safeguard freedom and security, its collective defense system (Article 5), and its headquarters in Brussels. The right column, titled "Political" and "Military", describes NATO's role in promoting democratic values and its commitment to peaceful dispute resolution and crisis management.

North Atlantic Treaty Organization (NATO)

Functions

- Formed in 1949 with the signing of the Washington Treaty, NATO is a security alliance of 31 countries from North America and Europe.
 - In April 2023, Finland joined the alliance as its 31st member.
- NATO's fundamental goal is to safeguard the Allies' freedom and security by political and military means.
- It is a system of collective defence where independent member states agree for mutual defence in case of any attack by external party.
 - Article 5 of Washington Treaty states that an attack against one Ally is an attack against all.
 - This article forms the core of the Alliance, a promise of collective defense.
- Headquarter - Brussels, Belgium.

Political

- NATO promotes democratic values and enables members to consult and cooperate on defence and security-related issues to solve problems, build trust and, in the long run, prevent conflict.

Military

- NATO is committed to the peaceful resolution of disputes.
- If diplomatic efforts fail, it has the military power to undertake crisis-management operations.

- Placed verifiable limits on categories of conventional military equipment that NATO and the then-Warsaw Pact could deploy

- The CFE treaty is often referred to as the "**cornerstone of European security**".

Second Voice of Global South Summit

- The second Voice of Global South summit took place in virtual mode. This was the second time that India hosted the summit since January 2023.
 - The first summit was themed as "**Energy Security and development: Roadmap to Prosperity**".
- The theme of the inaugural leaders' session was '**Together, for Everyone's Growth, with Everyone's Trust**' and that of the concluding leaders' session was '**Global South: Together for One Future**'.

Key Highlights Of The Summit

- **Inauguration of DAKSHIN:** PM Modi inaugurated a global centre for excellence for the Global South countries called DAKSHIN.
 - PM had proposed setting up the centre during the first Voice of Global South Summit in January this year.

- **Proposal to launch a satellite:** During the G20 Summit, India proposed to launch a satellite for monitoring weather and climate monitoring for Global South.
 - During this summit, PM assured that India is working on it at a fast pace.
- **PM coined 5 'Cs' for the Global South:** PM called for 5 'Cs' for the Global South: consultation, cooperation, communication, creativity and capacity building.

About The Global South

- **Not A Geographical Line**
 - Many countries included in the Global South are in the northern hemisphere, such as India, China and all of those in the northern half of Africa.
 - Australia and New Zealand, both in the southern hemisphere, are not in the Global South.
- **Brandt Line as The Border**
 - Many people refer to the Brandt Line as the border.
 - The line was proposed by former German Chancellor Willy Brandt in the 1980s as a visual depiction of the north-south divide based upon per-capita GDP.
 - It starts in the north of Mexico, goes across the top of Africa and the Middle East, makes a loop around India and China, and then goes down to include most of East Asia. It doesn't include Japan, Australia, or New Zealand.
- **Global South As A Concept**
 - The Global South is a geographical, geopolitical, historical and developmental concept, all at the same time — with exceptions.

India Emerged as The Voice Of Global South

- **One of the various visions of G20 presidency:** When India assumed the G20 presidency on December 1, 2022, it set out various visions for the nation's year-long presidency and the Global South was one of them.
 - India organized eight ministerial-level thematic segments to address the most pressing concerns of the developing world.
- **India Raised the issues concerning Global South** on the international forums and at the United Nations meetings and conferences.
- **During Covid-19 pandemic:** Made-in-India vaccines were sent to about 100 countries. And about 150 nations imported medicines during this period from the Pharmacy of the World.
- **India Hosted the Voice of Global South Summit** virtually in January 2023 with representatives from 125 countries.
 - India even ensured that the region remained centre stage at the G7 Summit in Hiroshima in May this year.
- **African Union as a full member of the G20** under India's presidency.
- **The 15th BRICS Summit in South Africa:** During this summit, PM Modi said that the Global South is not just a diplomatic term but represents the shared history of these countries against colonialism and apartheid based on which modern relations are being reshaped.
- **Two-day event on international taxation:** In an attempt to voice the views of the Global South on important international issues, India held a two-day event on International Taxation at the National Academy of Direct Taxes (NADT).
 - This event was an initiative of the Indian Presidency to bolster capacity building for Indian tax officials in the area of International Taxation, with a global south perspective.

- **India-UN Capacity Building Initiative** was announced in September 2023 at the event India-UN for the Global South-Delivering for Development.
 - The initiative aims to share the country's best practices with partner countries in the Global South.

CAG Girish Chandra Murmu elected vice-chair of UN external auditors' panel

- Comptroller and Auditor General of India, Girish Chandra Murmu, has been elected vice-chair of the **UN Panel of External Auditors**.
 - The Panel of External Auditors is composed of heads of 12 Supreme Audit Institutions (SAIs) globally.
 - It oversees the external audit of the UN Secretariat, funds and programmes, and specialised agencies.
 - This independent body conducts financial, performance and compliance audits of UN entities.
- This recognition underscores India's commitment to the highest standards of external audit and its active participation in shaping the global audit landscape.

Two India Cities In UNESCO's Creative Cities Network

- The city of Kozhikode in Kerala and Gwalior from Madhya Pradesh was added in UNESCO's Creative Cities Network (UCCN).
- These cities have been handpicked to **represent seven creative fields**:

crafts and folk arts

design

film

gastronomy

literature

media arts

music

- **Kozhikode was included in the category of literature and Gwalior in the category of music.**

UNESCO's Creative Cities Network (UCCN)

- **About**
 - UCCN was created in 2004 to promote cooperation among cities that have identified creativity as a strategic factor for sustainable urban development.
 - It now includes 350 cities in over a hundred countries.
 - It was launched to promote UNESCO's goals of cultural diversity and strengthen resilience to threats such as climate change, rising inequality, and rapid urbanisation.
- **Aim:** The network is aimed at leveraging the creative, social, and economic potential of cultural industries.
 - It encourages a culture of creativity in urban planning and solutions to urban problems.
- **Objective of the UCCN**
 - It allows member cities to recognise creativity as an essential component of urban development, notably through partnerships involving the public and private sectors and civil society.
 - It envisages developing hubs of creativity & innovation and broadening opportunities for creators and professionals in the cultural sector.
 - These cities have to achieve the UN agenda of sustainable development.
- **Areas of action**
 - The objectives of the network are implemented both at the level of the member cities and at the international level, notably through sharing experiences, knowledge and best practices.
 - There are professional and artistic exchange programmes, research and evaluations on the experience of the creative cities, among other activities.

- **The annual conference of network cities**

- A highlight of the network is the annual conference of mayors and other stakeholders of network cities.
- This offers a unique occasion to strengthen ties between creative cities from across the world.
- The last conference was held in Santos, Brazil, and this year's conference was in Istanbul. The next conference will be held in July 2024 in Braga, Portugal.

- **Responsibilities of members**

- Every four years, member cities are required to submit a Membership Monitoring Report.
- This report is presented with an aim of demonstrating their steadfast commitment towards the implementation of the UCCN Mission Statement.
- They present an action plan for the following four years, providing insights into their achievements and lessons learnt, as well as the impact of the designation.

- **Indian cities in the network**

- Apart from **Kozhikode** and **Gwalior**, **Varanasi** (music), **Srinagar** (crafts and folk arts) and **Chennai** (music) are part of the network.

UNESCO

- **About**

- UNESCO stands for **United Nations Educational, Scientific and Cultural Organization**.
- It is **specialized agency of the United Nations (UN)**.
- The constitution, which entered into force in 1946, called for the promotion of international collaboration in education, science, and culture.
- The agency's **permanent headquarters are in Paris, France**.
- **Parent Organisation** - United Nations Economic and Social Council

- **Goal**

- To contribute to peace and security by promoting collaboration among nations through education, science, and culture, and to promote sustainable development and intercultural dialogue.
- UNESCO believes that these areas are crucial for building a more just, peaceful, and inclusive world.

- **Key reports published by UNESCO**

- Global Education Monitoring Report
- The United Nations World Water Development Report
- World Trends in Freedom of Expression and Media Development
- Global Ocean Science Report

WHO's South East Asia Region Head

- **Saima Wazed**, Bangladesh's candidate and daughter of the country's PM Sheikh Hasina, was nominated as the World Health Organisation's regional director for South-East Asia.
- She won against Nepal's candidate, Dr Shambhu Acharya, who has been working in the WHO director-general's office since 2013.
- She will take office in February in 2024 and will succeed India's Dr. Poonam Khetrapal Singh.
 - Dr Poonam was the first woman to hold the office and remained in the position for two five-year terms.

World Health Organisation

- Founded in 1948, it is the UN agency responsible for global public health. It has 194 member states. **It is based in Geneva, Switzerland.**
- It aims to promote health, keep the world safe and serve the vulnerable.
- It is involved in vaccination campaigns, health emergencies and supporting countries in primary care.
- It is funded by a combination of members' fees based on wealth and population and voluntary contributions.

India & WHO

- India became a party to the WHO constitution in January 1948. India is a member state of the South East Asia Region at the WHO.
- The first regional director for South East Asia was an Indian, Dr Chandra Mani, who served between 1948-1968.
- The post was again occupied by an Indian appointee, Dr Poonam Khetrapal Singh in 2014. She remained in the position for two five-year terms (until February 2024).
- Dr Soumya Swaminathan has been serving as WHO's chief scientist since 2019.

Apple's State-Sponsored Attackers' Alert

- Certain Opposition Members of Parliament said that they received a warning from Apple that state-sponsored attackers may be targeting their iPhones.
 - The warning says the attackers are likely targeting these individuals because of who they are or what they do.
 - It advises them on how to protect themselves, including activating the 'Lockdown Mode' feature on their iPhones.

Response Of The Government

- The Government has launched an investigation into the alerts.
- Minister of Electronics and Information Technology Ashwini Vaishnaw downplayed the alerts by citing Apple's claim that these alerts have been sent to people in 150 countries.

About State-Sponsored Attackers That Apple Was Referring To

- Following the allegations, Apple said in a statement that it does not attribute the threat notifications to any specific state-sponsored attacker.
- As per Apple:
 - State-sponsored attackers are very well-funded and sophisticated, and their attacks evolve over time.
 - Detecting such attacks relies on threat intelligence signals that are often imperfect and incomplete.
 - It is possible that some Apple threat notifications may be false alarms, or that some attacks are not detected.
- Attackers backed by governments go after specific individuals and their devices, based on their identity or activities.
 - Such attacks are very different from the ones carried out by regular cybercriminals, who usually target a large number of users for financial gain.
- According to Apple, state-sponsored attacks are often short-lived, and are designed to evade detection and exploit vulnerabilities that may not be known to the public.



15 Years of Mumbai Terror Attack

- India had witnessed many terror attacks over the years but the one that rocked Mumbai in 2008 was a turning point. 10 Lashkar-e-Tayyeba (LeT) gunmen easily travelled by sea from Karachi to Mumbai and carried out attacks for four days.
- The ease with which they carried out the attack revealed:

significant weaknesses in India's maritime security

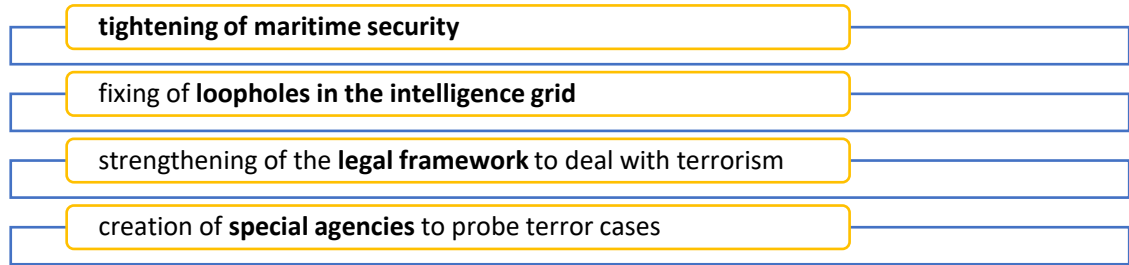
flaws in its internal security system

shortcomings in its counter-terrorism infrastructure and local police

- This attack fundamentally transformed India's strategy, and relationships in the world.

Mumbai Terror Attacks Changed India's Security Infrastructure

- Soon after the attacks, some key decisions on the security front were taken by the government.
- These included:



- **Maritime Security Revamped**

- Post 26/11, the **Indian navy** was given overall charge of maritime security.
- The **Indian Coast Guard** was given the responsibility for **territorial waters** and to coordinate with hundreds of new **marine police stations** that came up along India's coastline.
- The government also made it mandatory for all vessels longer than 20 metres to have an Automatic Identification System (AIS).
 - AIS transmits its identification and other information.

- **Intelligence Coordination**

- A decision was taken to strengthen the Intelligence Bureau's (IB's) **Multi Agency Centre (MAC)**.
- Primary job of MAC is to coordinate exchange of intelligence between central agencies, the armed forces, and the state police.
- Its charter too has been expanded to include radicalization and terror ecosystems.

- **Change in laws: UAPA and NIA Act**

- **Unlawful Activities Prevention Act (UAPA)** was amended to expand the definition of terrorism.
- **National Investigation Agency (NIA) Act** was passed by Parliament to create the first truly federal investigation agency in the country.
- However, the **National Counter Terrorism Centre (NCTC)**, floated by the then government could never take off as it violated the existing federal structure of policing.

- **Modernisation of police forces**

- Given the spectacular failure of local police, the Centre trained its focus on modernisation of state police forces.
- More funds were allocated by the MHA to state governments to:
 - make their police stations state-of-the-art,
 - equip them with modern technology,
 - train their policemen to deal with challenges of modern-day policing that included terrorism, and
 - give them better weapons.
- Apart from this, emphasis was given on the creation of crack commando teams among all police forces.
- And the National Security Guard (NSG) established four regional hubs across the country.

- **Cooperation from the West**

- The biggest impact of the 26/11 attacks, however, was the willingness of the West to cooperate with India on matters of security.

- It was only after the 26/11 attacks, during which American citizens got killed, that the US started seriously engaging with Indian agencies.
- The US not only provided real time information during the attacks, but also a lot of prosecutable evidence through the Federal Bureau of Investigation (FBI) that helped India nail Pakistan's culpability and embarrass it internationally.
- **Isolation of Pakistan**
 - The real success was in organising the international community, in isolating Pakistan, and in making counterterrorism cooperation against the LeT effective.
 - The global understanding on the need to deal with Pak-sponsored terrorism helped put Pakistan in the Financial Action Task Force's (FATF's) grey list in 2018.
 - This forced the country to take action against the terror infrastructure of the LeT and Jaish-e-Muhammad (JeM).
- **Some lacunae remain**
 - Despite these successes, gaps in the security grid remain.
 - State police forces continue to *remain ill equipped and poorly trained with continued political interference*.
 - On maritime security, there are limited options to track ships that do not transmit AIS signals.
 - Also, many of India's smaller shipping vessels have no transponders.

Ways In Which India's Strategy Game Has Played Out Since Mumbai Attacks

- **Pakistan as a perpetrator**
 - The fact that victims of those who were killed were from 16 nationalities, apart from India, and another seven countries' whose citizens were injured, made 26/11 — the **first truly global attack on Indian soil**. This put the spotlight on Pakistan's record on terrorism.
- **India's strategic restraint and its dividends**
 - In the immediate aftermath of the 26/11 attack, a debate took place about the kind of action that should be taken.
 - India showed restraint in response as it was felt that more was to be gained from not attacking Pakistan than from attacking it.
 - The surgical strikes after the Uri attack in 2016, or the Balakot air strike in 2019 were possible without much international criticism, only because Delhi had shown strategic restraint in 2008.

UNLF Signed Peace Deal With Centre

- Union Home Minister Amit Shah announced the signing of a **peace agreement** with the **Meitei separatist group United National Liberation Front (UNLF)** in Manipur.
- This is the **first known instance of a valley-based insurgent group (VBIG)** from Manipur entering into a peace pact with the Centre.
 - So far, the VBIGs have never entered into an agreement with the Centre or participated in any peace talks.

Insurgency In Manipur

- **About**
 - There is an ongoing armed conflict between India and a number of separatist rebel groups in Manipur.
 - This insurgency in Manipur is part of the wider Insurgency in Northeast India which combines elements of a **national liberation war** as well as **ethnic conflict**.

- **Historical background of Manipur**

- Following the brief Anglo-Manipur War of **1891**, the Kingdom of Manipur was conquered by Britain.
 - After this war, Manipur kingdom became a British protectorate.
- Manipur became a part of India in October 1949 and became a separate state in 1972.

- **Rise of insurgency**

- Manipur's incorporation into the Indian state led to the formation of a number of insurgent organisations.
 - These groups demanded the creation of an independent state within the borders of Manipur, and dismissed the merger with India as involuntary.
- The insurgency problem in Manipur came into existence in the late 1960s and 1970s.
 - There was no problem of insurgency when Manipur merged into India.
- The first separatist faction, **United National Liberation Front (UNLF)**, was founded in November 1964.
 - Now, the region is infested with many insurgent groups.

What Are The Reasons For Insurgency In Manipur?

- **Merger with India**

- Meiteis are the majority community of Manipur. Their influence declined after Indian Independence.
- This led to resentment in a section of Meities about the merger of the State with the Indian Union, which led to the Meitei insurgency from the 1960s.

- **Ethnic conflict**

- Manipur has a diverse ethnic population with Meitis controlling the Valley, Nagas on the surrounding hills and Kukis interspersed in between.
- This leads to clashes between these communities.
 - Kukis and Nagas of Manipur have overlapping and conflicting territorial interests over almost all the hill districts of Manipur.
 - Similarly, there are competing interests between the Nagas and Meitis.
 - The demand for Nagalim or Greater Nagaland includes the Naga inhabited areas of Manipur. On the other hand, the Meitis want to preserve what has been a single geographic entity for centuries.

- **Lack of socio-economic development**

- Owing to its topographical structure, the state has had problems of economic development and socio-economic transformation for a long period.
- Over the years, endless corruption, mismanagement of funds and the failure to devolve power to common people have led to the rise of dissatisfaction.

UNLF

- **About**

- The UNLF was formed in November, 1964, and is the oldest valley-based insurgent group.
- It was formed with the demand of secession from India under **the leadership of Arambam Samarendra Singh**, who was the general secretary of the group.
- It was a proscribed group, banned under the Unlawful Activities Prevention Act (UAPA).

- **Armed Wing of UNLF**

- The UNLF is believed to have received its initial training from the NSCN (IM), the largest Naga insurgent group.

- Its armed wing, the *Manipur People's Army*, was formed in 1990.
- There are now two factions of the UNLF and jointly, government estimates place the number of cadres at 400-500.
- **Factions of UNLF**
 - Now, there are two factions, one under the chairmanship of Khundongbam Pambei and the other under the chairmanship of NC Koireng.
 - Pambei has been *open to talks*, and the process to begin ceasefire negotiations goes back to 2020.
 - However, the faction under the chairmanship of NC Koireng has stayed away from talks.

J&K Police Rolls Out GPS Anklets To Monitor Terror Accused On Bail

- The Jammu and Kashmir Police has introduced GPS tracker anklets for monitoring the terror accused out on bail.
 - **Ghulam Mohammad Bhat**, who is accused of offences under the UAPA, was let out of jail.
 - This was after a special National Investigation Agency (NIA) court in Jammu upheld the prosecution's plea and ordered police to affix a GPS tracker anklet on his foot.
- With this, the J&K police department became the **first in India** to be using GPS tracker anklets.

GPS Tracker

- **About**
 - A GPS tracker is a small, wearable device like the GPS collars that have long been used to monitor the movements of animals.
 - The device provides the exact location of the wearer at all times, and allows law enforcement and security agencies to monitor his/ her movement in real time.
 - The use of GPS trackers make it a little easier to get bail under the stringent UAPA, and give police the confidence to not oppose bail.
- **Criticism**
 - Many experts have pointed to the **absence of specific legal provisions** allowing the use of GPS tracker anklets.
 - Also, the security establishment has not yet developed any standards and ethics in electronic monitoring.
 - Rights activists say tracking a human being is a violation of their fundamental right to privacy.
 - They claim that the Supreme Court in '**Maneka Gandhi vs Union of India**' (1978) ruled that the right to life includes the right to human dignity.
 - Since surveillance raises concerns of over-regulation and infringement of human rights, it is necessary to have a system of **informed consent** and procedures to deal with unethical and illegal practices.

Vajra Prahar 2023

- The 14th edition of the Indo-US Joint Special Forces exercise "Vajra Prahar 2023" began at the Joint Training Node, Umroi, Meghalaya.
- The exercise involves the special forces of India and the United States. The US contingent is represented by personnel from the 1st Special Forces Group (SFG) of US Special Forces.
- The exercise aims at sharing best practices and experiences in areas such as joint mission planning and operational tactics.

- The inaugural edition of the exercise took place in India in 2010.

FATF Report: 'Violent Extremist Organisation' in India Collected Funds Through Well-structured Networks

- According to the '**Crowdfunding for Terrorism Financing**' report, recently published by the FATF, a violent extremist organisation under investigation in India collected funds through well-structured networks.
- Without naming the organisation, the Financial Action Task Force (FATF) report makes a reference to the Popular Front of India (PFI).

Highlights of FATF Report - 'Crowdfunding for Terrorism Financing'

- The FATF report said the accounts of PFI involved both domestic and foreign transactions, **making this case extremely difficult to investigate.**
- **Funds were ultimately used to procure arms and ammunition** and for training the cadres of the violent extremist organisation, among other purposes.
- A portion of the funds raised through crowdfunding was also **invested and parked in businesses and real estate projects** to generate regular income for terrorism activities.
- **The group's fundraising tactics included** offline and online mechanisms, such as circulating QR codes and account details through which donors were asked to send money.

Other Reports of FATF Highlighting Different Modes of Money Laundering

- Earlier, the FATF had included a case study in a report titled '**Money Laundering and Terrorist Financing In The Arts And The Antiques Market**' that resembled the ED's case against former Yes Bank CMD Rana Kapoor.
- While FATF mentioned no name, it had made a reference to money laundering **through paintings**, including one bought from a close relative of a member of the ruling political party at that time for USD 264,000.
- **The FATF report notes different ways** in which crowdfunding platforms can be abused for terrorist financing purposes -
 - Abuse of humanitarian, charitable or non-profit causes;
 - Use of dedicated crowdfunding platforms or websites;
 - Use of social media platforms and messaging apps; and
 - Interaction of crowdfunding with virtual assets.

Crowdfunding - An Attractive Method of Fundraising for Terrorist Financing

- **The possibility of quickly and easily reaching a global audience** makes crowdfunding an attractive method of fundraising for terrorist financing.
- Some estimates have valued the global crowdfunding market at \$17.2 billion in 2020 and note that it is **expected to reach \$34.6 billion by 2026.**
 - There were over 6 million crowdfunding campaigns around the world.
- Although the majority of crowdfunding activity is legitimate, terrorist groups (like ISIL) and ethnically or racially motivated terrorist (EoRMT) **have exploited it to raise money for terrorist financing purposes.**
- A terrorist may establish **a fundraising campaign** on a dedicated crowdfunding platform, share the campaign on social media, and request payment in virtual assets.
- While certain jurisdictions and industries proactively implement measures to mitigate these risks, **anti-money laundering and counter-terrorist financing (AML/CFT) regulation is not consistent across the globe.**

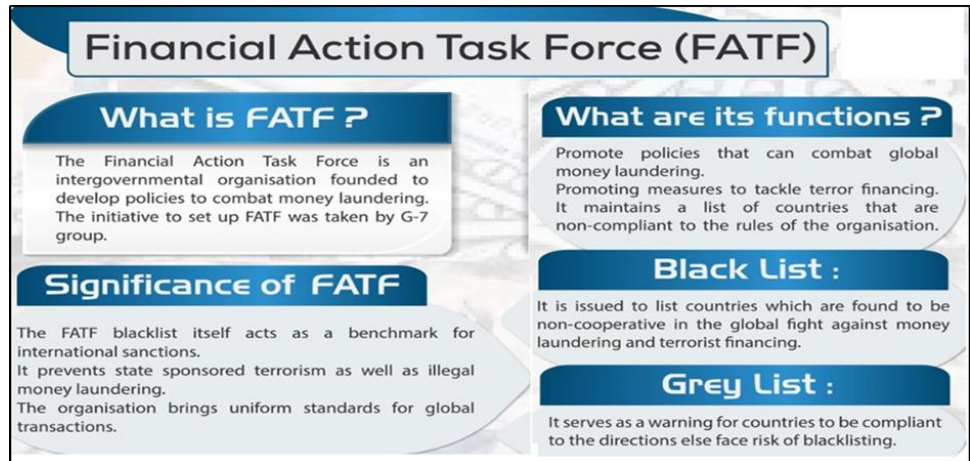
Way Ahead to Curb Terrorist Financing

- **Countries should assess the nature, size and risks associated** with all types and methods of crowdfunding in their particular jurisdiction, including companies, individuals or any other type of organisation.

- **Countries should also take note of the risk analysis** of the sector more globally given the cross-border nature of crowdfunding campaigns and associated financial transfers.
- **Countries should recognise** that even if their jurisdiction does not have significant terrorism activity domestically, **their jurisdiction can still be used as a pass-through for financial flows.**

About FATF

- It is an **intergovernmental** organisation founded in **1989** to develop policies to combat **money laundering** and its mandate was expanded to include **terror financing** in 2001.
- It operates from Organisation for Economic Cooperation and Development (OECD) headquarters in **Paris** and its plenary/ decision-making body meets three times per year.
- **It has 39 members including India** (became observer in 2006 and a full time member in 2010) and two regional organisations - the EU and GCC (Gulf cooperation council).
- FATF's mandate -
 - **Recognises the need to continue to lead decisive, coordinated and effective global action** to counter the threats of the abuse of the financial system by criminals and terrorists, and
 - **Strengthens its capacity** to respond to these threats that all countries face.
- **The FATF conducts peer reviews** of each member on an ongoing basis to assess levels of implementation of the FATF Recommendations.
 - **It provides an in-depth description** and analysis of each country's system for preventing criminal abuse of the financial system.
 - **India is currently under the FATF review.** It last underwent a similar review in **2013** where it was found that India had reached a satisfactory level of compliance.



About PFI

- The PFI was created in **2007** through the **merger of 3 Muslim organisations** in southern India, the National Democratic Front in Kerala, the Karnataka Forum for Dignity, and the Manitha Neethi Pasarai in Tamil Nadu.
- The PFI, which **emerged in the aftermath of the ban on the Students Islamic Movement of India (SIMI)**, has projected itself as an organisation that fights for the rights of minorities, Dalits, and marginalised communities.
- In 2022, **the Ministry of Home Affairs had declared the PFI** along with its associates or affiliates or fronts as an **“unlawful association”**.

UN report (Interconnected Disaster Risk Report (IDRR) 2023) On Groundwater Extraction

Key Reports & Significant Findings

UN Report (Interconnected Disaster Risk Report (IDRR) 2023) on Groundwater Extraction

IDRR was first published in 2021 by Institute for Environment and Human Security (UNU-EHS with HQ- Bonn, Germany), the academic arm of UN

Findings of Report

- Regions with most severe depletion - parts of India, north-eastern China, western US, Mexico, Iran, Saudi Arabia and parts of Northern Africa.
- Globally India pumps up the most groundwater, mainly for irrigation, domestic & industrial uses.
- Indo-Gangetic basin region has already passed the groundwater depletion tipping point.
- The report indicates that 78% of wells in Punjab are overexploited and the region will face critically lower groundwater availability in 2025.
- Agricultural purpose causes for 70% of groundwater withdrawals.

Adaptation Gap Report, 2023 (by United Nations Environment Programme (UNEP))

The adaptation gap — the difference between estimated financing needs and costs of adapting to climate change and finance flows in developing countries.

Findings of Report

- Countries need financing of \$215 billion to \$387 billion every year to adapt to climate change.
- Developing countries will require \$387 billion per year for the next decade to implement projects that will assist them in adapting to climate change.
- The adaptation finance needs are 10-18 times as high as the current international public adaptation fund flows.

Extra Mile (UNEP Activities)

- **Major Programmes:** Earth Hour, clean up the World, Billion Tree Campaign, Seal the Deal etc.
- **Major Reports:** Emission Gap Report, Adaptation Gap Report, Global Environment Outlook, Frontiers, Invest into Healthy Planet.

Greenhouse Gas (GHG) Bulletin (By World Meteorological Organisation (WMO))

- The concentrations of GHGs that trap heat in the Earth's atmosphere rose to record levels in 2022. The rise in concentrations of GHGs is mainly due to the use of fossil fuels for various human activities.
- Global average concentrations of carbon dioxide (CO₂), which is the most important GHG, reached 417.9 parts per million, for the first time in 2022.
- The concentrations of the other two major GHGs methane & nitrous oxide also grew in 2022.

Climate Services Report for 2023 (By WMO)

- By 2030, there will be around 560 mediums to large-scale disaster events every year, or 1.5 per day.
- Less than 25% of health ministries across the world utilize, climate information and services to monitor health risks related to climate sensitivity,

Brazzaville Summit or Three Basins Summit 2023

Brazzaville Summit of the Three Basins of Amazon, Congo and Borneo-Mekong-Southeast Asia that took place in Brazzaville (capital of the Republic of the Congo) ends with a declaration.

Brazzaville declaration	The summit's seven-point declaration aimed to halt and reverse biodiversity loss by 2030.
About Three Basins Amazon Basin (Amazon Rainforest/"Lungs of the Earth.") - It is the largest tropical rainforest in the world spanning across several South American countries. - The Amazon River, the second-longest river in the world (after the Nile), runs through the heart of the Amazon Basin. - The Amazon Rainforest plays a crucial role in regulating the Earth's climate. It acts as a significant carbon sink, absorbing and storing large amounts of carbon dioxide, and contributes to the production of oxygen through photosynthesis. Congo Basin ("Lungs of Africa.") - It is the second-largest tropical rainforest in the world, after the Amazon Rainforest. - The Congo Basin spans across six countries—Cameroon, Central African Republic, Democratic Republic of the Congo, Republic of the Congo, Equatorial Guinea and Gabon. - The Congo River, the second-longest river in Africa, flows through the basin. The Borneo-Mekong-Southeast Asia Basin (Island of Borneo + Mekong River) - Southeast Asia is a subregion of Asia, consisting of 11 countries: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar (Burma), the Philippines, Singapore, Thailand, Timor-Leste, and Vietnam. - Borneo is the third-largest island in the world and is located in Southeast Asia. It is divided among three countries: Malaysia, Indonesia (Kalimantan), and Brunei. - The Mekong River Basin includes parts of China, Myanmar, Laos, Thailand, Cambodia, and Vietnam. These Three Basins collectively house 80% of the world's tropical forests and two-thirds of terrestrial biodiversity.	

Carbon Nanoflorets

The IIT Bombay team finds tiny carbon 'flowers' that turn Sunlight to heat at efficiency of 87%.

What Are Carbon Nanoflorets? - They are a unique nanostructure composed of carbon atoms that show structural (morphology) similarity to plant flowers. - They stand out as promising materials for application in electrochemistry, gas adsorption and absorption, batteries and supercapacitors.
About Nanoflorets - Nanoflorets can absorb light at multiple frequencies, including infrared, visible light, and ultraviolet (UV), making them highly efficient at converting sunlight into thermal energy. ➤ Contrast to traditional solar-thermal materials that typically absorb only visible and UV light. - The unique surface area and morphology of these structures can impart specific properties that make them valuable for various technological advancements. - Its unique shape ensures minimal light reflection & efficient heat retention. A 1-square-meter coating of

nanoflorets can vaporize 5 litres of water in an hour, surpassing commercial solar stills.

Hydroclimate Extremes

Expert group of Banaras Hindu University examined the impact of global warming on hydroclimate extremes over the Indian River Basins (IRBs).

Concept Of Hydroclimatic Extremes

- Hydroclimate extremes refer to unusual and intense climatic events related to the Earth's water cycle, encompassing both the atmospheric and hydrological components.
- These extremes can manifest an exceptionally heavy rainfall, prolonged droughts, intense storms, floods, or other weather-related phenomena.

Key Findings Of Study

- Frequency of extreme rainfall is expected to increase over the Western Ghats & Northeast River basins, while heavy rainfall intensity is projected to increase over Upper Ganga & Indus basins.
- There will be an agricultural drought in the lower Ganga basin due to a decline in mean rainfall.
- In the mid-future, under certain carbon emission scenarios, a significant increasing change of about 30% precipitation per day was likely over the West flowing River (Kutch & Saurashtra), including Luni, Indus, and Upper Ganga River Basins.

Methanol Diesel-15 (MD15) Fuel

Indian Railways' technical advisor, Research Design and Standards Organisation (RDSO), with the Indian Oil Corporation Ltd. (IOCL), has developed a special fuel called Methanol Diesel-15.

About MD15

- It is a cost-effective blended fuel containing 15% methanol, 71% mineral diesel, and 14% indigenously developed additives by IOCL.
 - Methanol: Methanol is a non-polluting and versatile fuel that can fully or partially replace Petrol; Diesel and Liquefied petroleum gas (LPG).
 - Mineral diesel: A fuel that's used in locomotives.

Benefits of MD-15

- It has the potential to reduce diesel consumption by 15% (emit fewer pollutants) and result in substantial annual savings. (It's expected to save the railways around Rs 2,280 crore annually.)
- METHNAOL 15 (M15) in petrol will reduce pollution by 33% and diesel replacement by methanol will reduce pollution by more than 80 %.

Extra Mile

Methanol & Its Economy

- Methanol is a clean burning drop in fuel which can replace both petrol & diesel in transportation & LPG, Wood, Kerosene in cooking fuel.
- It can also replace diesel in Railways, Marine Sector, Gensets, Power Generation and Methanol based reformers could be the ideal complement to Hybrid and Electric Mobility.
- Methanol Economy is the 'Bridge' to the dream of a complete "Hydrogen based fuel systems".
- Methanol burns efficiently in all internal combustion engines, produces no particulate matter, no soot, almost nil SOX and NOX emissions (Near Zero Pollution).
- Methanol can be produced from Natural Gas, Indian High Ash Coal, Biomass, MSW, stranded and flared

gases

- The certain part of the world is already moving towards renewable methanol from CO₂, say CO₂ emitted from Steel plants, Geothermal energy or any other source of CO₂, effectively "Air to Methanol".
- NITI Aayog has prepared a comprehensive plan advocating adoption of methanol as the preferred cooking fuel in households as well as commercially.

White Hydrogen

Two scientists in northeastern France discovered a substantial deposit of "white hydrogen, "considered one of the largest concentrations of this clean energy source ever found.

What Is White Hydrogen?

- White hydrogen is a naturally occurring, geological hydrogen found in underground deposits (Earth's crust) and created through fracking.
- It's also known as "natural," "gold," or "geologic" hydrogen.
- White hydrogen is created through fracking and found in underground deposits. There are no strategies to exploit this hydrogen at present.

Features of White Hydrogen (Abundant And Untapped Source Of Clean-Burning Energy)

- White hydrogen's estimated cost is around \$1 per kilogram, significantly lower than green hydrogen, which costs about \$6 per kilogram, making it a more affordable clean energy source.
- Their deposits have been identified worldwide including in the US, eastern Europe, Russia, Australia, Oman, France, and Mali.

Extra Mile: (Types of Hydrogen/H based on Extraction Methods)

- **Green H:** Produced using electrolysis of water with electricity generated by renewable energy.
- **Blue H:** Created via natural gas or coal gasification combined with carbon capture storage (CCS)
- **Grey H:** Produced via coal or lignite gasification (black or brown), or via a process called steam methane reformation (SMR) of natural gas or methane (grey)

National Efficient Cooking Programme (NECP) and Energy Efficient Fans Programme (EEFP)

Energy Efficiency Services Limited (EESL) launched its groundbreaking National Efficient Cooking Programme (NECP) and Energy Efficient Fans Programme (EEFP) under the Ministry of Power.

National Efficient Cooking Programme (NECP): A Subset Of The Clean Cooking Scheme

- Programme aims to transform cooking practices in India by introducing induction-based cook stoves
- NECP focuses on Non-Solar/Electricity-based Induction Cookstoves (For Low Energy Consumption), aligning with the Go- electric initiative by the Ministry of Power.
- EESL has already initiated efforts to promote clean and safe electric cooking to support India's Go-electric campaign and contribute to carbon mitigation goals.

Energy Efficient Fans Programme (EEFP)

- EESL will distribute 1 crore efficient BLDC fan and 20 Lakh energy-efficient induction cook stoves.

Extra mile: About EESL (promoted by Ministry of Power)

- It is a Joint Venture company of four Central Public Sector Undertakings, viz. NTPC Limited, PFC Limited, REC Limited and POWERGRID Corporation of India Limited.
- It is registered under the Companies Act, 1956 on 10th December 2009.

- It is also leading the market-related activities of the National Mission for Enhanced Energy Efficiency (NMEEE-One of the missions under National Action Plan on Climate Change (NAPCC)).

New CO₂ to CO Conversion Technique

A new energy-efficient carbon dioxide capture technology that converts carbon dioxide to carbon monoxide has been developed.

It is done under electro catalytic conditions under ambient temperatures in the presence of water. It has been developed with potential for application in the steel sector.

- DST-supported National Centre of Excellence in Carbon Capture and Utilisation (NCoE-CCU) at IIT Bombay is actively working towards developing novel, scalable and affordable pathways on capturing CO₂ from various emission sources, and converting it into usable chemicals or permanent storage, representing a crucial pathway for greenhouse gas mitigation.

CO₂ to CO Conversion Technology

- It operates through an electrocatalytic process.
- Traditional processes require high temperatures (400-750 °C), and the presence of the equivalent amount of hydrogen, But recent process can operate at ambient temperatures (25-40 °C) in the presence of water, eliminating the need for high-temperature conditions.
- The energy for this electrocatalysis reaction can be sourced directly from renewable energy, such as solar panels or windmills, ensuring a carbon-neutral operation.

Tokhü Emong Bird Count (TEBC)

Nagaland is hosting the first edition of the Tokhü Emong Bird Count (TEBC), a four-day documentation event to list birds in the state.

- It is the first avian documentation exercise taken by Nagaland to go beyond Amur falcons.
- The TEBC falls within the Salim Ali Bird Count, a nationwide event conducted by the Bombay Natural History Society.

About Tokhu Emong Festival

- Tokhü Emong is the post-harvest festival of the Lotha Nagas, which is celebrated in the month of November and lasts for nine days.
- 'Tokhu' means moving from house to house, collecting tokens and gifts in form of natural resources and food. However, the meaning of 'Emong' is to put a halt for the appointed time.
- With the harvest done and the granaries full, the people in Nagaland in northeast India take a break from the farm work and enjoy the festivities that include folk dances and the singing of folk songs.
- During the festival, gracious offerings are made to the 'Sky God' and 'Earth God' seeking for blessings.

Alliance for Transformative Action on Climate and Health (ATACH)

WHO introduced an Operational Framework for constructing climate-resilient and low-carbon health systems through ATACH.

About ATACH

- ATACH is a voluntary network (established in 2022) where participants can share information, exchange views, and improve technical and political cooperation.
- ATACH's goal is to achieve the climate change and health ambitions set at COP26. This includes building sustainable and climate-resilient health systems.

- ATACH uses the collective power of WHO Member States and other stakeholders to drive this agenda forward.
- ATACH is not a distinct legal entity. It derives its legal status from WHO, which also provides its Secretariat.

World Organisation for Animal Health (WOAH)

India hosted the 33rd Conference on World Animal Health by the World Organisation for Animal Health (WOAH) Regional Commission for Asia and Pacific in Delhi.

About WOAHOIE

- It was Founded in 1924 and named Office International des Epizooties (OIE in French). Later in May 2003, adopted the common name World Organisation for Animal Health. It is headquartered in Paris, France.
 - WOAHO was founded as a response to a cattle plague called rinderpest, which swept across the globe, ravaging livestock and devastating livelihoods.
- WOAHO has five Regional Commissions to address specific challenges faced by its members in the different regions of the world. These Commissions are fully fledged regional institutional bodies.
- The primary mission of the OIE is to transparently disseminate information on animal diseases and to establish international standards for the control of animal diseases, including zoonoses (diseases that can be transmitted between animals and humans).
- The OIE work for both terrestrial (land) and aquatic (marine and freshwater) animal health.

CITES RST

India has been removed from the CITES's Review of Significant Trade (RST) for Red Sanders. India has been under the Review of Significant Trade (RST) process for Red Sanders since 2004.

About CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora)

- It is a global legally binding agreement (administered by UNEP) among governments to regulate or ban international trade in species under threat.
- It came into force in 1975. India joined CITES in 1976 and hosted CITES CoP-3rd in 1981.

What is CITES RST?

- The CITES RST process enables disciplinary action in the form of trade suspensions directed at countries that do not meet their obligations.
- The Red Sanders species has been listed for the RST process more or less since 2004.
- This is a process through which the CITES Standing Committee places increased scrutiny on the exports of a species from a country to determine if the Convention is being properly implemented.

About Red Sanders ('the pride of Eastern Ghats')

- Red sanders, classified as endangered by the IUCN, CITES (Appendix II), and Wildlife Protection Act (Schedule IV), are native to a specific region within the Eastern Ghats.
- These trees have a slow growth rate, taking 25 to 40 years to mature, and they display remarkable resistance to droughts.

Bengaluru Climate Action Plan

After Mumbai and Chennai, Bengaluru is drafting its first Climate Action Plan (CAP), which is designed to serve as a blueprint for the city to become carbon neutral by 2050. The Plan is in line with C40 Cities' commitment to tackle climate change.

- The Bruhat Bengaluru Mahanagara Palike (BBMP) has appointed the World Resources Institute (WRI) as the global consultant to prepare a climate action plan for 2050 for Bengaluru

Features of The Bengaluru Climate Action and Resilience Plan (BCAP)

The plan includes 269 actions to reduce greenhouse gas (GHG) emissions. Urban heat, urban flooding, droughts, thunderstorms, lightning and air pollution have been identified as climate and environmental hazards in the plan.

C40

- It is a global network of nearly 100 mayors of the world's leading cities that are united in action to confront the climate crisis. 6 Indian Cities namely Delhi NCT, Mumbai, Chennai, Kolkata, Bengaluru, and Ahmedabad are parties to it.
- As part of the signatory to the C40 cities, the commitment from the cities is to achieve carbon emission reduction by 2030 and carbon neutrality by 2050.

World Resource Institute (WRI)

- WRI is a global research non-profit organization established in 1982 with HQ in Washington DC.
- Its mission is to promote environmentally sound & socially equitable development with the purpose of supporting human society in six areas: food, forests, water, energy, cities, & climate.

E Prime Layer

Recently, a study by an international team of researchers revealed the formation of a new enigmatic layer – E prime layer at the outermost part of Earth's core.

What is E Prime Layer?

- It is a layer at the outermost part of Earth's core. The E-Prime Layer is a result of surface water altering the composition of the metallic liquid core's outermost region.
- When the water reaches the core-mantle boundary, it undergoes chemical changes, forming a hydrogen-rich, silicon-depleted layer. This layer resembles a film-like structure.

Significance Of The Discovery

- This discovery enhances researchers' comprehension of Earth's internal mechanisms, indicating a broader and more intricate global water cycle than previously acknowledged.
- The transformed layer in the core holds significant implications for the interconnected geochemical processes linking surface water cycles with the deep metallic core.

Ghol Fish

Gujarat recently declared the black-spotted croaker (*Protonibea diacanthus*), locally known as the Ghol fish, as the state fish.

About Ghol Fish/Goldfish/Sea Gold: IUCN Status: Near Threatened

Distribution	In the Indo-Pacific region that stretches from the Persian Gulf to the Pacific Ocean
Commercial Importance (A kilogram of Ghol fetches between Rs 5,000 to Rs 15,000 in Gujarat)	
• The meat of the fish is exported as frozen fillet to European and Middle-Eastern countries. • Its air bladder which is cut open from the stomach and dried is mainly exported to China, Hong Kong and other Asian countries where it is in high demand for its medicinal values.	
Health Benefits	
• Rich in Omega-3 Fatty Acids: These fatty acids are known to support heart health, reduce inflammation,	

and contribute to brain health.

- **Excellent source of high-quality protein:** Protein is essential for the body's growth, repair of tissues, and overall maintenance.
- **Vitamins and Minerals:** Ghol fish contains various vitamins and minerals, including vitamin D, vitamin B12, iodine, selenium, and zinc. These nutrients play crucial roles in bone health, immune function, and overall well-being.

Nugu Wildlife Sanctuary

The National Tiger Conservation Authority (NTCA) has recommended to the authorities that the Nugu Wildlife Sanctuary (WLS) adjoining the Bandipur Tiger Reserve be declared as a core critical tiger habitat.

About Nugu WLS (built across the Nugu River, a tributary of the Cauvery)

Location	North of Bandipur National Park in Mysore District, Karnataka
Notification	Declared as a Wildlife Sanctuary in 1974; Added to Nilgiri Biosphere Reserve in 2003-2004
Rainfall	Average 1000 mm (from both southwest and northeast monsoons)
Vegetation	Dry, deciduous and interspersed with patches of plantations
Fauna	Home to two important riverine wildlife species: the smooth-coated otter & the marsh crocodile

Mandatory Biogas Blending

India announces mandatory biogas blending for domestic use from 2025-26

Mandatory Biogas Blending

- The National Biofuels Coordination Committee (NBCC) gave its nod to mandatory blending of compressed bio gas (CBG) with compressed natural gas (CNG) for transportation and piped natural gas (PNG) for households starting 2025-26 (FY26).
- The key objectives of the CBO (compulsory blending obligation) are to stimulate demand for CBG in CGD sector, import substitution for liquefied natural gas (LNG), saving in forex, promoting circular economy and to assist in achieving the target of net-zero emission.

** The 2018 Biofuel Policy aims to reach 20% ethanol-blending and 5% biodiesel-blending by 2030. However, the Centre plans to move ahead with its ethanol blending target of 20% of petrol containing ethanol by 2025-26.

** NBCC is headed by the Prime Minister and has been constituted for providing High-level co-ordination and policy guidance / review on different aspects of biofuel development.

About Biogas

- Biogas is an energy-rich gas produced by anaerobic decomposition of biomass.
- It is produced from sources like agriculture residue, cattle dung, sugarcane press mud, municipal solid waste, and sewage treatment plant waste, among others.
- It can be burned directly as a fuel, or purified and upgraded by removing carbon dioxide, hydrogen sulfide, and then compressed to make compressed bio gas (CBG).
- The CBG (compressed bio gas) has methane content of more than 90%, which is similar to commercially available natural gas in composition and energy potential.

India & Natural Gas

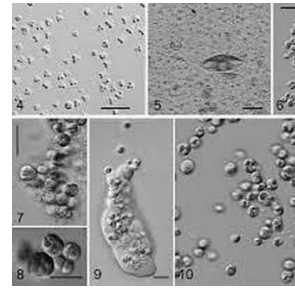
- India is a major consumer of natural gas and depends on imports to meet around half of its requirement.
- The country's natural gas consumption is only set to rise in the coming years given the government's aim to increase the share of natural gas in the primary energy mix to 15 per cent by 2030 from a little over 6 per cent at present.
- Increased production of CBG could help India in reducing reliance on natural gas imports.

Government Measures To Achieve Targets

- **SATAT scheme:** Under the Sustainable Alternative Towards Affordable Transportation (SATAT) scheme, 5,000 CBG plants were envisaged by 2023 to produce 15 million Tonnes of CBG. The scheme's objective was to encourage entrepreneurs to set up CBG plants across the country and supply gas to public sector oil companies.
- **GOBARDhan scheme:** Galvanizing Organic Bio-Agro Resources Dhan (GOBARDhan) is an umbrella initiative aims to build a robust ecosystem for setting up Biogas/Compressed Biogas (CBG)/ Bio-Compressed Natural Gas (CNG) plants to drive sustainable economic growth and promote a circular economy.

Species In News

Pancorius sebastiani 	• A New species of jumping spiders' <i>Pancorius sebastiani</i>' has been discovered from the Western Ghats (In Shendurney Wildlife Sanctuary – under Agasthya Mala Biosphere Reserve). • Its distribution was hitherto limited to the east and northeastern regions in India. • Males and the Females of this species exhibit reddish brown carapace. • They have yellowish abdomens with black patches and chevron-shaped markings posteromedially. • Distribution: Only two States, West Bengal and Tamil Nadu, have reported high numbers of Salticidae species.
Awaous Motla 	• A group of scientists has discovered that an edible freshwater fish, available in the markets of western Odisha, is actually an unregistered species. The new species was named 'Awaous Motla'. • The species belongs to the family 'Awaous' (Oxudercidae), thus named Awaous motla and 'motla' by fishermen. • The fish has a vibrant yellow-coloured body. • It was discovered from the Mahanadi River and can be consumed both fresh and dried.
Alcalus fontinalis 	• Researchers recently discovered a new species of frog named <i>Alcalus fontinalis</i> in the state of Arunachal Pradesh (in the Namdapha Tiger Reserve). • The identification of the new species is based on molecular, morphological, and osteological characteristics. • The frog appeared to be a mix of a bush frog & a water frog, something not seen before in India. • They are no ordinary frogs but members of a dwarf mountain frog of the genus <i>Alcalus</i>, hitherto unknown from India.

Attenborough echidna 	• An elusive Attenborough's long-beaked echidna which was feared extinct after disappearing for six decades has been rediscovered in a remote part of Indonesia. • They are part of the monotreme group, which are unique mammals laying eggs instead of giving live birth. • They are nocturnal and shy and rolls up into a spiny ball when it feels threatened, resembling the behaviour of a hedgehog (spiny mammal). • Adults have no teeth, but the tongue is covered in tooth-like spikes. • IUCN Status: Critically Endangered & CITES: Appendix II
Paintbrush swift butterfly 	• Paintbrush swift butterfly is photographed for the first time in Himachal Pradesh. • It's specie of the Hesperidae family. • Scientific name is Baoris Farri. • Species larvae feed on bamboo and some other grass species. • It is found across northeast, central and south India. • Conservation status: Schedule IV of Wildlife Protection Act 1972
Picocystis Salinarum 	• A researcher has divulged the molecular mechanisms behind the resilience of the green alga Picocystis Salinarum in extreme conditions of saline-alkaline soda lakes. • It is one of the smallest green algae. • Though the algae had been widely found in saline-soda lakes around the world, it was spotted for the first time in India only in the Sambhar Lake. • The unique organism apparently enhances photosynthesis and ATP synthesis along with chaperone proteins as key response to high salinity-alkalinity. • This discovery is a potential candidate for biotechnological applications, including carbon capture and biomass production.
Melocanna Baccifera 	• Study spanning 13 years has revealed further information about flowering in Melocanna baccifera. • It is a tropical bamboo species known for its association with the occurrence of 'bamboo death,' 'rat floods' and famines in northeast India. • Called 'Muli' in northeast India, it is the largest fruit-producing bamboo and is native to the northeast India-Myanmar region.
Music Frog 	• Scientists have discovered a new species of Music frog in Arunachal, named Nidirana noadihing. • This unique discovery is marked by the distinct feature that both male and female frogs are vocal. • Nidirana noadihing (named after the Noa-Dihing River where the specimens were discovered) • Nidirana (Genus): First time found in India. The Nidirana species is known in Japan, Taiwan, China, Vietnam, Laos, and Thailand. • Nidirana are known to inhabit swamps, ponds, and paddy fields. They often construct nests to lay their eggs.

Deep Ocean Mission (DOM)

India is preparing for a groundbreaking Deep Ocean Mission (Samudrayaan project) for both scientific discoveries and economic advantages.

What is it?	Deep Ocean Mission is India's ambitious quest to explore the depths of the ocean. Initiated in 2021 by the Minister of Earth Sciences, India will, for the first time, embark on a journey to a depth of 6,000 metres in the ocean using an indigenously developed submersible (Samudrayaan or Matsya 6000) with a three-member crew.
Aim	1) To study deep ocean resources and to extract key battery materials cobalt, copper, nickel, and manganese from potato-sized rocks called "polymetallic nodules" (PMN), and biodiversity in the Central Indian Ocean Basin (CIOB). 2) To support the Blue Economy Initiatives of the Government of India. ** India has been allotted 75,000 square kilometres in the Central Indian Ocean Basin (CIOB) by UN International Seabed Authority (ISA) for exploration of poly-metallic nodules.
Features - Matsya-6000 is India's first manned submersible. It is being built by the National Institute of Ocean Technology (NIOT) under the Samudrayaan project. Thematic areas: Development of technologies for deep sea mining, manned, and underwater robotics, Development of ocean climate change advisory services submersible, Technological innovations for exploration and conservation of deep-sea biodiversity. - U.S.A., Russia, China, France, and Japan have already achieved successful deep-ocean crewed missions.	

AI Regulation: London Summit

28 major countries meeting at Bletchley Park in the UK, the codebreaking hub during World War II, have agreed to collaborate to minimise risks from 'frontier AI'.

- Bletchley Park near London was once the top-secret base of the codebreakers who cracked the German 'Enigma Code' that hastened the end of World War II. This symbolism was evidently a reason why it was chosen to host the world's first ever Artificial Intelligence (AI) Safety Summit.
- Early research on AI was pioneered at Bletchley Park" by Alan Turing, considered as the Father of AI.

About London Summit

- Summit's main focus is to guarantee the safe use of AI, acknowledging its potential advantages but also being aware of the risks involved.
- It will discuss the establishment of:
 - International register of frontier AI models** that will allow governments to assess the risks involved with AI.
 - The AI Safety Research Institute** will examine, evaluate and test new types to understand what each new model is capable of and its risks.

Extra Mile

AI Regulation Around The World

- The digital ministers of the G7 had agreed to adopt "risk-based" regulation on artificial intelligence (AI). The agreement sets a landmark for how major countries govern AI amid privacy concerns and security risks.

- During the annual Group of Seven (G-7) Summit, held in Hiroshima, Leaders introduced the Hiroshima AI Process (HAP). HAP is an initiative designed on the governance and interoperability of artificial intelligence (AI) with a focus on achieving trustworthy AI.
- **Global Partnership on AI (GPAI):** It is a first-of-its-type initiative for evolving better understanding of challenges and opportunities around AI. GPAI is a congregation of 25 member countries, including India, US, UK, EU, Australia, Canada, France, Germany, Italy, Japan, Mexico, New Zealand, South Korea, and Singapore.
- The European Parliament has prepared a new draft of the European Union's ambitious Artificial Intelligence Act. The AI Act was drafted with the aim of bringing transparency, trust, and accountability to AI.

CAR T Cell Therapy

The Central Drugs Standard Control Organisation (CDSCO) has granted market authorisation to NexCAR19 (India's first indigenously developed CAR-T cell therapy) CAR-T for patients with B-cell lymphomas who didn't respond to standard treatments like chemotherapy.

What is NexCAR19?	It is an indigenously developed CD19-targeted CAR-T cell therapy. ● CD-19 is biomarker for B lymphocytes and can be utilised as a target for leukemia immunotherapies. ● NexCar19 is a type of CAR-T and gene therapy developed indigenously in India by ImmunoACT, which is a company incubated at IIT Bombay.
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About CAR T Cell Therapy

- Chimeric Antigen Receptor (CAR) T-cell therapy is the therapy in cancer treatment. It is a breakthrough as the therapy is not available in India outside of clinical trials.
- CAR-T is a revolutionary therapy that modifies immune cells, specifically T-cells, by turning them into potent cancer fighters known as CAR-T cells.
 - T-cells are special cells (white blood cells that find and fight illness and infection) whose primary function is cytotoxic, meaning it can kill other cells.
- This therapy involves genetically modifying a patient's own T cells (a type of immune cell) to equip them with Chimeric Antigen Receptors, which are synthetic receptors designed to recognize specific proteins on the surface of cancer cells.

How CAR-T Cell Therapy Works?

- **Collection of T Cells:** T cells are extracted from the patient's blood through a process called leukapheresis.
- **Genetic Modification:** In labs, T cells are genetically engineered to express Chimeric Antigen Receptors (CARs) on their surface. These receptors are designed to target specific antigens found in cancer cells.
- **Expansion of Modified T Cells:** The modified T cells are then cultured and allowed to multiply.
- **Infusion:** Once a sufficient number of CAR T cells have been produced, they are infused back into the patient's bloodstream. The engineered T cells can now recognize and attack cancer cells bearing the targeted antigen.
- **Targeted Destruction of Cancer Cells:** The CAR T cells seek out and bind to cancer cells, leading to the destruction of the cancer cells by the immune system.

How Effective And Different Is CAR-T From Other Cancer Treatments Like, Say, Chemotherapy?

- While chemotherapy and immunotherapy may add a few months or years to a cancer patient's life, this cell-and-gene therapy is designed to cure and provide lifelong benefit.
- It makes treatment easier with a one-time therapy [unlike several sessions of chemotherapy] that can be truly transformative [for a patient]. It's a lifeline for non-responsive cancer patients.

Coronal Holes or Solar Corona

A phenomenon called “coronal holes” was recently spotted in the sun.

What are they?	Coronal holes are areas in the Sun's outer atmosphere, known as the solar corona, where the magnetic field allows high-speed solar wind particles to escape into space.
Key Features Of Coronal Holes	
• Solar Wind Source: Coronal holes are primary sources of solar wind, a continuous stream of charged particles (mostly electrons and protons) that flows outward from the Sun into the solar system. When the Sun's magnetic field in these areas opens, it enables solar wind to stream out more freely. • Appearance: In images of the Sun taken in extreme ultraviolet or X-ray wavelengths, coronal holes often appear as dark regions, in contrast to the brighter surrounding areas. • Effects on Earth: When the solar wind from coronal holes reaches Earth, it can interact with the Earth's magnetic field, potentially causing geomagnetic storms. These storms can lead to auroras (the Northern and Southern Lights) and impact satellite communications and power grids. • Varied Sizes and Locations: Coronal holes can vary in size and location on Sun's surface. They are not static and can change shape and position as the Sun's magnetic activity evolves during its 11-year solar cycle.	

Lycopene Sensors

A team of researchers from the Institute of Nano Science and Technology (INST), Mohali, has developed a nano-biosensor for detecting ‘lycopene’.

Lycopene Sensors	• The sensor uses a reusable, portable, smartphone-based upconverting fluorescent paper strip. The sensor can detect lycopene in tomatoes.
What is Lycopene?	• Lycopene is a non-provitamin A carotenoid that gives color to foods. It is a carotenoid found in tomatoes, grapefruit, watermelons and papaya. It is also synthesised by plants and microorganisms but can't be synthesised by human body and can only be obtained via diet. • It is a potent antioxidant that helps prevent cancer and heart diseases.

Asteroid Dinkinesh

NASA's Lucy spacecraft, studying Jupiter's Trojan asteroids, made a surprising discovery of the main belt asteroid Dinkinesh.

About the Dinkinesh asteroid (discovered in 1999 by the LINEAR survey)	
• It is a S-type asteroid, which means it is composed mainly of silicates and some metal. • It is the first fly-by target of the Lucy mission during its cruise to the Trojan Clouds.	
About the Lucy Mission (launched by NASA in 2021)	
• It is a 12-year mission which will take close observations of nine of Jupiter's Trojans and two main belt asteroids. • It is the first spacecraft sent to study the Trojan asteroids, which orbit the Sun in the same path that the planet Jupiter takes.	

Dayapar Wind Project

NTPC Renewable Energy Limited has declared the commercial operation of its first project, the 50 MW wind project at Dayapar in Kachch, Gujarat. Dayapar Wind is the first capacity in India to be declared commercial under new Indian Electricity Grid Code and General Network Access Regime.

About Wind Energy

- Wind energy is generally classified into two main types:
 - Onshore wind farms, characterized by large installations of wind turbines situated on land.
 - Offshore wind farms, characterized by installations positioned in bodies of water.
- It is a major source of clean energy in India, accounting for 34.06% of the country's total renewable energy capacity. The Government of India has set a target of 500 GW of renewable energy by 2030, of which 140 GW will come from wind.
- India has **the fourth-highest installed capacity** in the world at 39.25 GW (28% of the goal of 140 GW)
- Rajasthan is the top state for wind energy adoption. Tamil Nadu is the largest producer of wind energy.

Oldest Black Hole Discovery & Concept of White Hole

Scientists have discovered the oldest (13.2 billion years old) and largest black hole (10 times larger than the black hole residing at the center of our own Milky Way galaxy).

About The Discovery

- The discovery was made through the combined efforts of NASA's James Webb Space Telescope and the Chandra X-Ray Observatory. (X-ray emitting gas in this galaxy: a trademark for a growing supermassive black hole.)
- The light from the galaxy & the X-rays from gas around its supermassive black hole are magnified by 4X by intervening matter in Abell 2744 (due to gravitational lensing), enhancing the infrared signal detected by Webb & allowing Chandra to detect the faint X-ray source.
 - Gravitational lensing is when a massive object, like a black hole, galaxy cluster, bends the path of light around it.

What is A Black Hole

- The first black hole was identified in 1964. It is an astronomical object with a gravitational pull so strong that nothing, not even light, can escape it.
- This occurs when a massive star exhausts its nuclear fuel and undergoes gravitational collapse, compressing its mass into an infinitely small, dense point known as a **singularity**.
- The boundary surrounding the singularity is called the **event horizon**, and once an object crosses this boundary, it is trapped by the black hole's gravity.
- Matter and radiation fall in, but they can't get out.
- Black holes play a crucial role in the structure and evolution of galaxies.
- Most famously, black holes were predicted by Einstein's theory of general relativity, which showed that when a massive star dies, it leaves behind a small, dense remnant core.

Concept of White Hole

Italian physicist and famous Science author Carlo Rovelli explores the concept of white holes in his latest work, "White Holes: Inside the Horizon."

- White holes are theoretical cosmic regions that function in the opposite way to black holes.
- Just as nothing can escape a black hole, nothing can enter a white hole. Matter and light can only emerge from it.

Difference Between Black Hole And White Hole

- A white hole is a hypothetical region of spacetime that cannot be entered from the outside, much like how a black hole cannot be exited from the inside.

- Both black holes and white holes are solutions to Einstein's field equations of general relativity, but while black holes have been observed and studied extensively, white holes have never been directly observed and are considered to be unlikely to exist in reality.

Euclid Mission

The European Space Agency's (ESA) Euclid mission, which launched in July 2023 to investigate the mystery of dark matter and dark energy, released its first five science images.

- They include views of large clusters with thousands of distant galaxies, close-ups of two nearby galaxies, a nebula, and a gravitationally bound group of stars called a globular cluster.

About Euclid Mission:

- The mission is a space telescope (Launch Vehicle: SpaceX Falcon 9) with a goal to create a 3D map (Largest cosmic map) of the universe by observing galaxies up to 10 billion light-years away.
- The telescope will survey more than a third of the sky, mapping the large-scale structure of the universe across space and time.
- The mission's primary objective is to study dark matter and dark energy. The mission is scheduled to last six years but may be extended.

Extra Mile: Difference between Dark Matter & Dark Energy		
	Dark Matter	Dark Energy
Nature	It is the mysterious stuff that fills the universe, but no one has ever seen.	The mysterious form of energy that makes up about 68% of the universe
Composition	Exotic particles that interact weakly with electromagnetic forces	Not yet understood. It is often associated with the vacuum energy
Role	Acts as a form of "invisible" matter, influencing the behavior of visible matter via gravitational interactions.	The dominant component of the universe's energy density, responsible for the observed accelerated expansion.

Saturn's Rings

Recent study observes that Saturn's rings will temporarily disappear in 2025.

- This is because the rings are being pulled into the planet by its gravity as a dusty rain of ice particles under the influence of Saturn's magnetic field.

About Saturn's Ring (the most extensive ring system of any planet in the Solar System)

Composition	Comprises of bits of ice, dust and rocks
Structure	The ring system is divided into several major ring groups and smaller ringlets.
Size	Incredibly wide but very thin, with a thickness of only a few meters
Visibility	Easily visible from Earth using even small telescopes. They were first observed by Galileo Galilei in 1610
Exploration	The Cassini spacecraft (orbited Saturn from 2004 to 2017) provided extensive data about Saturn's ring system.

Thalidomide

The Australian government have issued a formal apology to people affected by thalidomide, the morning sickness drug that caused significant birth defects in babies during the 1950s and 1960s.

About Thalidomide	It was marketed (Without trial) as a sedative and anti-nausea drug for pregnant women in the 1950s but caused birth defects including “shortened or absent limbs (phocomelia), blindness, deafness or malformed internal organs.
Present Status about Thalidomide	Despite its dark history, thalidomide has demonstrated efficacy in managing conditions such as leprosy (Hansen's disease) and multiple myeloma (a type of blood cancer). However, its use is highly controlled.

A.K. Raychaudhuri

2023 is Amal Kumar Raychaudhuri's birth centenary (1923-2005). Raychaudhuri revolutionized physics and was a legendary teacher. He had significant working in the field of general relativity and cosmology.

➤ Despite his groundbreaking work, Raychaudhuri received limited recognition in India.

Contribution in Science

- His most significant contribution is the eponymous Raychaudhuri equation, which demonstrates that singularities arise inevitably in general relativity.
- Raychaudhuri's equation was later used by Stephen Hawking and Roger Penrose (was awarded the Nobel Prize in Physics 2020 for his work on black holes) to develop mathematical model of Black Hole.
 - Hawking's area theorem, demonstrating that the surface area of black holes never decreases, relied on the Raychaudhuri equation.

Extra Mile: About Singularity
Meaning • In physics and mathematics, a singularity refers to a point or region in space-time where certain quantities become infinite or undefined. • Singularities often arise in the study of physical theories, such as general relativity, which describes the gravitational force, and quantum mechanics, which deals with the behavior of matter and energy at the smallest scales. Contexts In Which The Term "Singularity" Is Commonly Used • Black Hole Singularity: In the theory of general relativity, black holes are often associated with singularities. At the center of a black hole, the density becomes infinite, and the curvature of space-time is so extreme that our current understanding of physics breaks down. This point of infinite density is considered a singularity. • Big Bang Singularity: The Big Bang theory describes the origin of the universe as a singularity. At the beginning of the universe, the entire cosmos was concentrated at a single point of infinite density and temperature.

Chimaeras

In a recent landmark study, scientists reported successfully generating a live monkey of the species Long-tailed macaques in non-human primates.

About Chimeras

In biology, a "chimera" refers to an organism that contains cells or tissues from different sources, often of genetically distinct individuals. Chimeras can occur naturally or be created artificially for various purposes, including scientific research.

Key Aspects Of Biological Chimerism

1) Natural Chimeras:

- Natural chimeras can arise through different mechanisms. For example, during the development of fraternal twins, the fusion of two embryos early in development can result in a chimera.
- In some cases, chimerism can also occur through the exchange of cells between mother and fetus during pregnancy.

2) Artificial Chimeras:

- Scientists can create chimeras in a laboratory setting for research purposes. This may involve combining cells or tissues from different organisms to study development, genetics, or the function of specific organs.
- For example, researchers might create chimeric mice to study human diseases or the regenerative capabilities of certain tissues.

3) Medical Applications:

- Chimerism has implications in the field of organ transplantation. The idea of creating chimeric organs involves introducing human cells into animals (like pigs) to generate organs suitable for transplantation into humans. This could potentially address the shortage of donor organs.

4) Genetic Chimerism:

- Genetic chimerism refers to an individual who has two or more genetically distinct cell lines within their body. This can occur due to various genetic and developmental processes.
- In some cases, individuals may have different blood types in different parts of their body.

It's important to note that the term "chimera" in biology is not limited to a specific organism or scenario. It encompasses a broad range of situations where an organism contains cells with different genetic origins.

The study of chimeras provides insights into genetics, developmental biology, and the potential applications of such knowledge in medicine and biotechnology.

Freemartins

In agricultural settings, Freemartins are generally culled because freemartins can't reproduce; farmers often identify them through physical and/or behavioural traits.

About Freemartins (Most Commonly Found In Cattle)

Meaning

In animal husbandry, cattle that are born exhibiting characteristics of both sexes are called freemartins. Freemartins are sterile female cattle that result from the twinning of a male and a female within the same uterus. This phenomenon occurs in approximately 90% of such twin pregnancies in cattle.

Scientific Analysis Of The Concept Of Freemartin

- **Cause:** The key reason is the exchange of blood between the male and female foetuses during gestation (anastomosis). Genetically, freemartins are attributed to the sharing of cells carrying the Y chromosome from the male twin with the female twin.
- **Hormonal Influence & Course of Action:** This chromosome triggers the development of male reproductive organs in the male foetus, while the female foetus, affected by the presence of male hormones (anti-Müllerian hormones).
- **Impact on Female:** The female receives masculinizing hormones produced by the male, which alters her female reproductive development.
- **Characteristics of freemartins:** Non-functioning ovaries, Masculinized behavior, small ovaries etc.
- **Final Impact:** The end result is that freemartin has an underdeveloped or non-functional reproductive tract.

Unusual Nitrogen-9 Isotope

Researchers have found compelling evidence supporting the presence of the unconventional nitrogen-9 isotope, overturning earlier explanations and providing a fresh outlook on subatomic configurations.

Concept of Isotope

- Isotopes of an element have the same number of protons but different numbers of neutrons.
- The standard notation for isotopes includes (the element's symbol -> the sum of the number of protons and neutrons). For example, nitrogen-14 has 7 protons and 7 neutrons, giving it an atomic mass of 14.
- Isotopes are different forms of an element with the same atomic number (due to the same number of protons) but different atomic masses (because of differing numbers of neutrons).
- Nitrogen typically exists in several isotopes, with nitrogen-14 (N14) being the most abundant and stable isotope. Nitrogen-15 (N15) is another stable isotope, and there are also radioactive isotopes, such as nitrogen-13 (N13).
- Isotopes often exhibit similar chemical properties but may have distinct physical properties, such as varying atomic masses.

Understanding the isotopic composition of nitrogen is essential in fields such as geochemistry, environmental science, and biology, where isotopic ratios can provide valuable information about sources, transformations, and processes involving nitrogen-containing compounds.

Nitrogen-9 Nucleus

- It is characterized by seven protons and two neutrons. Nitrogen-9 stands out due to its distinctive configuration of seven protons and two neutrons within its atomic nucleus.
- This results in an unusually elevated ratio of protons to neutrons, contrary to the typical balance seen in stable elements.
- Most elements exhibit a proportional number of protons and neutrons for stability, but Nitrogen-9's heightened proton count renders it less stable, defying conventional stability norms.
- The presence of Nitrogen-9 in this state prompts inquiries into the mechanisms maintaining its stability, adding intricacy to our comprehension of atomic nuclei.

Deep Space Optical Communications (DSOC)

NASA's Deep Space Optical Communications (DSOC) experiment has successfully transmitted data via laser for the first time beyond the moon.

About Deep Space Optical Communications (DSOC)

Concept of DSOC

- DSOC refers to the use of optical (or laser) communication systems for transmitting data over long distances in deep space. It encodes data in photons at near-infrared wavelengths (rather than radio waves) to communicate between a probe in deep space and Earth.
- This communication technology represents an alternative to traditional radio frequency (RF) communication systems, offering potential advantages in terms of data transfer rates, power efficiency, and signal fidelity.
- It's similar to fiber optics replacing old telephone lines on Earth.
 - ISRO is developing Deep Space Optical Communications (DSOC).

Key Aspects of DSOC

- **Laser Communication Systems:** DSOC systems utilize lasers to transmit information. Instead of radio waves, which are used in traditional deep space communication, lasers operate in the optical or near-

infrared part of the electromagnetic spectrum.

- **Reduced Signal Degradation & Higher Data Transfer Rates:** One of the primary advantages of DSOC is the potential for significantly higher data transfer rates compared to traditional RF communication. This higher bandwidth can facilitate the transmission of large volumes of data, such as high-resolution images or scientific observations, at faster rates.
- **Current and Future Applications:** Deep Space Optical Communications is being considered for various space missions, including interplanetary missions and those exploring the outer reaches of the solar system.

DSOC is an evolving technology that holds promise for improving the efficiency and capabilities of communication systems in deep space exploration.

NASA & DSOC

- NASA's DSOC experiment is the agency's first demonstration of optical communications beyond the Earth-Moon system.
- It is configured to send high-bandwidth test data to Earth during its two-year technology demonstration as Psyche travels to the main asteroid belt between Mars and Jupiter.
- NASA's Jet Propulsion Laboratory in Southern California manages both DSOC and Psyche.
- NASA's Psyche spacecraft, equipped with the DSOC tool, achieved a groundbreaking milestone by transmitting a laser-beamed message from 16 million kilometers away—40 times farther than the Earth-moon distance.
 - Psyche is a NASA mission (launched in 2023) to study a metal-rich asteroid with the same name, located in the main asteroid belt between Mars and Jupiter.

Generic Drugs for Rare Diseases

The Union Health Ministry has made available generic drugs to support the care and treatment of four ailments: Tyrosinemia-Type 1, Gauchers Disease, Wilson's Disease, and the Dravet-Lennox Gastaut Syndrome.

About Generic Drug

- It is a medication that has exactly the same active ingredient as the brand-name drug and yields the same therapeutic effect (bioequivalence).
- A generic drug can only be marketed after the brand name drug's patent has expired.
- Generic drugs are usually much less expensive than brand-name drugs.

Concept of Rare Diseases

- WHO defines rare diseases as debilitating lifelong conditions with a prevalence of 1 or less per 1000 population (affect a small percentage of the population). They collectively affect 6-8% of India's population (about 8 to 10 crore cases in India), with nearly 80% being genetic.
- **Some treatments for rare diseases include** Antibody therapy, Enzyme replacement therapy, Gene therapy, Stem cell therapy, Drug repositioning, Orphan drugs etc.
- In the U.S., under the Orphan Drug Act, companies are provided incentives to develop therapies, or orphan drugs, for rare diseases.
- In India, the **2021 National Policy for Rare Diseases (NPRD)** offers financial assistance of up to Rs. 50 lakhs for treatment, grants an exemption from Basic Customs Duty on drugs for Rare Diseases, and incorporates orphan drugs into the Production Linked Incentive Scheme for Pharmaceuticals.
- National Rare Diseases Committee aims to ensure that patients enrolled with the All-India Institute of Medical Sciences (AIIMS), Delhi, receive timely treatment and benefit from the policy.

About Rare Diseases

	About	Effect on Body
Tyrosinemia-Type 1	A rare genetic disorder that affects the body's ability to break down the amino acid tyrosine. This condition is caused by a deficiency of an enzyme called fumarylacetoacetate hydrolase (FAH)	Liver Damage, Jaundice, the kidneys can be affected, leading to renal tubular dysfunction. Individuals may experience intellectual disability, developmental delays
Gauchers Disease	A rare genetic disorder characterized by the buildup of a fatty substance called glucocerebroside in various organs and tissues due to a deficiency of the enzyme glucocerebrosidase.	Accumulation of glucocerebroside in the bone marrow can result in anemia (low red blood cell count), thrombocytopenia (low platelet count), and leukopenia (low white blood cell count)
Wilson's Disease	Characterized by the abnormal accumulation of copper in various organs, primarily the liver and brain.	Experience tremors, difficulty with coordination and balance (ataxia), stiffness, and slurred speech.
Dravet-Lennox Gastaut	Severe epileptic encephalopathies that manifest during early childhood. Challenging to diagnose and treat	Patients often develop severe neurologic, intellectual, and behavioral disorders that progressively worsen

Wasp-107b

NASA's James Webb Space Telescope has discovered a new exoplanet named Wasp-107b (a super-Neptune ice giant), which is the size of Jupiter.

About Wasp 107b (Orbits A Sun But Exists Beyond Our Solar System. Dubbed "Candy Floss,")

Location	It is situated 200 light-years away in the Virgo constellation.
Size	Same as Jupiter but possesses the mass of Neptune, making it less dense than other gas giants (composed mostly of gases, such as hydrogen and helium)
Atmospher	Helium & sand clouds (a weird exoplanet where it rains sand instead of water)

Extra Mile: James Webb Space Telescope (JWST) & it's activity

- JWST (largest, most powerful infrared ever built.) was built in collaboration between NASA, European Space Agency (ESA) & the Canadian Space Agency & was launched in December 2021.
- It is presently at a point in space known as the Sun-Earth L2 Lagrange point, approximately 1.5 million km beyond Earth's orbit.

Key Achievements of JWST

- WASP-80 b: Detected water and methane in the atmosphere of this "warm Jupiter"
- James Webb Space Telescope captured stunning image of SN1987A & Cassiopeia A supernova.
- Captured exoplanets with unprecedented resolution. Detected the earliest known carbon dust in a galaxy, 1 billion years after the Big Bang.
- JWST is expected to play a significant role in understanding of Hycean planets (A class of exoplanets that represent a potentially habitable category in the search for extraterrestrial life. ("hycean" = "hydrogen" + "ocean").)

Bestu Varas

- Gujarati New Year, also known as Bestu Varas is celebrated in the month of November.
- In Gujarat, the new year is generally celebrated a day after Diwali celebrations.
- The new year is celebrated as per Gujarati Hindu Vikram Samvat calendar.
- While Vikram Samvat calendar is also used by people in several north Indian states and it is also the national calendar of neighboring country Nepal, the Gujarati Vikram Samvat calendar is different from others.

Lachit Borphukan

- The Prime Minister recently paid tributes to Lachit Borphukan on Lachit Diwas (24th November).
- Born in 1622, Lachit Borphukan is best known for leading the Ahom troops which **fought and defeated advancing Mughal troops** (led by the Kachwaha raja, Ram Singh I) at the **Battle of Saraighat** on the outskirts of Guwahati in 1671. The Battle of Saraighat was a naval battle.
- Although weaker, the Ahom army defeated the Mughal army by guerrilla tactics, psychological warfare, military intelligence and by exploiting the weakness of the Mughal forces - its navy.
- Borphukan is also considered as the inspiration behind strengthening India's naval force and revitalising inland water transport and creating infrastructure associated with it.
- Since 1999, the Lachit Borphukan gold medal is awarded to the best cadet from National Defence Academy.

Ahom Kingdom

- The Ahom kings ruled large parts of what is now known as Assam for nearly 600 years, from the early 13th century to the early 19th century.
- It was a prosperous, multi-ethnic kingdom which spread across the upper and lower reaches of the Brahmaputra valley, surviving on rice cultivation in its fertile lands.

Guru Tegh Bahadur

- The President of India paid homage on the Martyrdom Day of Guru Teg Bahadur.
- Guru Tegh Bahadur was born in Amritsar in 1621 to Mata Nanki and Guru Hargobind, the sixth Sikh guru, who raised an army against the Mughals and introduced the concept of warrior saints.
- As a boy, Tegh Bahadur was called Tyag Mal because of his ascetic nature. He spent his early childhood in Amritsar under the tutelage of Bhai Gurdas, who taught him Gurmukhi, Hindi, Sanskrit, and Indian religious philosophy, while Baba Budha trained him in swordsmanship, archery, and horse-riding.
- At the age of 13, Tegh Bahadur distinguished himself in a battle against a Mughal chieftain. His bravery and heroic swordsmanship in the battle earned him the name of Tegh Bahadur. ("Tegh" is 'sword' in Punjabi.)
- He traveled extensively to preach the teachings of Nanak and contributed many hymns to the **Guru Granth Sahib** including the Saloks, or couplets.
- He is regarded as the **saviour guru**, as during the reign of the Mughals, there were oppressions in which people were forced to convert to Islam under the Mughal ruler Aurangzeb.
- And in that period, he resisted the forced conversions of non-Muslims to Islam.
- Later, Guru Tegh Bahadur was executed on the orders of Aurangzeb in Delhi in 1675. His martyrdom is remembered as the **Shaheedi Divas** every year on November 24.

Rohini Nayyar Prize

- Deenanath Rajput has been awarded the Rohini Nayyar Prize for Outstanding Contribution to Rural Development.
- This is the second edition of the prize, which was instituted in the memory of economist and administrator Dr Rohini Nayyar, who passed away in 2021.
- The award recognized Deenanath Rajput's effort in changing lives of over 6,000 tribal women in Chhattisgarh by establishing a Farmers Producers Organisation (FPO).
- The FPO was set up in 2018 with an initial membership of 337 women from Jagdalpur in Bastar, a district known to be a hub of Naxalite activities. Since then, FPO has more than 6,000 members across four districts.
- It helps women farmers by providing them with agricultural extension services, building cold storage infrastructure, connecting them with national and international markets for their products, and helping them diversify into higher value-added products and services.

British Academy Book Prize 2023

- India-born author **Nandini Das** has been named the winner of 2023 British Academy Book Prize for Global Cultural Understanding, for her book 'Courting India: England, Mughal India and the Origins of Empire'.
- The book presents a new perspective on the origins of empire through the story of the arrival of the first English ambassador in India, Sir Thomas Roe, in the early 17th century.
- Established in **2013**, the British Academy Book Prize was formerly known as the **Nayef Al-Rodhan Prize**, to reward the best works of non-fiction, that have contributed to public understanding of other world cultures and their interaction.
- The British Academy is the UK's national academy for humanities and social sciences.
- Books eligible for the award belongs to archaeology, history and psychology to philosophy, languages and cultural studies.

Namita Chattopadhyay Sahitya Samman 2023

- **Nadajibir Notebook** ('notebook on rivers') a book in Bengali by writer and river scientist Supratim Karmakar, has been honoured with **Namita Chattopadhyay Sahitya Samman 2023** at the Bangla Akademi in Kolkata.
- The book deals with issues concerning the rivers of India, their ecology, and the steps that can be taken for their rejuvenation.
- The book provides an insight into the relationship between people of country and rivers and is an important testament to the fragile ecosystem of India's rivers.
- This is the first time a non-fiction book has been honoured with the literary award.
- Namita Chattopadhyay was a well-known literary critic, and the award was constituted about 12 years ago in her honour.

Booker Prize 2023

- Irish author Paul Lynch's "**Prophet Song**" has been named as the winner of the Booker Prize 2023.
- Set in Dublin, Prophet Song tells the story of a family dealing with a terrifying new world in which the democratic norms they are used to begin to disappear.

- Lynch received his trophy from Sri Lankan author Shehan Karunatilaka, last year's Booker winner for "The Seven Moons of Maali Almeida".
- The Booker Prize is the **world's leading literary award** for a single work of fiction.
- It was formerly known as the **Booker Prize for Fiction** (1969–2001) and the **Man Booker Prize** (2002–2019).
- **Founded** in the **UK** in **1969**, it initially rewarded Commonwealth writers but is now **open to anyone regardless of origin**.
- It is awarded each year for the **best novel written in English** and **published in United Kingdom or Ireland**.
- A sister prize, the International Booker Prize, is awarded for a book translated into English and published in the United Kingdom or Ireland.

Fathima Beevi

- India's **first female Supreme Court judge**, Justice Fathima Beevi, recently passed away.
- In 1949-50, when she graduated as a law student, it was mandatory to clear an exam by the Bar Council to get enrolled as a lawyer. In 1950, Beevi became the **first woman law graduate to get the gold medal from the Bar Council**.
- She began her career in the lower Judiciary of Kerala in 1950. After eight years, she joined the judicial service as a munsiff and then became the district sessions judge in 1974.
- Beevi was appointed as a judge of the Kerala High Court in 1983 and was elevated to become a judge of the Supreme Court in 1989.
- After retiring from the apex court, she served as a **member of the National Human Rights Commission** and as the **Governor of Tamil Nadu**.
- She also served as **Chancellor of Tamil Nadu University** during her tenure as a Governor of the state.
- She was awarded the **Bharat Jyoti Award** and the **US-India Business Council (USIBC) Lifetime Achievement Award**.

Ballon d'Or Award

- Lionel Messi was recently awarded his eighth Ballon d'Or award. Barcelona and **Spain midfielder Aitana Bonmati** was awarded the Ballon d'Or Féminin.
- The Ballon d'Or (Golden Ball) award is an annual football award presented by French news magazine France Football since 1956.
- Between 2010 and 2015, the award was temporarily merged with the FIFA World Player of the Year (founded in 1991) and known as the **FIFA Ballon d'Or**.
- However, in 2016, they separated again, and the award returned to its original name, the Ballon d'Or. FIFA also started giving its own separate award called The Best FIFA Men's Player.
- The Ballon d'Or was created by sports writers Gabriel Hanot and Jacques Ferran.
- It is given to the male player who is considered to have performed the best in the previous season. Football journalists used to do the voting for this award from 1956 to 2006.
- At first, it was only given to players from Europe and was called the European Footballer of the Year award.
- But in 1995, it was expanded to include players from any part of the world who have played for European clubs.
- After 2007, coaches and captains of national teams were also allowed to vote. The award became a global prize in 2007 and any professional football player from around the world became eligible to win it.