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- Freebie Culture In India
- Local Governments In A State Of Disrepair
- Centre Vs State tussle over AIS officers Postings
- Pelosi's Visit to Taiwan
- India, Maldives Ink 6 pacts
- Carbon Market
- Violation of Coastal Ecosystem Norms
- UN High Seas Treaty



From Director's Desk,....



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Common University Entrance Test (CUET)

The **debut edition** of *Common University Entrance Test (CUET)*, which has been split into **six phases**, has been marred by **technical glitches** and **administrative errors** so far causing exam cancellations at multiple centres and postponement of exams for several candidates. The general complaints were –

- **Overlapping Dates:** With dates for their CUET and *CBSE compartment papers* overlapping, a section of students find themselves in a tense situation.
- **Confusion Over Exam Dates:** Several CUET-UG aspirants are claiming that the exam dates mentioned on their admit cards have already passed while the date intimated to them earlier was different.
- **Administrative Error:** The students at some centers, who were to take exams, complained that they received question papers of other subjects.

Consequently, due to postponement, the admission procedure to the universities will stretch into September. This will have a spiraling effect on undergraduate timetables that had already been upset by Covid-19 pandemic in the past two years. Also, many aspirants, after months of suspense in CUET-2022, have decided to take *admissions into private universities* that are still largely non-participating institutions.

About CUET

- CUET is a revamped version of Central Universities Common Entrance Test (CUCET), launched in 2010 which failed to gather steam since only 14 central universities had adopted it until last year.
- **Rationale:** In pursuance of **National Education Policy, 2020**, CUET has been decided as a common entrance test for admission in central universities to reduce the burden on students, universities and the entire education system.
- **Description:** It is a computer-based test (CBT), conducted in **13 languages** namely Hindi, Marathi, Gujarati, Tamil, Telugu, Kannada, Malayalam, Urdu, Assamese, Bengali, Punjabi, Odia and English.
 - ✓ CUET UG - 2022 may also be adopted by the State / Private / Deemed Universities.
 - ✓ It is the **common Platform for undergraduate (UG) admissions** in all central universities and is now the **second biggest entrance exam** in country, **surpassing JEE-Main's average** registration of 9 lakh.
 - ✓ NEET-UG is the biggest entrance test in India with an average of 18 lakh registrations.
- **Components:** CUET will essentially have three parts as follows:
 - ✓ **Language** (reading comprehension, vocabulary), **domain-specific knowledge** (27 domains on offer, student chooses at least one and maximum of six), **general test** (GK, current affairs, general mental ability, numerical ability, quantitative reasoning).
- **Registrations:** Over 1.4 million students have registered for admissions to UG courses in 44 central universities, 12 state universities, 11 deemed, and 19 private universities.
- **Magnanimous Exercise:** Aspirant being allowed to appear in up to 9 papers, resulting in more than 50,000 subject combinations, the CUET is conducted in more than 550 cities in country and 13 foreign centers.
- **Exemption:** International students are exempted from CUET and their admissions will be carried out on the existing **supernumerary basis**.
- **Conducting Body:** The National Testing Agency has been entrusted with responsibility of conducting the UG entrance tests for all the Central Universities (CUs) in CUET.
 - ✓ The Union Cabinet, in 2017, approved creation of NTA as an **autonomous** and **self-sustained** premier testing organization to conduct entrance examinations for Higher Education Institutions (HEIs). NTA will be chaired by an **eminent educationist** appointed by Ministry of Education.

Significance of CUET	Questionable Outcomes of CUET
<ul style="list-style-type: none"> • Common Platform: CUET will allow all students to appear for the exam and put everyone at one common level as compared to the <i>merit lists and cut off system</i> on UG admissions in the past. • Equity: CUET will provide equal opportunities to candidates across the country, especially those from <i>rural and other remote areas</i> and help establish better connect with the Universities. • Reduced Costs: Students may apply to more than one university as per their choice with one application form thereby reducing financial burden and increasing access. • Standardize Benchmarks: CUET would avoid multiple entrance tests, thereby providing uniform quality in the exam pattern & process and minimize corruption and irregularities in admissions. 	<ul style="list-style-type: none"> • Snap-decision: The hurry and speed with which the decision for a single admission test was taken throughout the 40-odd central universities was disturbing. • Ignoring University Specific Testing: Every central university in the country has special characteristics enshrined in its Act and Statutes which CUET ignores. • Discrepancy: The validity of unifying diverse institutions and programmes in one single test <i>without regard to natural regional variations</i> in institutional cultures and structures. • Unfair Common Testing: Every state has its own syllabus and exam pattern till higher secondary level. Putting all students then for single entrance would be unfair for many. • Coaching Bias: The students from rural and under-privileged who cannot afford private coaching would find it difficult to compete with urban students in CUET. • Federal Issues: A centralized exam keeps the state government out of the admission process. Also state reservation rules will not apply to CUET. • Limited Languages: Exam is not conducted in all official languages of India. • Lack of Manpower: The NTA conducts 15 different exams without adequate manpower. It does not have a full-time director-general. • Distorted Academic Calendar: Earlier, every university used to decide its academic calendar. However, now, the academic calendar is dependent on when the NTA holds entrance tests. The academic freedom of the universities is in a way getting subverted

Conclusion

- The smooth conduct of the CUET requires an upgrade in the IT systems of at least the network of centres where the examinations are held. Indeed, with 15 lakh registrations across 54,000 unique subject combinations, it must be on its toes to address the inevitable glitches.
- NTA must also now go out of its way to accommodate student requests for shifting test centres, fixing admit card errors etc.
- CUET is undoubtedly the way forward. But professional implementation of any reform is critical to maintaining public trust in it.



Guardianship And Adoption Of Minors

The department-related Parliamentary Standing Committee on Personnel, Public Grievances, Law and Justice tabled its report, in both Houses of Parliament on the 'Review of Guardianship and Adoption Laws'.

Current Law On Guardianship

Indian laws accord superiority to father in case of guardianship of a minor.

HMGA, 1956	The natural guardian of a Hindu minor in respect of the minor's person or property is the father, and <i>after him</i> , the mother. Provided the custody of a minor who has not completed the <u>age of five years</u> shall ordinarily be with the mother. ✓ However, HMGA does not contain any <u>independent, legal or procedural mechanism</u> for deciding custody rights or declaring court-appointed guardians .
Muslim Personal Law (Shariat) Application Act, 1937	It says that the Shariat or the religious law will apply in case of guardianship, according to which father is the natural guardian, but custody vests with the mother until the son reaches the <u>age of seven</u> and the daughter reaches puberty though the father's right to general supervision and control exists.

Recommendations Of Parliamentary Panel On Guardianship And Child Custody

• Urgent Need to Amend HMGA (Hindu Minority and Guardianship Act, 1956)

- ✓ The existing law treats mothers as subordinates to their husband. Hence, the law violated the right to equality and right against discrimination envisaged under Articles 14 and 15 of the Constitution.
- ✓ It recommended to accord equal treatment to both mother and father as natural guardians.

SC Judgment In Githa Hariharan vs RBI, 1999

- The Court challenged the HMGA for violating the guarantee of equality of sexes under Article 14.
- The court held that the term "after" should not be taken to mean "after the lifetime of the father", but rather in the absence of the father.
- But the judgment failed to recognise both parents as equal guardians, subordinating a mother's role to that of the father.
- Though the judgment sets a precedent for courts, it has not led to an amendment to the HMGA.

• Joint Custody Of Children During Marital Disputes

- ✓ In cases of marital dispute, the panel says that there is a need to relook at child custody which is typically restricted to just one parent. In such cases, mothers tend to get preference.
- ✓ The panel recommended that courts should be empowered to:
 - grant joint custody to both parents when such a decision is conducive for the welfare of the child, or
 - award sole custody to one parent with visitation rights to the other.

• On Adoption

- ✓ The Committee has said that there is a need for a new legislation that harmonises the Juvenile Justice (Care and Protection of Children) Act, 2015 & the Hindu Adoptions and Maintenance Act (HAMA), 1956.
- ✓ It also said that such a law should cover the LGBTQI community as well.

Extra Mile

- The **Law Commission of India Report in 2015**, on Reforms in Guardianship and Custody Laws in India, also recommended joint custody and shared parenting.
- In **Vivek Singh v. Romani Singh 2017 case**, SC highlighted the concept of Parental Alienation Syndrome underlining its "psychological destructive effects".
- Report of **Justice Bindal Committee 2018**, also said that "best interests of the child" are of paramount importance in matters relating to child custody in view of UN Convention on Rights of the Child (UNCRC).
- In **Lahari Sakhamuri v. Sobhan Kodali 2019 case**, SC held that the "best interests of the child" is wide in

its connotation.

- In **Vasudha Sethi v. Kiran V. Bhaskar 2022 case**, SC held that Welfare of the child must get precedence over the parents' rights in a custody battle.

Can Queer And Transgender People Adopt Children In India?

- The Adoption Regulations 2017 is silent on adoption by LGBTQI people and neither bans nor allows them to adopt a child.
 - ✓ Its eligibility criteria for prospective adoptive parents says that they should be physically, mentally and emotionally stable, financially capable and should not have any life-threatening medical condition.
 - ✓ Single men can only adopt a boy while a woman can adopt a child of any gender.
 - ✓ A child can be given for adoption to a couple only if they have been in a marital relationship for at least two years.
- Activists say LGBTQI people who seek adoption face institutional discrimination because of stigma. Therefore, the law should be amended to include them as eligible candidates.

Other Recent Changes To Bring In Parity

- There has been change in rules regarding passport and Permanent Account Number (PAN) card that allows an applicant to furnish their mother's name if she is single parent. Ministry of external affairs liberalised its rule in 2016
 - ✓ The new passport application form also does not require the applicant to provide the name of her or his spouse when they are divorced and neither are they required to provide the divorce decree
- Central board of Direct taxes amended Income tax Rules, 1962 in 2018 to remove the compulsory mentioning of Father's name on documents when a mother was a single parent.
 - ✓ The new PAN application form also seeks the mother's name alongside the name of father.
 - ✓ Applicants can also choose whether they want their father's name on the PAN card or their mother's name.
- But school certificates and lot of other documents insists father's name as guardian.



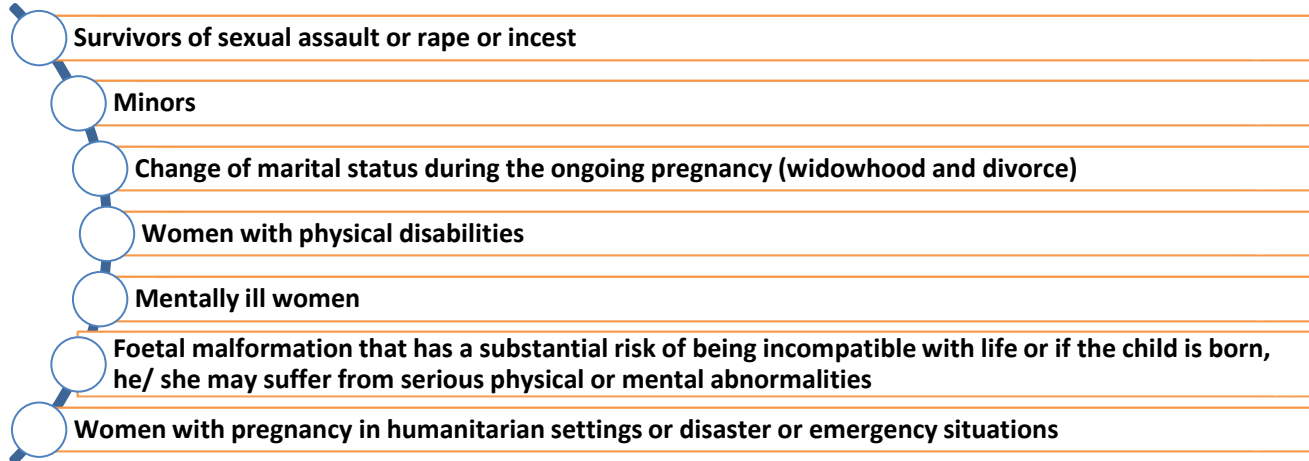
SC To Tweak MTP Act for Unmarried Women

- The Supreme Court said it would carry out an interpretational correction in the Medical Termination of Pregnancy (MTP) Act and the Rules thereunder.
- As per SC, it would be discriminatory to bar an **unmarried woman**, who could have been exploited in a relationship or is vulnerable, from terminating her 20-24-weeks-old unwanted pregnancy when other similarly situated [married] women are permitted to do so under the law.
- **Observation Made By SC In The Above Case:**
 - ✓ **Contradicting Constitutions:** Denying an unmarried woman the right to a safe abortion *violates her personal autonomy and freedom*. A woman's right to reproductive choice is an inseparable part of her personal liberty under **Article 21** of the Indian Constitution.
 - ✓ **Contradicting Legislative Intent:** By replacing the word "**husband**" with "**partner**" in Section 3(2) of the MTP (Amendment) Act, 2021, the Parliament of India intended to include unmarried women and single

women within the Act's scope. Excluding unmarried and single women from the statute's scope contradicts the legislation's intent.

MTP Amendment Act

- Last year Government **notified new rules** under which the gestational limit for Medical termination of pregnancy has been **increased from 20 to 24 weeks for certain categories** of women.
- The new rules come under the MTP Act, 2021. Under the new rules, **seven specific categories** will be eligible for termination of pregnancy up to 24 weeks:



- Medical Board will decide if a pregnancy may be terminated **after 24 weeks** due to **substantial foetal abnormalities**. All States and UTs will constitute a Medical Board consisting of a gynaecologist, paediatrician, radiologist/sonologist, and other members notified by the state government.
- **New Rules Regarding Medical board**
 - ✓ The medical boards are to either accept or reject the proposal for medical termination of pregnancy within three days of receiving the request.
 - ✓ The abortion procedure has to be done within 5 days of the board receiving the request

	MTP ACT 1971	MTP Amendment ACT 2021
Failure of contraceptive (Methods/Device)	Upto 20 weeks only by a married woman	Unmarried women also covered
Upto 12 weeks	Advice of 1 Registered Medical Practitioner (RMP)	Advice of 1 RMP
12 to 20 weeks	Advice of 2 RMP	Advice of 1 RMP
20 to 24 weeks	Not allowed	2 doctors for 7 categories of pregnant women (mentioned above)
More than 24 weeks	Not allowed	State Level Medical Board In Case Of Substantial Foetal Abnormality
Any time	1 RMP, if immediately necessary to save pregnant woman's life, opinion formed in good faith.	
Breach of confidentiality	Fine upto 1000 Rs	Imprisonment up to a year, or fine, or both

Significance Of MTP (Amendment) Act 2021

- Despite a sustained government push over years, contraceptive use in India is not very popular. Data from NFHS 5 show that only 56.5% of couples in the country use modern contraceptive methods.

- According to a 2018 study by the Guttmacher Institute, 50% of pregnancies in six of the larger Indian states — Assam, Bihar, Gujarat, Madhya Pradesh, Tamil Nadu and Uttar Pradesh — are unintended.
- Estimation of unintended pregnancies is important because many of them result in abortions and the availability of cheap and safe abortion services is one of the indicators of a robust health system.
- Several petitions have been filed in the Courts seeking permission for aborting pregnancies at a gestational age beyond the present permissible limit on grounds of foetal abnormalities or pregnancies due to sexual violence faced by women.
- Current changes are a step towards safety & well-being of women and many women will be benefited by comprehensive abortion care, under strict conditions, without compromising service & quality of safe abortion.
- The amendments will increase the ambit and access of women to safe abortion services and will ensure dignity, autonomy, confidentiality and justice for women who need to terminate pregnancy.

Issues Still Unaddressed

- Formation of a state medical board raises additional concerns of their access, particularly to women from rural areas.
- The Act requires abortion to be performed only by doctors with specialisation in gynaecology or obstetrics. There is a 75% shortage of such doctors in community health centres in rural areas.
- Only 53% of abortions are performed by a **registered medical doctor** and the balance are conducted by a nurse, auxiliary nurse midwife, family member, or self.
- No clarity regarding transgender persons whether they will be covered or not.



Create More Women-Centric NREGS Work

- Parliamentary Standing Committee on Rural Development and Panchayati Raj has submitted its recommendations w.r.t. Mahatma Gandhi National Rural Employment Guarantee scheme.
- In its report, the committee has recommended to emphasise more on women-centric work under the scheme.

Major Recommendations

- **Women-centric Work**
 - ✓ The committee noted that the average percentage of women's participation in the workforce under MGNREG scheme, for more than 5 years, has been around 50% mark which is way higher than the stipulated one-third mark.
 - ✓ This data reveals that the scheme is clearly seen by women as a route to a livelihood as compared to men. So, the government must take measures for better promotion of "women-centric works" through creation or linking of existing livelihood projects under the scheme.
 - ✓ The committee has asserted that the aim should be to provide platforms for the rural women to strengthen their economic prowess even further.
- **Wage Parity**
 - ✓ The committee reiterates that the Ministry of Rural Development needs to bridge the wage disparity among states by notifying a uniform wage rate structure.

- ✓ The report highlights the fluctuation in wage rates ranging from Rs 193 to Rs 318 across different states and UTs to emphasis its point.
- ✓ The committee has proposed that the long-standing demand for increasing wages must be address through suitable linkage to the inflation index.

Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)

- The National Rural Employment Guarantee Act (NREGA) was notified in September, 2005.
 - In 2009, through an amendment, the name of the Act was changed to **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)**.
- **Mandate:** To provide at least 100 days of guaranteed wage employment in a financial year to **every rural household** whose adult members volunteer to do **unskilled manual work**.
- **MGNREGS** was created as the means to implement the Act. It is a **Centrally-Sponsored Scheme** i.e. the scheme is jointly funded by the Central government and the State governments.
- **Concerned Ministry:** Ministry of Rural Development

Salient Features of the Scheme

- **Legal Right to Work:** It provides a **legal guarantee for wage employment** to every rural household. Also, at least 1/3rd of the beneficiaries of the scheme have to be women.
 - There are legal provisions for allowances & compensation both in cases of failure to provide work on demand and delays in payment of wages.
- **Demand-Driven** where provision of work is triggered by the demand for work by wage-seekers.
- **Decentralized mode of implementation: The State governments have powers to make rules and amend the concerned State scheme.**
 - Gram Panchayats (GPs) are to implement at least 50% of the works in terms of cost.
 - Plans and decisions regarding the nature and choice of works to be undertaken are to be made in open assemblies of the Gram Sabha and ratified by the GP.
- **Annual Report tabled in the Parliament:** Prepared by the Central Employment Guarantee Council (CEGC), on the outcomes of MGNREGA is required to be presented annually by the Central Government to Parliament.
 - CEGC is a statutory body set up under Section 10 of the MGNREGA.
 - It is chaired by the Union Minister for Rural Development.
- The MGNREGA covers the entire country with the exception of districts that have 100% urban population.

Other Challenges Faced By MGNREGA

- **Inadequate Allocation:** Total budget allocation for MGNREGA this year was 34% less than the revised budget of the last financial year.
- **Delayed payments suppress demand:** 71% of the payments were delayed beyond the mandated 7-day period; 44% exceeded 15 days. It discourages workers to the extent that they do not ask for as much work as they would want to.
- **Caste-based payment delays:** Union government asks states to give 3 Funds Transfer Orders— one each for MGNREGA workers belonging to “SC”, “ST” and “Other” categories.
 - ✓ Non-SC, non-ST workers, who account for around 87% of all workers, were facing much longer payment delays. Payment of wages to workers has been erratic and non-uniform, triggering caste-based tensions among MGNREGA workers.
- **Lack of Awareness and Capacity among Rural Citizens:** Changes are being imposed without any consultations or adequate study.
- **Inadequate Social Audit and Accountability:** In many villages, no social audit has been conducted. The government officials’ shows the social audit process on paper only.

- Activists have been demanding an **increase in the wage rate** for MGNREGA schemes. It will be even more effective if the number of days for guaranteed work can be increased **up to 200 days** from the current 100 days. Govt. also needs to ensure a complete allocation and timely wage payments to workers

Extra mile

Mobile Monitoring System for MGNREGA

- The Union Ministry of Rural Development introduced a Mobile Monitoring System for effective implementation of the MGNREGA.
- This system is aimed at bringing more transparency and ensuring proper monitoring of the schemes.
- It permits taking real time attendance of workers at MGNREGA worksites along with geo-tagged photograph. It is expected to plug leakages & helps in increasing citizen oversight of the programme.

Technical Issues In New Mobile Monitoring System

- Complaints regarding inability to upload attendance data and capturing of attendance. Even in cases where the upload happened successfully, wage has not been processed.
- The new arrangement under the **Public Financial Management System (PFMS)** has been another issue.
- All MGNREGS payments in all panchayats have to be now made through a single account.
 - ✓ The new arrangements require that every single vendor for any kind of material also should be registered with the centralised system. There are a lot of vendors for each panchayat. Even the registration process is stuck and payments are held up.



Financial Inclusion Index

India's financial inclusion index (FI-Index), for the year ending March 2022, has improved to 56.4 from 53.9 in the previous year. Conceptualized and constructed by RBI in **2021**, the index helps to determine and assess the extent of financial inclusion in India.

- It is a comprehensive measure that incorporates details of banking, investments, insurance, postal as well as the pension sector.
- It captures information on various aspects of financial inclusion on a **scale from 0 to 100**, where 0 represents complete financial exclusion and 100 indicates full financial inclusion.
- Published **annually**, the index has been constructed **without any base year** and reflects cumulative efforts of all stakeholders over the years towards financial inclusion.

Parameters

- There are three broad parameters with certain assigned weights:

Access (35%)

Usage (45%)

Quality (20%)

Each parameter consists of various dimensions computed based on **97 indicators**.

- **Access** stands for access to bank branches, number of ATMs, banking correspondents and point-of-sales terminals per 1 lakh adults.
- **Quality parameter** includes aspects such as financial literacy, consumer protection, and inequalities and deficiencies in services.

Significance Of The Index

- The various components of the index will help to measure financial services for use of internal policy making. It can be used directly as a composite measure in development indicators.
- It enables fulfilment of G20 Financial Inclusion Indicators requirements.
- It will also *facilitate researchers* to study the *impact of financial inclusion* and other macro-economic variables.

Various Government Measures For Financial Inclusion

- **Pradhan Mantri Jan Dhan Yojana (PMJDY):** To ensure financial inclusion of all the households in the country by providing universal access to banking facilities. Under this, a person not having a savings account can open an account without the requirement of any minimum balance.
- **Integration of Financial Services:** Convergence of Jan Dhan-Aadhar-Mobile (JAM) trinity with the Direct Benefit Transfer (DBT) for targeted and accurate payments.
- **Swabhiman Campaign:** Aimed at giving more self-respect and confidence to people by making them aware of the financial sector of their country and banking services.
- **Insurance & Pension Schemes:** Atal Pension Yojana, Pradhan Mantri Suraksha Bima Yojana and Jan Suraksha Yojana.
- **Pradhan Mantri Mudra Yojna:** Provides formal access of financial facilities to Non Corporate Small Business Sector thereby promoting bank finance to the unfunded segment of the economy.
- **RBI Initiatives:** This includes Priority Sector Lending (for providing a specified portion of the bank lending to few specific sectors), Opening of no-frills accounts (account with nil or very low minimum balance), Relaxation on know-your-customer (KYC) norms, Business correspondents (BCs) as intermediaries for providing financial services, Issuing Kisan Credit Cards (KCC) with NABARD, Project Financial Literacy
- **Digital Initiatives:** Initiatives like Digital India, payments banks and small finance banks have helped to improve the reach of formal financial services to economically disadvantaged sections thus providing financial services to both unbanked and underbanked population, especially in rural/remote regions.

Challenges To Financial Inclusion In India

Socio-Economic Factors	Low-income households, low savings and generally low levels of awareness hinder access to available financial products and services. <ul style="list-style-type: none">○ Gender Gap in Financial Inclusion
Geographical Factors	Rangarajan Committee showed that financial exclusion is highest among households in the Eastern, North -Eastern and Central areas of country partly due to poor infrastructure. This coupled with <u>remoteness and less population</u> in some areas results in problems with access.
Limited Availability Of Technology	The lack of infrastructure and <u>cost effective & appropriate technology</u> for facilitating transactions at the doorstep is a hindrance to financial inclusion.
Financial Illiteracy & Digital Divide	Rural population, as a result, relies mostly on the informal sector for availing finance at high rates which lead to the vicious circle of poverty and debt repayment.
Perception of Obligation	The financial institutions are reluctant to serve small value and unprofitable customers with irregular income. Banks perceive inclusion as an obligation rather than a business opportunity.
Penetration	About 5% of India's 6 lakh plus villages have bank branches. There are 296 under-banked districts in states with below-par banking services.
Implement Deficit	For instance, the Jan Dhan scheme has resulted in the opening of many dormant accounts which never saw actual banking transactions.

Lack of Documents	Such as Aadhaar card, income certificate, birth certificate, address proof etc.
Informal and Cash-Dominated Economy	This combination of a huge informal sector along with a high dependence on cash mode of transaction poses an impediment to digital financial inclusion
Lack of Credit Penetration	High cost of credit in providing credit to low-income households and informal businesses due to lack of information available with formal creditors to determine their credit worthiness.

Conclusion

- There needs a multidimensional approach through which existing digital platforms, infrastructure, human resources and policy frameworks are strengthened and new technological innovations to be promoted.
- Financial inclusion calls for technology service providers, mobile network operators, corporate houses, and banking correspondents to develop efficient delivery models.
- Banks need to look after the needs & constraints of rural areas and not impose the urban models in rural areas.
- Financial literacy, awareness along with consumer protection needs to be focussed upon.
- If adequate measures are taken to tide over the existing problems, financial inclusion has the potential to amplify the benefits of economic growth to the poor.



Global Employment Trends for Youth 2022

International Labour Organisation (ILO) has released the **Global Employment Trends for Youth 2022**.

Key Findings Of The Report

Impact of COVID-19 Pandemic	<ul style="list-style-type: none"> • The global number of unemployed youths is estimated to reach 73 million in 2022, a slight improvement from 2021 (75 million). However, it is still 6 million higher than the pre-pandemic levels. • Between 2019 and 2020, those aged 15 to 24 experienced a much higher percentage loss in employment than the rest of the labour market. • The global youth unemployment rate is projected to be 14.9% in 2022. • In Europe and central Asia, the rate is predicted to be 16.4 %. In Asia Pacific, it is set to match the global average at 14.9 %. • In Latin America, it should hit a worrying 20.5 %, while in North America, the figure is 8.3 %. • The 12.7 % in Africa masks the fact that many youths have chosen to withdraw from the labour market altogether.
Regional differences	<ul style="list-style-type: none"> • High income countries are the only ones expected to achieve youth unemployment rates close to those of 2019 by the end of 2022. • Meanwhile, in between low- and middle-income countries, the unemployment rates are projected to remain more than 1% point above their pre-crisis values.
Gender Gap	<ul style="list-style-type: none"> • The report highlights the significant gender gap in the employment to population ratio (EPR) across the globe. While the <u>EPR</u> for men stands at 40.3%, it is 27.4% for women.

	<ul style="list-style-type: none"> The gap is largest in lower-middle-income countries, at 17.3 percentage points, and smallest in high-income states, at 2.3 points.
NEET	<ul style="list-style-type: none"> The share of youth Not in Employment, Education or Training (NEET) in 2020 -- the latest year for which a global estimate is available -- rose to 23.3%, up 1.5 percentage points from 2019. This group of young people (around 280 million) is at a particular risk of seeing their labour market further deteriorate since this is <u>a level not seen in the last 15 years</u>. Economists generally take the NEET rate as a better indicator of the employment situation, as <u>a declining NEET rate implies further investment by people in their education and training</u>. However, the education being mostly online or distance, and falling family incomes during the pandemic, meant that youth had to give up their education and training as well, thus making it difficult for them to search new jobs.
Green and Blue Future	<ul style="list-style-type: none"> On the positive side, young people were well-placed to benefit from the expansion of the so-called green and blue economies, centered around the environment and sustainable ocean resources respectively. The study said an additional 8.4 million jobs could be created for young people by 2030 through green and blue investments, notably in clean and renewable energies, sustainable agriculture, recycling and waste management.
Broadband Coverage & Healthcare Sector	<ul style="list-style-type: none"> The report estimates that achieving universal broadband coverage by 2030 could lead to a net increase in employment of 24 million new jobs worldwide, of which 6.4 million would be taken by young people. The report also estimates that investments in care sectors would create 17.9 million more jobs for young people by 2030.

Findings From India

EPR	Impact on Education	Gender Gap in India	Domestic Work
<ul style="list-style-type: none"> In India, the youth <u>employment participation rate</u> (EPR) declined by 0.9 percentage points over the first nine months of 2021 relative to its value in 2020, while it increased by 2 percentage points for adults over the same time period. The situation is particularly severe for very 	<ul style="list-style-type: none"> In India, school closures lasted 18 months and among the 24 crore school-going children, only <u>8% of such children in rural areas and 23% in urban areas</u> had adequate access to online education. School closures not only prevented new learning, but also led to the phenomenon of learning regression, that is, <u>children forgetting what they had learned earlier</u>. 92% of children on an average lost at least one 	<ul style="list-style-type: none"> India has a very low <u>youth female</u> labour market participation, and they experienced larger relative employment losses than young men in 2021 and 2022. Earlier, Centre for Monitoring Indian Economy (CMIE) had noted that the lower EPR is due to low female labour participation, which was just 9.2% in 2021-22, compared to 15% in 2016-17. Young Indian men account for 16% of young men in the global labour market, while the corresponding share for young Indian women is just 	<ul style="list-style-type: none"> Domestic work is a highly informal sector in India, and wages are extremely low. Reports of abuse suffered by young domestic workers are common, including verbal and physical abuse, and sexual exploitation.

young people aged 15-20 years. foundational ability in language and 82% lost at least one foundational ability in mathematics. 5%.

Initiatives By The Government

- **UNICEF's Initiative (YuWaah):** The India chapter of Generation Unlimited (GenU) – YuWaah aims to ensure, the following by 2030:
 - ✓ Build pathways for 100 million young people to aspirational economic opportunities.
 - ✓ Facilitate 200 million young people to gain relevant skills for productive lives and the future of work.
 - ✓ Partner with 300 million young people as changemakers and create spaces for developing their leadership
- **National Youth Policy 2014** provides a holistic Vision for youth of India which is “to empower the youth to achieve their full potential.
- **Prime Minister's Employment Generation Programme (PMEGP) 2008:** For generation of employment opportunities through establishment of micro enterprises in rural & urban areas.
- **Pradhan Mantri Mudra Yojana (PMMY):** Launched in 2015 for providing loans up to Rs. 10 lakh to the non-corporate, non-farm small/micro-enterprises.
- **Pradhan Mantri Rojgar Protsahan Yojana (PMRPY):** It has been launched by the Ministry of Labour and Employment for incentivising employers for promoting employment generation. The Government is paying the entire employer's contribution towards EPF and EPS for all eligible new employees for all sectors for 3 years.
- Increased public expenditure on schemes like MGNREGA, Pt. Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) and Deendayal Antyodaya Yojana- National Urban Livelihoods Mission (DAY-NULM)
- Other Flagship Programmes: Make in India, Digital India, Industrial corridors, etc.

How To Further Enhance Youth Employability In India?

- Upskilling of young people on new era skills including life skills, financial skills, digital skills, vocations skills etc.
- Strengthening National Career Service (NCS).
- Support in Job forecasting by exploring the gaps.
- Supporting direct dialogue and feedback mechanism among youth, policy stakeholders and industrial establishments

Way Ahead

- Undertaking the green, digital and care measures together as part of a big investment push would raise global GDP by 4.2%.
- Investment in these sectors must be accompanied by the promotion of decent working conditions for all young workers.
- This includes ensuring that they enjoy fundamental rights and protections including freedom of association, the right to collective bargaining, equal pay for work of equal value, and freedom from violence and harassment at work.
- Further, young people need well-functioning labour markets with decent job opportunities for those already participating in the labour market, along with quality education and training opportunities for those yet to enter it.

Freebie Culture In India

The Supreme Court called for an expert panel to regulate freebies offered during the elections by political parties. The Election Commission supported SC's decision to set up an expert committee. However, it declined to be part of this panel. EC said there are continuous elections in the country. Hence, any opinion/view/comment during deliberations in a multi-member body might amount to pre-decide the issue and disturb the level playing field.

Background

- The issue of Freebies is one of the important areas of electoral reform.
- As the name suggests, freebies are the things (goods or services) that are provided free of charge.
- The promise of distribution of unsustainable freebies in **election manifestos** to lure voters has reached absurd proportions in the country.
- Provision of free electricity/water/public transport, waiver of pending utility bills and farm loan waivers are often regarded as freebies.
- The list of freebies offered by political parties are endless-mixer grinders, gold for brides, washing machines, Free Cable TV connections, free electricity, free gadgets (laptops, smart phones) and so on.
- As per estimates, expenditure on freebies range from 0.1 – 2.7% of GSDP for different states.

Incongruence In Freebie Classification

- **Concessions To Corporate:** Corporate tax rates have been reducing and Budget documents show that in 2019-20, the effective tax rate (tax-to-profit ratio) declined as profits increased.
- Putting together all tax exemptions and concessions, including on foreign trade and personal income taxes, the revenue forgone each year is over ₹5 lakh crore.
- **Irony:** However, there is no pressure for a justification for these concessions in mainstream discussions and small amounts freebies is being questioned time and again.
- **Irrational Argument:** Few critics of freebies also include **welfare schemes** such as free or subsidised rations under the Public Distribution System (**PDS**), cooked meals under the **mid-day meal** scheme, supplementary nutrition through anganwadis, and work provided through the **MGNREGA** etc. in the definition of freebies.

Why Freebies Are A Cause Of Concern In Indian Democracy

- Freebies have a detrimental impact on the economic interests of the nation particularly on the **state government finances** because they
 - ✓ Impose huge burden on public exchequer-especially on states that faces major financial crunch.
 - ✓ Increases debt to GDP ratio thereby leading to vicious cycle of debt trap.
 - ✓ Affects investment climate and confidence on the country's economy
- Irrational freebies have impact on long term socio-economic development as they reduce the amount of funds available for provision of important public goods such as:

quality education

quality health care

quality infrastructure

better rule of law

- Freebies have been contributing to rise of *immorality in politics*

- ✓ Promise of freebies before polls to lure voters is analogous to bribery (bribing voters) and undue influence thereby exploiting weakness of people.
- Freebies have a detrimental impact on the democratic interests of the nation as it:
 - ✓ disturbs the level playing field between the contesting parties and candidates during elections
 - ✓ shakes the roots of free and fair elections
- They create huge intergenerational equity issue as disproportionate increase in debt levels will get passed on to the future generations which is unjust.
- They are against the principles of good governance.

RBI in its report titled “**State Finances: A Risk Analysis**” *released on June 2022* flagged concerns over the rising debt levels in five states namely Punjab, Rajasthan, Bihar, Kerala, West Bengal where debts are already unsustainable and may deteriorate even further due to “non-merit freebies”. Punjab is expected to be worst hit as its debt-GSDP ratio is projected to exceed 45% in 2026-27.

What Led To The Rise Of Freebie Culture In India

- **Failure of Indian economy**
 - ✓ Our economy has not been able to provide sufficient number of high-quality jobs or even low-quality jobs to vast majority of Indians
 - ✓ Benefits of growth of economy has not trickled down to all parts of economy or all sections of society
 - ✓ Political regimes failed to create a sustainable income generating economy
- **Competitive Populism**
 - ✓ Even political parties are responding to the signals that they are getting from voters
- Promise of freebies in election manifestos can't come under corrupt practices *under sec 123 of the Representation of People act of 1951*.
- Various provisions of the Directive Principles of State Policy (DPSP) place a duty on the State to frame various welfare measures-This provided scope for political parties to promise freebies.

Possible Solutions To Deal With The Issue Of Freebies

- An **independent agency with a statutory status** can be constituted with the mandate to audit manifestos of political parties and make people aware whether such promise of freebies is feasible or not.
- Election Commission of India (ECI) can frame guidelines under the Model Code of Conduct (MCC) to govern content under election manifestos in consultation with political parties
- Interstate council a body enshrined under **Art 263** of the constitution is also best forum as both central and state governments can come together to arrive at an understanding.
- Differentiating Subsidies and Freebies: There is a need to understand the impacts of freebies from the economic sense and connect it with the tax payers money.
- A system to review schemes periodically can be put in place so they don't go into perpetuity
- Union Finance commission can be empowered to allocate funds to the states by taking into consideration the debts of the state and the quantum of freebies granted.
- Creating an inclusive sustainable income generating economy.

Conclusion

Every freebie might benefit public in one or other way. But the given the limited financial resources available at the disposal of the government they should be utilized in best possible manner. A distinction needs to be made between merit (e.g. free toilets) and non-merit subsidies that are subsidies which are necessary and subsidies which are ill-afforded.

FREEBIES IN MEDICAL PROFESSION AND PHARMACEUTICAL INDUSTRY

The relationship between the *medical profession and pharmaceutical industry* has provoked intense scrutiny and attempted regulation in India. The Central Board of Direct Taxes (CBDT) has accused the makers of Dolo-650 of indulging in "unethical practices" and giving away freebies (like sponsored trips to foreign countries) of around Rs 1,000 crore to medical professionals and doctors in order to get them to promote their products.

Dolo Scandal That Refuses To Die

- **Evidence:** The raids on Dolo-650 manufacturer Micro Labs Ltd for tax evasion led to uncovering evidence of large sums of money being used for freebies to doctors to prescribe Dolo.
- **Statistics:** The revenue generated by Dolo-650 increased by **289.6%** between the second quarter of 2020 and the second quarter of 2021.
 - ✓ In the same time, revenue generated by two popular brands of paracetamol by GlaxoSmithKline, **Crocin** and **Calpol** increased by **53%** and **158.9%**, respectively.
- **Company's Claims:** Its executive VP stated that this amount would be around Rs 5-6 crore.
 - ✓ He also mentioned that apart from normal samples, pens, writing pads, small printed books, hand sanitisers & masks, no major so-called freebies or big gifts were given.
- **Plea in Apex court:** The *Federation of Medical and Sales Representatives Association of India (FMRAI)*, moved the Supreme Court with the following claims:
 - ✓ Since the market price of paracetamol up to 500 mg was regulated, the company moved to higher doses.
 - ✓ In a bid to increase sales, freebies were given to prescribe Dolo 650 mg, the higher dose.
- The PIL by FMRAI has also alleged the **unethical marketing practices** by pharmaceutical companies in their dealings with healthcare professionals.
 - ✓ As per the trade union body, **Indian Medical Council (Professional conduct, Etiquette and Ethics) Regulations of 2002** prescribes a code of conduct for doctors in their relationship with pharmaceutical and allied health sector industry, and prohibit acceptance of freebies by medical practitioners from pharma companies.
 - ✓ But it is **enforceable against doctors only** and does **not apply to drug companies**. This leads to anomalous situations where doctor's licenses are cancelled for misconduct and the pharma companies go scotfree.

Failure of Voluntary Ethics Codes

- **Fine Distinction:** Pharma companies need to inform and update doctors about their products. But the rather thin dividing line between **legitimate promotional activities and illegitimate incentivisation** has been a much contested one.
- **India Code:** In an attempt to draw this line, many countries have developed codes of conduct including India.
 - ✓ The previous Medical Council of India (**MCI**) code and the upcoming ethics code of the **National Medical Commission** label *gifting and hospitality as unethical conduct*.
- **Internal Codes:** MNC pharma companies are supposed to be bound by internal codes, but they are ignored, owing to vested mutual interests of both pharma companies and medical professionals.
- **Moral collapse:** The pharma-doctor relationship is thus fertile territory for unreasonable incentivisation.
 - ✓ Though many doctors believe they can stay neutral after accepting freebies, evidence clearly points otherwise. Appealing to the **good sense of both parties** through the lens of moral ethics has largely failed.

Pandemic-inspired Opportunity For Reform

- **Aware citizenry:** Covid has created a sense of urgency for **collective action** on healthcare and has made ordinary citizens acutely aware of the dangers of unregulated healthcare.
- **Induced Scepticism:** Drug prescriptions and costs are arousing suspicions. For instance, the bizarre prescriptions of antiviral drugs in Covid. It has led to demand for an actionable code for defining relationship between pharma and doctors in clear terms.
- **Stronger UCPMP:** FMRAI is asking SC for early implementation of the Uniform Code for Pharmaceuticals Marketing Practices (UCPMP) which is currently a voluntary code on paper.
 - ✓ The apex court is also examining their plea seeking direction to Centre to give teeth to UCPMP by making it law, thus ensuring an effective monitoring mechanism & transparency as well as punishments for violations.



Local Governments In A State Of Disrepair

India completed 75 years of Independence, a good time for examination and introspection of Local governments in India.

Constitutional Provisions Dealing With Local Governments

Art 40 of Directive Principles of state policy (**DPSP**): The State shall take steps to organize village panchayats and endow them with such powers and authority as may be necessary to enable them to function as units of self-government.

73 rd Constitutional Amendment Act (CAA)	74 th Constitutional Amendment Act (CAA)
<ul style="list-style-type: none">➤ Accorded constitutional status to Panchayati Raj Institutions (PRIs)➤ Inserted Part 9 with provisions from Articles 243 to 243-O➤ Added 11th schedule containing 29 functional items	<ul style="list-style-type: none">➤ Accorded Constitutional status to municipalities➤ Inserted Part 9A with provisions from Articles 243-P to 243-ZG➤ Added 12th schedule containing 18 functional items

Initiatives Undertaken To Strengthen Local Bodies

- Enactment of 73rd and 74th CAAs in 1993; Creation of separate 'Ministry of Panchayati Raj' in 2004 by central government
- Constitution of Expert committee headed by Mani Shankar Aiyar to examine the functioning of Panchayats and make recommendations.
- 10th Finance Commission (FC) made a provision for supporting local bodies through grants.
- Successive union finance commissions substantially increased funding to local bodies:
 - ✓ The 14th FC allocated 2.87 lakh crores to local governments.
 - ✓ The 15th FC recommended 4.36 lakh crores to local governments for 2021-26.
- Rashtriya Gram SWARAJ Abhiyan (RGSA)- umbrella scheme to develop and strengthen the capacities of Panchayati Raj Institutions (PRIs)

- e-governance initiatives: e-Gram SWARAJ, AuditOnline
- National Panchayat Awards- to incentivize best performing Panchayats every year
- Swachh Survekshan ranking to assess **urban local bodies** for their levels of cleanliness and sanitation

Assessment Of Impact Of Local Self-Government Institutions So Far

Achievements	Failures
<ul style="list-style-type: none"> • Deepening of representative democracy with increase in the number of public representatives and local leaders: <ul style="list-style-type: none"> ✓ Nearly 3 million elected representatives at local bodies. • People’s participation in local governance bodies increased. • Political Empowerment of marginalized sections: <ul style="list-style-type: none"> ✓ Over 1 million Women, Dalits and Tribals in proportion to their population got represented in various elected and leadership positions in local governance • Many studies pointed out that: <ul style="list-style-type: none"> ✓ Female leaders at local level are more likely to focus on issues pertinent to women (water, sanitation). ✓ SC Pradhans are more likely to invest in public goods in SC hamlets. • During Covid-19 lockdowns they played an important role in prevention, detection and management of infections and in delivery of public services. 	<ul style="list-style-type: none"> • Failed to provide better governance and deliver economic development and social Justice at the grass-roots level • Mani Shankar Aiyar Committee Report: PRIs failed to make meaningful contribution to income generation or employment • Had limited success in provision of basic public goods such as primary health care, access to drinking water supply, street lighting etc. • Dalits, Adivasis and women, despite reservations in local bodies, continue to be victims of atrocities rather than active agents of social change.

Why Local Governments Are In A State Of Disrepair?

- Inadequate devolution of **funds, functions (11th & 12th schedules) & functionaries** by state governments.

Functional challenges	<ul style="list-style-type: none"> • Less than satisfactory devolution of functions by state governments affecting their efficiency and effectiveness. • Creation of parallel bodies making inroads into domain of local governments. For example, State water boards, Special Purpose Vehicles (SPVs) under smart cities mission.
Functionary challenges	<ul style="list-style-type: none"> • They are grossly under-staffed and under-skilled.
Financial challenges	<ul style="list-style-type: none"> • Lack of adequate funds to carry out their responsibilities. • Local government expenditure as a percentage of GDP is only 2% which is extremely low. • Own sources of funds limited, heavy dependence on external sources (central and state governments).

- **Bureaucratic unwillingness** to empower Local governments for fear of losing their hegemonic role in governance, thus leading to excessive control of bureaucrats over their functioning.
- Turned into mere **implementing agencies of Centrally Sponsored Schemes (CSS)**. Schemes like **MLALAD** and **MPLAD**, adoption of villages by MPs under **Adarsh Gram Yojana** have made PRIs powerless
- The **dominance of upper castes** and **patriarchy** has led to proxy rule. For example, the ‘Phenomenon of ‘Sarpanch Pati’.
- **Maladministration in local bodies**: Rampant corruption, nepotism and abuse of office at local level.

- **Gram Sabhas** have remained disempowered.
- Failure to constitute and adequately empower **State Finance commissions (SFCs)** and **District Planning Committees (DPCs)** as well **delay in conducting elections.**

Suggestions To Strengthen Local Bodies

- Empowering them through **meaningful devolution of 3Fs-Funds, Functions and Functionaries**
- **National Commission to review the working of the constitution (NCRWC) 2002** suggested that:
 - ✓ Exclusive functions should be assigned to Panchayats.
 - ✓ Local authorities be allowed to borrow from their state government and financial institutions.
- The **second Administrative Reforms commission (2nd ARC)**: recommended setting up of an ombudsman for local bodies to investigate cases of corruption or maladministration against their functionaries.
- **Mani Shankar Aiyer Committee Recommendations:**
 - ✓ Put Gram Sabhas in charge of all social sector schemes.
 - ✓ Allow Panchayats to raise their own funds through taxes.
 - ✓ Panchayats should have effective control of employees deputed to them by the State government.
- Encouraging active citizen participation in affairs of local bodies.
- Parallel bodies should not be allowed to undermine authority of local bodies.
- **Changing the composition of Legislative council (where it exists)** so as to make it a 'council of local governments' at par with Rajya Sabha (council of states)
- **Global best practices:** As far as practicable, all citizen services should converge at Local bodies such as which can be seen in countries like Germany.
 - ✓ Call centers should be established for each city and cluster of local governments so that citizens can directly access the service provider



Centre Vs State Tussle Over AIS Officers Postings

The Central government is facing acute shortage of All India Services (AIS) officers. Only few AIS officers are on Central Deputation.

- The Cadre Deputation Reserve (CDR) is normally expected to be 40% of the total strength of the state cadre. Currently, the numbers from many states are reportedly even down to about 10%.
- According to Department of Personnel and Training (DoPT), only 10% of mid-level IAS officers were posted with the Union Government in 2021, a sharp fall from 19% in 2014.

Constitutional And Legal Provisions As Well As Rules Governing AIS Officers

- Article 312: Provides procedure for creation of one or more All India services common to union and states.
- Entry 70 of List I of the 7th Schedule made AIS the subject of Centre's exclusive jurisdiction.
- All India Services Act 1951 governs the recruitment and conditions of service of AIS officers.
- Central or state deputation of AIS officers from state cadres is regulated by Rule 6 of the IAS (Cadre) Rules (1954) and the corresponding rules governing the IPS(Cadre) Rules (1954) and the IFoS(Cadre) Rules (1966).

Why Only Fewer AIS officers Are On Central Deputation?

- *Reluctance among them* to go on central deputation for reasons including:
 - ✓ Long hours of work and need for extreme care in preparation of reports going up the hierarchy.
 - ✓ Availability of fewer comforts than what is available at state level in terms of accommodation, Staff car, services of peon etc.
 - ✓ Faster promotions in states compared to Centre. The rules of promotion at the central and state levels are different.
 - ✓ Officers from the same state generally accept the relative comfort zone of serving in their home state
- States are not sponsoring adequate numbers of officers for Central deputation under their CDR obligations as:
 - ✓ They themselves are facing the shortage of AIS officials.
 - ✓ Chief Ministers of states are often reluctant to relieve competent (and sometimes favourite) officers.
- The central government's practice of accepting only such officers who are empaneled under a stringent process, prevent many willing officers

Issues With Fewer AIS Officers On Central Deputation	How Central Deputation Benefits AIS Officers?
<ul style="list-style-type: none"> • Negative effect on the: <ul style="list-style-type: none"> ○ functioning of several central government departments ○ policy formulation & implementation of central-sector schemes • Increase in Work load on existing officials. • Their vision and implementation will get confined to states only which will make them remain parochial in their outlook. • All India services would lose its All-India character if the officials refuse to go on Deputation to Centre. • Too many vacancies in the Central Police Establishment comprising the paramilitary forces and investigating agencies like CBI and NIA has been affecting their overall functioning <u>posing a grave threat to internal security environment</u> • Central policies will lose touch with grassroots realities 	<ul style="list-style-type: none"> • <u>Psychological satisfaction</u> of contributing to the <u>formulation of national policy</u> on various critical issues health, education, national security etc. • Officers will gain better and wider exposure. They can even get <u>opportunity to work with international agencies</u> and to deal with matters of international importance. • Broadens their Perspective on governance. • By being at key positions in the central government, they can serve the issues faced by their cadre state • They can carry back their newly gained skills and experience at the Centre to their respective states

Steps Undertaken To Address The Shortage Of AIS Officials

- Central government recently proposed amendments to *Rule 6(1) of the IAS (Cadre) Rules*, the *IPS (Cadre) Rules* and the *IFoS (Cadre) Rules*. Under this, Union government will acquire for itself overriding powers to transfer AIS officers through Central deputation, doing away with the requirement of taking the approval of the State governments.
- Central government also issued an order on central deputation of DIG-level IPS officers. DoPT has said that IPS officers joining the Union at DIG level would no longer be required to be empaneled at that level with the Union Government, making the entire pool of DIG-level officers in every state eligible for central deputation.
 - ✓ Previously, a DIG-ranked IPS officer with a minimum experience of 14 years could only be deputed to the Centre if Police Establishment Board empaneled them as DIGs at the Centre.
- **Lateral Entry scheme** to recruit qualified personnel from the private sector

Issues/ Challenges Associated With Such Proposals/Orders

- **Increase in power asymmetry** in favor of center vis-a-vis to All India Service: The new order is being seen cautiously by several states as the Centre's attempt at pushing the envelope further on increasing its powers over officers serving in the states.
- **Anomaly in IPS cadre management at level of center over the years:** On one hand, states are releasing adequate number DIGs or SPs to the Centre, while on the other hand the Centre does not have enough posts if the total cadre reserve of IPS is calculated.
- **Populism:** States should ideally promote batches or *parts of it* according to the vacancies available. However, political executives often promote entire batches to please a certain section, in effect restricts promotional avenues for those below them.
- **Career stagnation:** It is being faced by CAPF officers due to **fixed quote** for IPS officers in CAPFs/CPOs.
 - ✓ IPS officers have a quota of 40% in Central Police Organisations (CPOs) and Central Armed Police Forces (CAPFs), *which cannot be filled by non-IPS uniformed officers.*
 - ✓ According to data sourced from various CPOs & CAPFs, out of 252 posts reserved for IPS officers at DIG level at the Centre, 118 (almost half) are vacant.
 - ✓ Centre had, in Nov' 2019, written to states proposing to decrease this quota by 50%

Way Forward

- *Making it mandatory for AIS officers to work for at least three years on central deputation between 9 and 25 years of service.*
 - ✓ Even the *Sarkaria Commission on Centre-State Relations* had recommended that "there should be an *element of compulsion in the matter of deputation* of AIS officers to the Union".
- The *Inter-state council* constituted under **Art 263** to handle Centre-state related issues could be utilized by the Centre and states to *achieve consensus* on the issue of Deputation
- *Increasing the annual recruitment* of AIS officers that has been coming down drastically over the years.
- *Proper cadre review* in all states will release many IAS officers from 'non-strategic posts'.
- Centre can consider the *utilization of services of the officers who are appointed to IAS by promotion or selection from the State Civil Services.*
- Centre can *relax cooling-off norms* on central deputation to retain them for longer periods as many of them will be willing to continue there on central deputation.
- AIS officers should be allowed to retain the salary drawn by them in the state and be provided with decent facilities as available at the state level.



Pelosi's Visit to Taiwan

Pelosi, the Speaker of the House of Representatives and second in line to the White House, visited Taiwan's capital Taipei despite warnings from Beijing that such a trip would be disastrous for US-China ties. Her visit to Taiwan is the highest-level visit by an elected American official to the island country in over 25 years.

Why China Opposed This Visit?

- China has said that this visit is a serious violation of the one-China principle and the provisions of the China-US three joint communiques.

- As per China, this visit sends a seriously wrong signal to the separatist forces for Taiwan independence. Hence, it seriously **infringes upon China's sovereignty and territorial integrity**.

Key Highlights

Response of China Following Pelosi's Visit

- As an immediate reaction, China **imposed sanction on the US House Speaker** visit to Taiwan.
- It also cancelled or suspended eight key dialogue mechanisms with the US.
- The Chinese military started its live fire-drills in six regions surrounding Taiwan and fired conventional missiles over the island of Taiwan into waters to the east.
- In addition to the military measures, China has so far put in place modest economic curbs such as barring more than 100 Taiwanese exporters.

Stand of US

- US has reiterated that **there was no change in US Policy on Taiwan**. It argued that Pelosi is not the first American lawmaker, nor her delegation the first US legislative team to visit Taipei.
 - ✓ US has maintained a **'One China'** policy since 1979, under which it recognises Taiwan as a part of China. Under this policy, the US does not have formal diplomatic relations with Taiwan.
 - ✓ However, it has unofficial ties with Taiwan as well — a strategy that is known as strategic or deliberate ambiguity.
- It has also made clear that the US opposes any unilateral changes to the status quo from either side and does not support Taiwan independence.

India's Response

- Initially, India chose not to comment on these developments as it seeks to avoid controversy on a sensitive issue between U.S. and China.
- Later, it indirectly called upon China to not alter the status quo around Taiwan. However, it refrained from spelling out India's clear position on the 'One China' policy.
 - ✓ On One China Policy, India's relevant policies are well known and consistent. India has followed the one China policy since 1949, indicating it does not recognise any government other than the PRC in Beijing.
 - ✓ However, New Delhi stopped mentioning the policy in official statements and joint declarations after 2008. This decision was taken after:

- A series of Chinese statements claiming Arunachal Pradesh as a part of the Chinese territory, renaming Arunachal towns with Mandarin names
- China started issuing stapled visas to Indian citizens who were residents of Jammu and Kashmir and Arunachal Pradesh

China-Taiwan Dispute: Background

- The island seems to have first appeared in Chinese records in AD 239, when an emperor sent an expeditionary force to explore the area. This evidence is used by Beijing to back its territorial claim.
- Taiwan was administered by **China's Qing dynasty** from 1683 to 1895.



- In 1895, Japan won the First Sino-Japanese War, and the Qing government had to cede Taiwan to Japan. After World War II, Japan surrendered and relinquished control of territory.

Civil War

- When Japan surrendered, the Chinese Nationalist Party (also known as the Kuomintang - KMT) began ruling Taiwan. **Chiang Kai-shek** was the ruler of this party.
- However, almost immediately following Japan's surrender, the Chinese Civil War broke out between the KMT and the Chinese Communist Party (CPC).
- Chiang and the remnants of his Kuomintang government fled to Taiwan in 1949.

Disagreement And Confusion About Taiwan

- China regards Taiwan as a breakaway province which it has vowed to retake, by force if necessary.
 - ✓ China has repeatedly insisted that Taiwan should be called "Chinese Taipei", in efforts to prevent international recognition of Taiwan as a country.
- But Taiwan's leaders argue that it is a sovereign state. Taiwan continues to participate in international events and dialogues separately.
 - ✓ It has its own constitution, democratically-elected leaders, and about 300,000 active troops in its armed forces.

Who Recognises Taiwan?

- Chiang Kai-shek's Republic of China (ROC) government held **China's seat** on the United Nations Security Council. It was recognised by many Western nations as the only Chinese government.
- However, in 1971 the UN switched diplomatic recognition to Beijing and the ROC government was forced out. Since then, the number of countries that recognize the ROC government diplomatically has fallen drastically to about 15.
- India does not have formal diplomatic ties with Taiwan. Like most countries, it maintains commercial ties with Taiwan.



India-Maldives Ink 6 Pacts

President of Maldives, Ibrahim Mohamed Solih, paid an Official visit to India.

Key Outcomes

Groundbreaking/Review of Projects

- Pouring of first concrete of Greater Male Connectivity Project- an USD 500 mn, India funded project. The project includes a 6.74 km bridge and the causeway linking capital Male with the neighbouring islands.
- Review of the progress on the construction of 4,000 social housing units in Hulhumale.
- Overview of India Maldives development cooperation including Addu roads and reclamation, water and sanitation in 34 islands and Friday Mosque restoration projects.

Agreements/MoUs Exchanged on

- Capacity building of women development committees and local government authorities of Maldives.
- Cooperation in the areas of cyber security, disaster management.
- Collaboration on potential fishing zone forecast capacity building.

- USD 41 Mn Buyer’s Credit Agreement to construct police infrastructure.
- Letter of Intent for Buyer’s Credit financing of 2,000 social housing units .

Announcements

- Extension of USD 100 Mn new Line of Credit to finance infrastructure projects in Maldives.
- Gifting of 24 utility vehicles to Maldives National Defence Force (MNDF).
- Supply of second Landing Craft Assault (LCA) to MNDF.
- Supply of a replacement ship for the earlier provided ship - CGS Huravee - to MNDF.
- Facilitation of duty-free tuna exports to India from Maldives.

Significance Of This Visit

1. Rise of anti-India sentiments in Maldives

- Opposition parties and a section of the media in Maldives are engaged in renewed efforts to whip up anti-India sentiments. In this regard, **India Out campaign** was launched.
- This campaign alleged that the cooperation between the governments of the two countries is undermining the national security and sovereignty of the Maldives.

2. The Yoga Day Attack

- On 21 June 2022, an angry mob stormed the Maldives national football stadium and attacked participants at the Yoga Day. The event was organised by the Indian High Commission.

3. A bitter Row Between Maldivian Speaker, former President and party colleagues

- President Solih and Speaker Mohamed Nasheed are from the same party—MDP and both are considered as sympathiser of India. However, the members of the ruling MDP are planning a no-confidence motion against Parliament Speaker Md. Nasheed.
- India fears that this internal fighting will give ground to the former President Yameen, who is perceived to be closely aligned with China. It was under his tenure, that the Maldives developed closed relations with Beijing, especially on the investment front.

India’s Interest In Maldives

<p>Strategic Importance</p>	<ul style="list-style-type: none"> •Maldives is barely 70 nautical miles away from Minicoy and 300 nautical miles away from India’s West coast. It is situated at the hub of commercial sea-lanes running through Indian Ocean (particularly the 8° N and 1 ½° N channels).
<p>Geo-political interest</p>	<ul style="list-style-type: none"> •Securing sea lanes of communication; Fighting piracy and sea-based terrorism; •Making Indian Ocean a conflict free zone and restoring its status as sea of tranquil; •Exploring blue economy & Enhancing trade; Security of Indian expatriates working there.
<p>China Angle</p>	<ul style="list-style-type: none"> •Maldives has emerged as an important 'pearl' in China’s “String of Pearls” construct in South Asia
<p>Internal security angle: Radicalisation</p>	<ul style="list-style-type: none"> •In the past, the number of Maldivians drawn towards terrorist groups like the Islamic State (IS) had increased. The Maldives has become the country with the highest rate of foreign fighters per capita in the world. This has been revealed by a 2020 report by European Foundation for South Asian Studies. •Political instability and socio-economic uncertainty are further fuelling the rise of Islamist radicalism in the island nation. •This gives rise to the possibility of remote Maldivian islands being used as a launch pad for terror attacks against India and Indian interests.

India and Maldives Bilateral Relation

A. Political Relation

- PM Modi, on his first overseas visit after taking oath of the office for his second term, visited Maldives in June 2019. During this visit, he addressed a session of the newly constituted People's Majlis.
- He was **only the second foreign Head of State** to address the People's Majlis in its 86-year history.

B. Trade And Economic Cooperation

- For 2021 (January to August), bilateral trade between these two countries stood at \$202.71 million which is heavily favoured towards India. India emerged as Maldives' 2nd largest trade partner in 2020.

C. Cooperation During the COVID -19 Pandemic

- *Operation Sanjeevani*—India, in April 2020, supplied 6.2 tonnes of essential medicines to Maldives.
- Indian Government has also evacuated nine Maldives nationals from Wuhan, China.
- In January 2021, India delivered 1 lakh doses of Made in India COVID-19 Vaccines to Maldives under the "Vaccine Maitri" initiative.

D. Security & Defence Cooperation

- Other than the projects mentioned above, India provides the largest number of training opportunities for MNDF, meeting around 70% of their defence training requirements.
- Composite Training Centre for MNDF, Coastal Radar System (CRS) and construction of new Ministry of Defence Headquarters.

Challenges In the Relationship

India out campaign

Radicalisation in Maldives

Presence of China

Conclusion

- The Maldives relationship with India has habitually oscillated between support and opposition. India Out campaign being run in Maldives is an example of this.
- However, it should be remembered that India plays a critical role in economic, defense, and humanitarian sectors in the Maldives and will continue to do so despite the campaign.



Carbon Market

The Bill to amend the Energy Conservation Act, 2001 seeks to establish a domestic carbon market and facilitate trade in carbon credits. To achieve its climate targets, India **plans** to open a carbon trading market for major emitters in the energy, steel and cement industries.

About Carbon Markets

- It is a market, **where buying and selling of carbon emissions take place**, with the objective of reducing global emissions.
- At global level, **Kyoto Protocol & Paris Agreement**, both provide provisions for development of the carbon market.
 - ✓ In India, a similar scheme called **PAT** (perform, achieve and trade) allows units to earn efficiency certificates if they outperform the prescribed efficiency standards. The laggards can buy these certificates to continue operating.

- It can be a **compliance and voluntary type**.

How Carbon Market Works

- Each country has a cap on the amount of carbon they are allowed to release.
- Companies that pollute less can sell their unused pollution rights to companies that pollute more.

Legal Aspect of Carbon Trading In India

- The Multi Commodity exchange (**MCX**) started future trading in **January 2008** after the Government of India recognized carbon credit as commodities.
- The National Commodity and Derivative Exchange (**NCDX**), by a notification and with due approval from Forward Market Commission (FMC), had launched Carbon Credit future contract.
 - ✓ Its aim was to provide transparency to markets and help the producers to earn remuneration out of the environment projects.
- Carbon credit in India is traded on NCDEX only as a future contract.

Examples of Carbon Trading In India

- **Jindal Vijaynagar Steel** - It has recently declared that by the next 10 years it will be ready to sell \$225 million worth of saved carbon.
- **Powerguda in Andhra Pradesh** - The village has made a claim of having saved 147 MT of CO₂. This was done by extracting bio-diesel from 4500 Pongamia trees in their village.
- **Handia Forest in Madhya Pradesh** - It is estimated that 95 very poor rural villages would jointly earn at least US\$300,000 every year from carbon payments by restoring 10,000 hectares of degraded community forests.

Significance of Carbon Market

- **Help Reduce Emission** - It has proven to be *one of the most effective drivers* of reducing emissions, offering the lowest-cost emission reductions.
- **Carbon-neutral by 2070** - It can help a long way in India's aim of turning carbon-neutral by 2070.
 - ✓ In 2019, India was criticized as the world's third highest polluter with 2.88 giga-tonnes (Gt) of CO₂. {China-10.6 Gt & US-5 Gt}.
- **Encourage Private Sector Involvement** - Incentives in the form of carbon credits against the *deployment of clean technologies* will lead to the private sector involvement in climate action.
- **Lower Air Pollution Health Costs** - This would also have positive spill overs in terms of air quality improvement and hence reduced public health costs.
- It would **spur innovation** and **finance clean projects** from **Indian MSMEs**, which have huge scope for emission reduction.
- It will also provide greater liquidity to reduction certificates from India, encouraging greater reductions globally.

Challenges in Carbon Market

- **Inequities** – The marginal costs of emission reduction might be the same for two entities, but resource constraints may unfairly impact smaller sized firms.
- **Implementation costs** – Compared to a tax, a carbon market entails higher costs associated with market oversight, monitoring and ensuring compliance and trading infrastructure and security.
- **Ensuring compliance** – A weak compliance could threaten market stability by lowering the value of emission reductions.
- **Market Security and Fraud** - Ensuring security of allowances, especially from cyber-attacks, breaches and online fraud is a key concern for a carbon market.

Way forward

- **Ensuring compliance** would not only need strong institutional support for effective penalties and sanctions in cases of non-compliance but also infrastructure needed to monitor compliance.
- It is essential to **have adequate security measures** and a robust technical platform to ensure data security.

Energy Conservation (Amendment) Bill, 2022

- The Lok Sabha has passed the Energy Conservation (Amendment) Bill, 2022 which seeks to amend the **Energy Conservation Act, 2001**, last amended in 2010.
- The bill is aimed at putting in place provisions to make use of clean energy mandatory and paving the way for the setting of **carbon markets** in the country.
- The Act promotes energy efficiency and conservation. It provides for the regulation of energy consumption by equipment, appliances, buildings, and industries.

Key Proposals Under The Bill

- **Obligation to use non-fossil sources of energy including Green hydrogen, green ammonia, biomass, and Ethanol.**
 - ✓ The 2001 Act empowers the central government to specify energy consumption standards. The Bill adds that the government may require the designated consumers to meet a minimum share of energy consumption from non-fossil sources
 - ✓ Designated consumers include commercial buildings, industries such as mining, steel, cement, textile, chemicals, petrochemicals, Railways etc.
 - ✓ This consumption may be done **directly from a renewable energy source or indirectly via the power grid.**
 - ✓ Failure to meet the obligation for use of energy from non-fossil sources will be punishable with a penalty of up to Rs 10 lakh.
- **Carbon Trading**
 - ✓ The Bill empowers the central government to specify a carbon credit trading scheme.
 - ✓ The central government or any authorized agency may issue carbon credit certificates to entities registered under and compliant with the scheme.
 - ✓ The entities will be entitled to purchase or sell the certificate.
- **Energy Conservation Code For Buildings**
 - ✓ The 2001 Act empowers the central government to specify energy conservation code for buildings. The code prescribes energy consumption standards in terms of area.
 - ✓ The Bill amends this to provide for an 'energy conservation and sustainable building code'.
 - ✓ This new code will provide norms for energy efficiency and conservation, use of renewable energy, and other requirements for green buildings.
- **Applicability to Residential Buildings**
 - ✓ Under the 2001 Act, the energy conservation code applies to commercial buildings:
 - erected after the notification of the code, and
 - having a minimum connected load of 100 kilo watts (kW) or contract load of 120 kilo volt ampere (kVA).
 - ✓ Under the Bill, the new energy conservation and sustainable building code will also apply to the office and residential buildings meeting the above criteria.
 - ✓ The Bill also empowers the state governments to lower the load thresholds.

- **Standards For Vehicles And Vessels:**
 - ✓ Under the 2001 Act, the energy consumption standards are specified for equipment and appliances which consume, generate, transmit, or supply energy.
 - ✓ The Bill expands the scope to include vehicles and vessels (includes ships and boats).
 - ✓ Vehicle manufacturers in violation of fuel consumption norms will be liable to pay a penalty of up to Rs 50,000 per unit of vehicles sold.
- **Regulatory powers of SERCs:**
 - ✓ The 2001 Act empowers the State Electricity Regulatory Commissions (SERCs) to adjudge penalties under the Act.
 - ✓ The Bill adds that SERCs can also make regulations for discharging their functions.
- **Composition of Bureau of Energy Efficiency (BEE) Governing Council:**
 - ✓ Under 2001 Act, the governing council of BEE has members between 20 and 26 in number.
 - ✓ The Bill instead provides that the number of members will be between 31 and 37.
 - ✓ It also provides for up to 7 members representing industries and consumers.



Violation of Coastal Ecosystem Norms

The Comptroller and Auditor General (CAG) of India tabled a report in Parliament on whether steps taken by the Union Environment Ministry to conserve India's coastal ecosystems have been successful. This latest report contains the observations from an audit of Conservation of Coastal Ecosystems from 2015-20. These reports are placed before the Standing Committees of Parliament.

Why Did CAG Undertake This Audit

- The CAG found that there were **large-scale CRZ violations in the coastal stretches.**
- Incidents of illegal construction activities and waste from local bodies, industries and aquaculture farms were reported by the media and this prompted a detailed investigation.
- The CAG has a constitutional mandate (under Article 151) to investigate and report on publicly funded programmes.

Major Findings of The Audit

- The Environment Ministry **hasn't notified the National Coastal Zone Management Authority (NCZMA) as a permanent body** and it was being reconstituted every few years.
 - ✓ In the absence of defined membership, it was functioning as an ad-hoc body.
- The **Expert Appraisal Committee (EAC) members not being present** during project deliberations.
 - ✓ EAC is a committee of scientific experts and senior bureaucrats who evaluate the feasibility of an infrastructure project and its environmental consequences.
 - ✓ There were instances of the members of EAC being fewer than half of the total strength during the deliberations.
- The **State Coastal Zone Management Authority (SCZMA) has not been reconstituted in Karnataka** and the reorganization has been delayed in the states of Goa, Odisha and West Bengal.
- The District Level Committees (DLCs) of Tamil Nadu lacked participation from local traditional communities. In Andhra Pradesh, DLCs were not even established.

- The **projects were approved despite inadequacies in the Environment Impact Assessment (EIA) reports.**

Centre's Obligations on Conserving the Coastline

- Coastal Regulation Zone (CRZ) notification was issued in 1991 under Environmental Protection Act, 1986, by Ministry of Environment Forest and Climate Change (MoEFCC) to regulate activities in coastal areas of India.
- The **CRZ** classifies coastal area into different zones to manage infrastructure activities and regulate them.

Different Zone in CRZ

CRZ- I These are ecologically sensitive areas which are essential in maintaining the ecosystem of the coasts. These include national parks/marine parks, reserve forests, mangroves and corals/coral reefs etc. **These areas are situated between the high and low tide lines.**

CRZ- II The areas that have already developed up till the shoreline of the coast. Construction of unauthorised structures is prohibited in this zone

CRZ-III Rural and urban localities that are relatively undisturbed and do not belong to the first two categories are included in this zone.

- Only specific activities related to agriculture or certain public facilities are permitted under this coastal regulation zone.

CRZ- IV The zone constitutes water areas from the **low tide line up to territorial limits**, including areas of the tidal-influenced water bodies.

- These areas include the coastal stretches in Lakshadweep, the Andaman and Nicobar Islands and some other small islands, except those termed as CRZ-I, II, or III.
- Activities such as fishing and other allied services are permitted in this zone.

Implementing Agencies of CRZ

- National Coastal Zone Management Authority (NCZMA) at the Centre,
- State/Union Territory Coastal Zone Management Authorities in every coastal State and Union Territory,
- District Level Committees (DLCs) in every district that has a coastal stretch.

Significance of CRZ

- It **protects environmentally sensitive areas** such as mangroves and coral reefs, which act as a barrier against tsunamis and cyclones.
- It **limits some types of operations within a specific distance** from the coast, such as big constructions, the storage or dumping of hazardous materials and mining.
- It **improves the lives of coastal communities**, such as fishermen and tribals.

Shailesh Nayak Committee Report on CRZ

- It was established in June 2014. The committee recommended that the Central Government's regulatory authority in coastal areas be curtailed.
 - ✓ Except for projects that involve environmental permits, all other activities should be governed by state and municipal planning authorities.
- Based on the recommendations of the Committee, suggestions were made by the Coastal States and Union Territories and CRZ 2018 Notification was issued.

UN High Seas Treaty

- In New York, Negotiations involving 168 countries, including the European Union, to agree on a UN treaty for protecting oceans failed.
- After the latest deadlock, talks will only resume next year, unless a special session is called.
- A delegation from India deliberated on an agreement to conserve marine biodiversity in the high seas.
- It was expected to be the final in a series set in motion since 2018 to draft an *international legally binding instrument* under the **United Nations Convention on the Law of the Sea (UNCLOS)**.

About New Treaty

- Also referred to as the 'Paris Agreement for the Ocean', this **biodiversity Beyond National Jurisdiction (BBNJ) treaty** is also known as the "Treaty of the High Seas".
- It is an **international agreement on the conservation & sustainable use of marine biological diversity of areas outside national jurisdiction**. It is being developed within the framework of UNCLOS.
- The key aspect of **the agreement is deciding on the rights of companies** that undertake exploration for biological resources in the high seas.
- It will also address marine genetic resources, including questions on benefit-sharing, measures such as area-based management tools, environmental impact assessments, capacity-building, financial support to countries and the transfer of marine technology.

Why The Need For A Separate Ocean Biodiversity Agreement?

- There is no treaty for conserving the health of high seas. Hence, a UN resolution in 2017 had decided to address this issue while setting 2022 as the deadline.
- UN agreements identify high seas as "**areas beyond national jurisdiction**", which mean that its management is not the sole responsibility of any one nation.
- **International law (UNCLOS) does not meaningfully address biodiversity monitoring & conservation in the high seas.**
 - ✓ **Biodiversity governance gap** has been of concern for the past two decades.
- Without a **binding mechanism under international law, countries are not obligated** to co-operate on developing and implementing *conservation measures in the high seas*.
- This lack of monitoring and surveillance means human rights violations are abundant in the open ocean.
- There is no single global mechanism to establish **Marine Protected Areas (MPAs)** outside States' territorial seas or uniform requirements for undertaking environmental impact assessments.
- In June 2022, UN Secretary-General had declared an **ocean emergency** at the UN Ocean Conference in Lisbon, Portugal, citing threats to the world's oceans.
- 90% cent of global warming is occurring in the ocean, according to the NASA website.
- The effects of ocean warming include sea level rise due to thermal expansion, coral bleaching, accelerated melting of Earth's major ice sheets, intensified hurricanes, and changes in ocean health and biochemistry.
- Excessive fishing has increased manifold over the years, and a third of species such as sharks and rays are at the risk of extinction, according to the World Wildlife Fund.

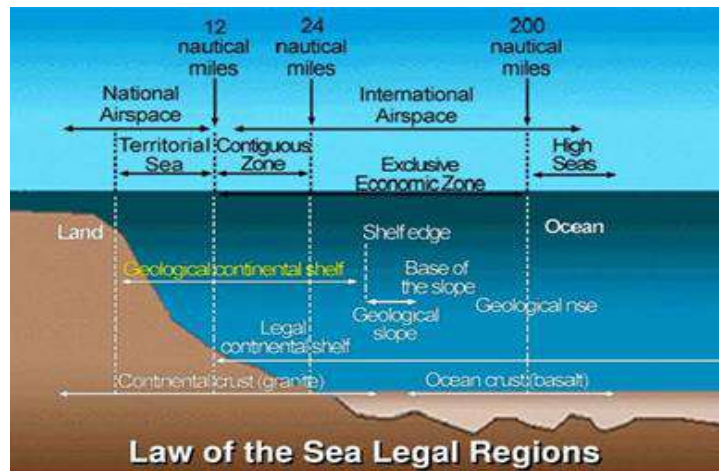
Challenges Faced By The Proposed Treaty

- The pandemic resulted in many delays and the negotiations were not held on many issues.

- A High Ambition Coalition came about and put the focus on '30x30' goals – protecting 30% of the ocean by 2030.
 - ✓ The coalition has more than 100 countries including India, the US, and the UK.
 - ✓ This coalition is creating pressure on the leaders to include these goals in any treaty concerning with the conservation of high seas.
- The negotiating parties have not agreed on the legal nature of this treaty.
 - ✓ Many institutions, such as the International Union for Conservation of Nature (IUCN), are demanding this treaty to be legally binding in order to become more effective.
- Some countries in the Caribbean alleged that richer countries of the Global North did not actively participate until the last few days of the talks.
- Also, the treaty is facing resistance from countries that engage in deep sea mining of minerals or are heavily invested in fishing.

About High Seas

- It is the **parts of the ocean that are not included in the Exclusive Economic Zones (EEZ)**. That is, it is outside the maximum 200 nautical miles from the baseline.
- High seas comprise 64% of its surface & nearly 95% of ocean's volume.
- It is the areas of the ocean for which **no one nation has sole responsibility for management.**



How Are High Seas Regulated Currently

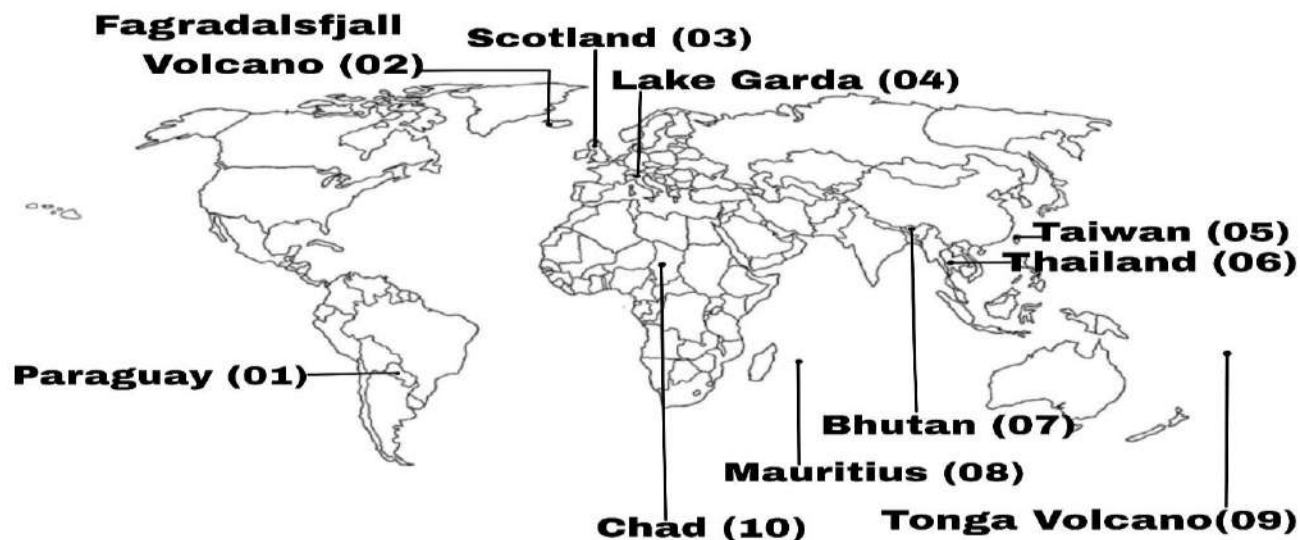
- Some treaties, along with UNCLOS, regulate the conduct of actors on the high seas.
 - ✓ UNCLOS also created the International Seabed Authority and other conflict-resolution mechanisms.
- But a treaty dedicated to protecting ocean health does not exist as of now.

About UNCLOS

- It is an international agreement that was **adopted in 1982 to establish jurisdictional limits over the ocean areas.**
- It defines a **distance of 12 nautical miles (approx. 22 km) from the baseline as Territorial Sea limit and a distance of 200 nautical miles as EEZ limit.**
 - ✓ EEZs are domestic spaces in which a sovereign state has special rights regarding the exploration and use of marine resources, including energy production from water and wind.
- **India became a signatory to the UNCLOS in 1982.**

MAPS: PLACES IN NEWS

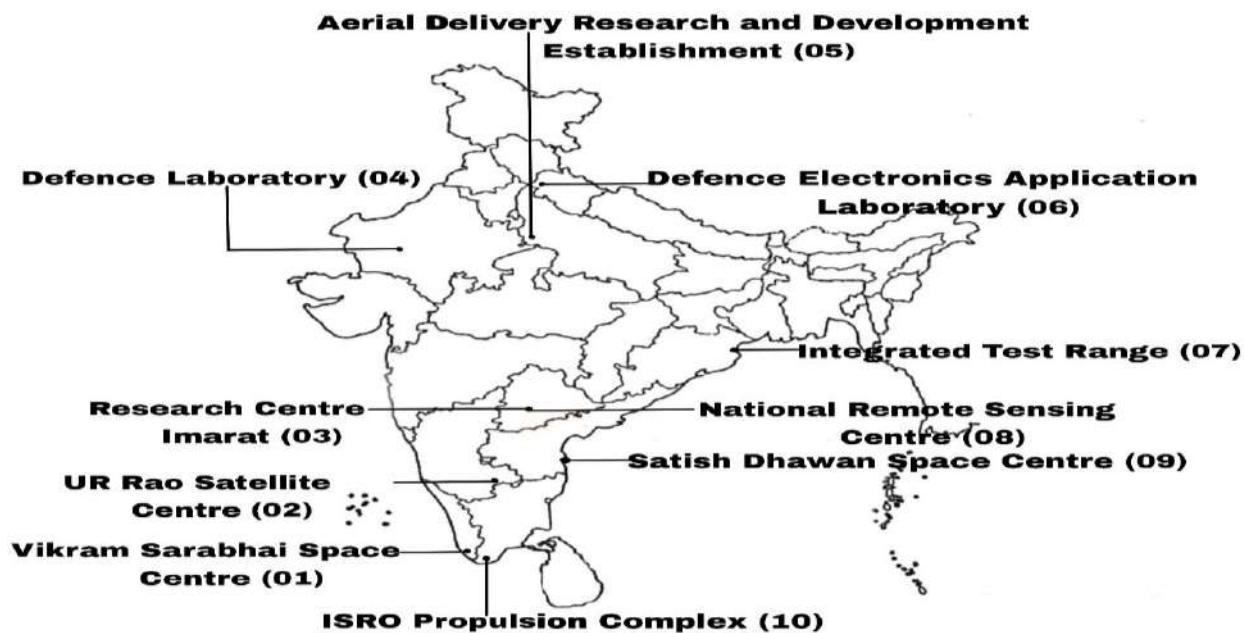
International Places in News



01	Paraguay	External Affairs Minister Dr S Jaishankar has unveiled a bust of Mahatma Gandhi in Asuncion, Paraguay. The Minister also visited the historic Casa de la Independencia, from where Paraguay's Independence movement started more than two centuries ago. It is a landlocked country in South America and bordered by Argentina, Brazil and Bolivia. Asuncion is the capital and the largest city of Paraguay.
02	Fagradalsfjall volcano	It is a tuya volcano formed in the Last Glacial Period on the Reykjanes Peninsula in Iceland. A tuya is a flat-topped, steep-sided volcano formed when lava erupts through a thick glacier or ice sheet. In March 2021, this volcano erupted after 815 years.
03	Scotland	The Scotland Museum signed a deal to return seven ancient artefacts to India. Scotland <i>is a part of the United Kingdom</i> . Scotland has no sovereignty and UK Parliament has power over Scotland's territory. Scotland does not have external recognition nor does Scotland have its own embassies in other independent countries. It share a border with England to the south. It is surrounded by the Atlantic Ocean to the north and west, the North Sea to the northeast and the Irish Sea to the south.
04	Lake Garda	Drought has reduced Lake Garda to its lowest level ever recorded. It is the <i>largest lake</i> in Italy. Its shoreline is divided between the provinces of Verona, Brescia and Trentino.
05	Taiwan	China has warned that the US House Speaker's visit to Taiwan is a disregard to its warnings undermining regional peace and stability. It is an Island country in East Asia, formerly known as Formosa, located at the junction of the East and South China Seas in the north-western Pacific Ocean.
06	Thailand	India and Thailand celebrated the 75th anniversary of the establishment of diplomatic relations. It is a country of Southeast Asia, shares land boundaries with Cambodia, Laos, Malaysia, and Myanmar. Recently, Thailand became the 1 st Asian country to legalise Marijuana.
07	Bhutan	Chief of Army Staff General Manoj Pande has met Bhutanese King. It is a small,

		landlocked country nestled deep in the Himalayas between India and China. It shares a border with four Indian States: <i>Assam, Arunachal Pradesh, West Bengal and Sikkim</i> .
08	Mauritius	India and Mauritius successfully held the 1st session of India-Mauritius High-Powered Joint Trade Committee. It is an island nation in the Indian Ocean. It gained its independence in 1968 from the United Kingdom. In 2015, India signed an agreement with Mauritius for development of Agalega Islands.
09	Tonga Volcano	It is a submarine volcano in the South Pacific, located about 30 km south of the submarine volcano of Fonuafo'ou and 65 km north of Tongatapu, Tonga's main island. The initial tsunami wave created by Tonga's underwater Hunga Tonga volcano eruption was 90 metres high. It was nine times higher than the tsunami recorded near Japan in 2011. Tonga is a Polynesian country and also an archipelago consisting of 171 islands of which 45 are inhabited
10	Chad	Chad's military government and more than 40 rebel groups signed a pledge in Qatar. Chad is a landlocked country in Africa, shares its boundary with <u>Libya, Sudan, the Central African Republic, Cameroon, Nigeria, and Niger</u> . Lake Chad, after which the country is named is bordered by Chad, Niger, Nigeria, and Cameroon. It is the 5 th largest country on the African continent. Its Capital is N'Djamena. The official languages of the country are Arabic and French. It is a part of Sahel Region

Centres/Laboratories/Establishments Of ISRO And DRDO

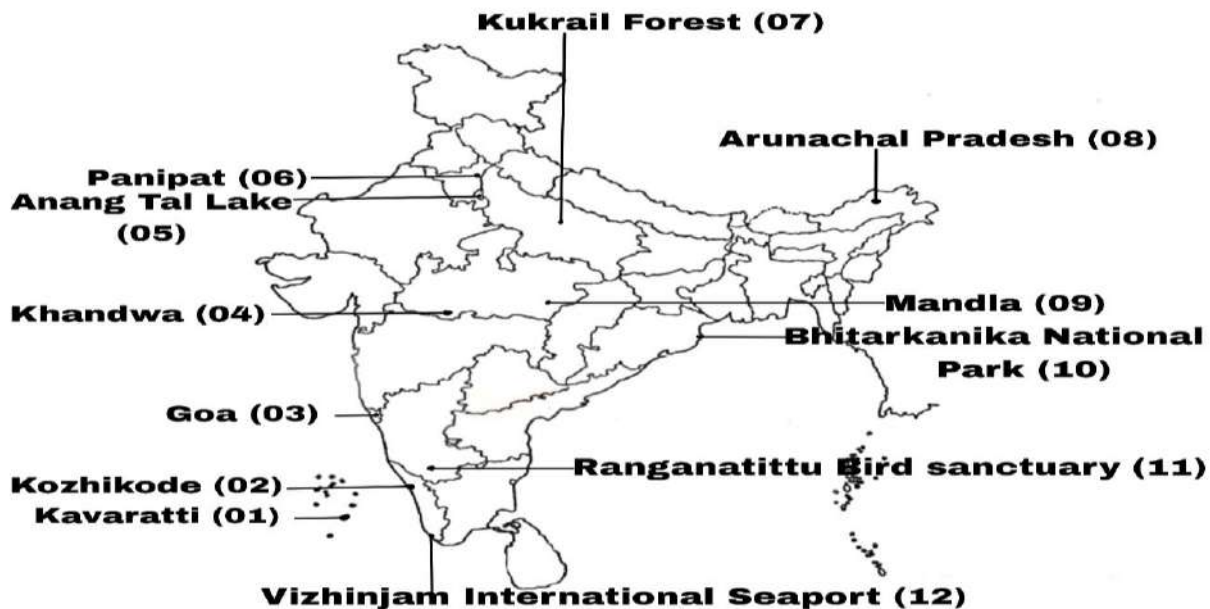


S. No.	Name	Location	Details
01	Vikram Sarabhai Space Centre (VSSC)	Thiruvananthapuram, Kerala	It is the lead centre of ISRO responsible for the design and development of launch vehicle technology , like Sounding rockets (Rohini, Menaka launchers), Reusable Launch Vehicles, advanced technology vehicles, air-breathing propulsion, SLV, ASLV, PSLV, GSLV and GSLV Mk III families of launch vehicles.

02	U R Rao Satellite Centre (URSC)	Bengaluru, Karnataka	It is formerly known as ISRO Satellite Centre (ISAC). It is the lead centre for building satellites and developing associated satellite technologies . These spacecrafts are used for providing applications to various users in the area of Communication, Navigation, Meteorology, Remote Sensing, Space Science and interplanetary explorations.
03	Research Centre Imarat (RCI)	Hyderabad, Telangana	It is a laboratory of the DRDO, responsible for Research and Development of Missile Systems, Guided Weapons and advanced Avionics for Indian Armed Forces . It was established by APJ Abdul Kalam in 1988.
04	Defence Laboratory (DL)	Jodhpur, Rajasthan	It is a laboratory of the DRDO, responsible for the development and manufacture of electronics and materials required for modern warfare and weapon systems. It is researching the areas of camouflage, deception, detection, reconnaissance, performance evaluation and life estimation of weapons and ammunition, clothing, equipment and stores under desert conditions, integrated water management, soil stabilisation, and applications of radioisotopes in defence.
05	Aerial Delivery Research & Development Establishment (ADRDE)	Agra, Uttar Pradesh	It is a laboratory of the DRDO, responsible for the development of systems for dropping heavy loads, Parachute Systems (Paratrooper, Aircrew, Ammunition, Brake Parachute, Recovery, Aerial Delivery). It was involved in the design and development of a recovery parachute for the Nishant Unmanned Aerial Vehicle.
06	Defence Electronics Application Laboratory (DEAL)	Dehradun, Uttarakhand	It is a laboratory of the DRDO, working on design and development of technologies and systems in the areas of satellite communication and surveillance, like the radio, Satellite, Millimeter Wave communication devices and data link for defence applications.
07	Integrated Test Range (ITR)	Balasore, Odisha	It is a centre of DRDO, responsible to provide safe and reliable launch facilities for performance evaluation of rockets, missiles and air-borne weapon systems. Recently DRDO and the Indian Navy successfully flight-tested Vertical Launch Short Range Surface-to-Air Missile (VL-SRSAM) from here.
08	National Remote Sensing Centre (NRSC)	Hyderabad, Telangana	It is a centre of ISRO, which manages data from aerial and satellite sources . It is mostly financed by State and Central Government funds but also does commercial business by selling satellite images and providing Consultancy to various government, private organisations.
09	Satish Dhawan Space Centre (SDSC)	Sriharikota, Andhra Pradesh	It is a centre operated by ISRO, responsible for providing Launch Base Infrastructure for the Indian Space Programme. It has two launch pads from where the launching operations of PSLV and GSLV are carried out. Many successful missions like Chandrayaan, Mars orbiter Mangalyaan were launched from

			the centre.
10	ISRO Propulsion Complex (IPRC)	Mahendragiri, Tamil Nadu	It is an ISRO centre involved in testing, assembling, and integrating propulsion systems and stages that are developed at ISRO's Liquid Propulsion Systems Centres.

National Places In The News



01	Kavaratti	The National Institute of Ocean Technology, is establishing an Ocean Thermal Energy Conversion (OTEC) plant in Kavaratti, Lakshadweep. It lies in the Arabian Sea. It has been selected as one of the hundred Indian cities to be developed as a smart city under PM Smart Cities Mission. It is the capital of UT Lakshadweep
02	Kozhikode	HDFC Bank inaugurated an all-women branch in Kozhikode, Kerala. It is also known as Calicut. It was a significant spice trade center and is close to Kappad Beach, where Portuguese explorer Vasco da Gama landed in 1498.
03	Goa	Goa became the 1 st state in India to receive “Har Ghar Jal” certification . It is India's smallest state by area and its fourth-smallest by population. It has the highest GDP per capita among all Indian states.
04	Khandwa	World’s largest floating Solar Power Plant (600MW) will be constructed in Khandwa, Madhya Pradesh. It is the only district of MP which have all three-power plant, Thermal, Hydel and solar power plant. As of now, Ramagundam Floating Solar PV project in Telangana is the largest project in country. It has the capacity to generate 100 MW of energy
05	Anang Tal Lake	It has been declared a monument of national importance designated by the Archaeological Survey of India (ASI). It is located in South Delhi northwest of the Qutub complex. It was built by the 11th century Tomar king Anang Pal Tomar-II. He was the founder of Dhillika Puri, which eventually became Delhi. Evidence about the early history of Delhi is inscribed on the iron pillar of Masjid Quwaatul Islam, adjacent to Qutub Minar.

06	Panipat	The Prime Minister of India dedicated a 2G ethanol plant in Panipat, Haryana. The city is famous as the "City of Weavers" and "Textile City". In Indian history, all three battles of Panipat were fought here between the years 1526 to 1761
07	Kukrail Forest	The Uttar Pradesh Tourism Department has started the country's 1 st night safari in the Kukrail forest area, Lucknow. It is an urban forest that was created in the 1950s as a plantation forest. It has a captive breeding and conservation center for the freshwater gharials.
08	Arunachal Pradesh	Border Road Organization (BRO) build the 1 st Steel Slag Road in Arunachal Pradesh. It is the largest of the Seven Sister States of Northeast India by area. It borders the states of Assam and Nagaland. It shares international borders with Bhutan, Myanmar, and a disputed border with China in the north at the McMahon Line.
09	Mandla	It becomes India's 1 st fully 'functionally literate' district. It is a city in Mandla district of Madhya Pradesh, surrounded by river Narmada on three sides.
10	Bhitarkanika National Park	It is situated in the Kendrapara district of Odisha. It is located in the estuary of Brahmani , Baitarani, Dhamra, and Mahanadi river systems. It has reached a saturation point in the population of crocodiles which could lead to more human-Crocodile conflict. It is spread in a vast area of 672 Kms in Orissa. It is the 2nd largest Mangrove ecosystem of India after Sundarbans, West Bengal. It was designated as a Ramsar site in 2002. Bhitarkanika is represented by 3 Protected Areas which are: Bhitarkanika National Park, Bhitarkanika Wildlife Sanctuary, Gahirmatha Marine Sanctuary.
11	Ranganathittu Bird Sanctuary	It is the largest bird sanctuary of Karnataka, also known as Pakshi Kashi of Karnataka, located on the banks of River Cauvery. It was designated as a Ramsar site in 2022 becoming the first wetland of Karnataka to get designated as Ramsar site.
12	Vizhinjam International Seaport	Fishermen on the southern coast of Kerala are protesting against Adani Group's Vizhinjam International Port Development Project. They are saying that this will lead to erosion of the sea and result in possible loss of their traditional livelihood. It will be India's 1 st Mega Transshipment Container Terminal.

SOCIAL ISSUES

Tribal Health

For the first time since independence, a tribal President has become a reality in India. On the occasion of International Day of the World's Indigenous Peoples on 9th August, the scholars have analysed the need for the launch of the **National Tribal Health Mission** for India.

- Over 104 million tribal people live in India. Spread across 705 tribes, they account for 8.6% of the country's population.
- Tribal people have remained marginal geographically, socio-economically, politically, and therefore, in the national psyche.

Background: Tribal people in India have:

poorer health indicators

greater burden of morbidity and mortality

very limited access to healthcare services'

inequity in health and health care

Health Status of Tribal Communities in India

- The Lancet in its study in 2016 titled 'Indigenous and Tribal People's Health' found that:
 - ✓ India has 2nd highest *Infant Mortality Rate (IMR)* for tribal people, next only to Pakistan.
 - ✓ *Life expectancy at birth is 63.9 years*, as against 67 years for the general population
- The Expert committee on Tribal Health headed by Dr Abhay Bang in its report titled 'Tribal Health in India- Bridging the Gap and a Roadmap for the future' had given the following findings:

Malnutrition

- 42% of Tribal children suffer from malnutrition which is 1.5 times higher than non-tribal children

Communicable diseases

- Malaria and Tuberculosis are 3 to 11 times more common among them
- They account for 30% of all cases of malaria & 50% of all malaria related deaths
- Incidence of Tuberculosis among them is significantly higher than rest of the country-703 against 256 per 10,000

Non-communicable diseases

- Hypertension: one out of every four tribal adults suffer from it

Causes For Poor Tribal Health

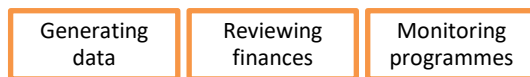
- **Underdeveloped health care facilities**
 - ✓ As per Abhay Bang committee report, in more than half of the states with sizeable Tribal population, the health care infrastructure was 27 to 40% deficient in number compared to *National Rural Health Mission (NRHM)* norms
- **Scarcity of trained health care personnel** in terms of doctors, nursing staff and frontline workers (ASHAS) at health centers in tribal areas
- **Lack of access to basic social determinants of health** such clean water supply, sanitation, clean fuel, transport facilities etc.
 - ✓ Only 10.7% of the Tribal population has access to tap water
 - ✓ Three out of every four Tribal people (74%) continue to defecate in open
- Early marriages, low Body Mass Index (BMI) and high incidence of anemia are critical reasons for high maternal mortality

- **Harmful social beliefs and cultural practices:**
 - ✓ Magico-religious practices are frequently resorted to treat various illnesses
 - ✓ Our present health care delivery system is incompatible with tribal cultural and belief systems, *leading to low rate of acceptance*
- **Poor economic status:** Over 40% of Tribal population live below poverty line
- **High Prevalence of addiction** to substances such as smoking, alcohol and drugs
- **Health illiteracy:** Awareness about good health practices (personal hygiene, nutrition) remains poor
- **Political disempowerment:** little or no inclusion of people in planning, priority setting and in execution of health services
- Insufficient allocation of funds

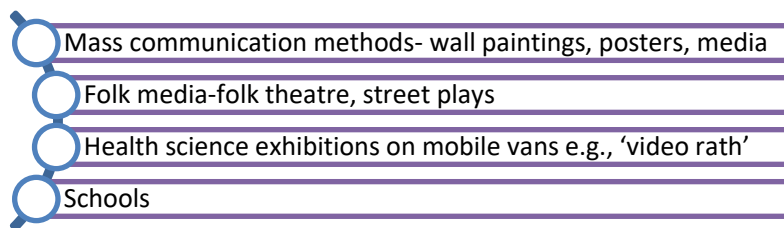
Suggestions to Improve Tribal Health

Abhay Bang committee in its report made a number of recommendations. These include:

- **Launch of National action plan** to bring Tribal Healthcare indicators on par with their respective state averages in next 10 years
- **Ensure adequate financing for Tribal health:** 2.5% GDP per capita must be allocated and spent
- Integrating Traditional Tribal Medicine into Primary Health Care
- A **Tribal Health Council** and **Directorate for Tribal health** must be constituted to focus solely on Tribal health including:



- **Imparting health literacy in a culturally sensitive manner** through use of:



- **Potential human resources at the local level** can be **trained** and **utilized** by health system to address the shortage of health personnel
- To attract **specialists, doctors** to Tribal areas and to ensure that they stay:
 - ✓ Increase salaries substantially
 - ✓ Provide well-equipped housing facilities
- **Empowering 'Gram Sabha'** under Panchayat Extension to Scheduled Areas (PESA) act, 1996 to guide health, healthcare related programmes and schemes
- Creation of **dedicated medical colleges** in Tribal districts
- **Improving data collection:** Creation of institutional mechanisms for collection and dissemination of data on Tribal Health status at regular intervals to make **evidence-based policy decisions and action**.

Implementation of these recommendations in addition to recommendations made by **Virginus Xaxa committee** will go a long way in improving the health of Tribals in the country.

Extra Mile: Few Important Schemes Related To STs

- **Eklavya Model Residential School (EMRS):** To provide high-quality middle and high-level education for ST students in remote areas, to allow them to take advantage of reservations in high-level and professional

education courses and as public and private jobs

- **Vanbandhu Kalyan Yojana:** Holistic development and welfare of the tribal population.
- **Van Dhan Yojana:** Skills upgrading and capacity-building of tribals so as to promote enterprise and marketing skills in them.
- **Pradhan Mantri JI-VAN yojana:** To provide financial assistance to Integrated Bio-ethanol Projects using lignocellulosic biomass and other such renewable feedstock.

SMILE-75 Initiative

- Government is planning to undertake the task of identifying and rehabilitating persons engaged in begging as a step forward to implement the SMILE Scheme.
- To mark 75 years of independence, Union Minister for Social Justice and Empowerment launched the “SMILE-75 Initiative”.
- Under the Smile-75 initiative, the 75 identified municipal corporations will undertake *comprehensive rehabilitation of persons engaged in the act of begging*.
- Municipal Corporations, in collaboration with NGOs and other stakeholders will cover several comprehensive welfare measures with focus on rehabilitation, provision of medical facilities, counselling, awareness, education, skill development, economic linkages and convergence with other Government welfare programmes etc

ABOUT SMILE SCHEME

- The Union Government has formulated an umbrella scheme “**SMILE - Support for Marginalized Individuals for Livelihood and Enterprise**”. to provide welfare measures to the Transgender community and people engaged in the act of begging.
- It **provides the targeted group with necessary legal protection and a promise to a secured life.**
- It also focuses on the aspect of social security by emphasizing on providing medical care, education, occupational opportunities and shelter.
- This will be done with the support of State Governments/UTs/Local Urban Bodies, Voluntary Organizations, Community Based Organizations (CBOs) and institutions and others.
- **Budget:** Rs 365 Crore (2021-22 to 2025-26)
- **Nodal Ministry:** Ministry of Social Justice & Empowerment
- It includes two Central Sector Scheme sub-schemes:
 - **Comprehensive Rehabilitation for Welfare of Transgender Person Scheme**
 - **Comprehensive Rehabilitation of persons engaged in the Act of Begging**



Comprehensive Rehabilitation for Welfare of Transgender Person Scheme

- The scheme has a provision to provide scholarships to the transgender students studying in IX and till post-graduation to enable them to complete their education.
- There is also a provision of setting up of Transgender Protection Cell to ensure timely registration, investigation and prosecution of offenses.
- Through Composite Medical Health it provides a comprehensive package in convergence with PM-JAY (Pradhan Mantri Jan Arogya Yojana) supporting Gender-Reaffirmation surgeries through selected hospitals.

Comprehensive Rehabilitation of persons engaged in the Act of Begging

- It will focus on survey and identification, mobilisation, rescue/shelter home and comprehensive resettlement.
- Pilot projects have already been initiated on Comprehensive Rehabilitation in ten cities namely Delhi, Bangalore, Chennai, Hyderabad, Indore, Lucknow, Mumbai, Nagpur, Patna and Ahmedabad.

Status of Beggars in India

- According to the 2011 census, the total population of persons engaged in the act of Begging and vagrants is about 4.13 lakh. Most of them struggle to gain access to basic needs of food, shelter and clothing, which drives them into a loop of poverty.
- West Bengal tops the chart followed by Uttar Pradesh and Bihar. Lakshadweep merely has two vagrants according to the 2011 census.
- Among the UTS, New Delhi had the largest number of beggars 2,187 followed by Chandigarh.
- Among the northeastern states, Assam topped the chart with 22,116 beggars, while Mizoram ranked low with 53 beggars

Govt. To Enumerate People Who Clean Sewers

- The government is now preparing to undertake a nationwide survey to enumerate all people engaged in hazardous cleaning of sewers and septic tanks.
 - ✓ Hazardous cleaning of sewers and septic tanks has led to at least 351 deaths since 2017.
- The enumeration exercise is part of the Union government's National Action Plan for Mechanised Sanitation Ecosystem (NAMASTE) scheme.

NAMASTE Scheme

- Launched in July 2022 with an objective to ensure safety and dignity of sanitation workers in urban India as well as providing sustainable livelihood to these workers.
- **Ministries involved:** It is launched as a joint initiative of the Ministry of Social Justice and Empowerment (MoSJE) and the Ministry of Housing and Urban Affairs (MoHUA).
- **Implementing agency** - National Safai Karamchari Financial Development Corporation (NSKFDC)
- **Coverage:** Five hundred cities (converging with AMRUT cities) will be taken up under this phase of NAMASTE. It will be implemented for the period 2022-26.

Aim

- Zero fatalities in sanitation work in India. All sanitation work to be performed by skilled workers
- No sanitation workers come in direct contact with human faecal matter
- Sanitation workers are collectivized into SHGs and are empowered to run **sanitation enterprises**
- All Sewer and Septic tank sanitation workers (SSWs) to have access to alternative livelihoods

- **Extending Insurance Scheme Benefits**
 - ✓ These workers and their families will be covered under the Ayushman Bharat- Pradhan Mantri Jan Arogya Yojana (AB-PMJAY).
 - ✓ The premium for AB-PMJAY for those identified SSWs families who are not covered earlier shall be borne under NAMASTE.
- **Livelihood Assistance:** Action Plan will promote **mechanization & enterprise development**.
 - ✓ Identified SSWs and their dependants will be given counselling on available livelihood choices and an opportunity to acquire alternative skills, if they so desire.
 - ✓ An SSW may choose to continue working in the sanitation sector, thereby becoming eligible for receiving capacity building training.
 - ✓ The worker may choose to explore an alternative livelihood option or an entrepreneurial venture.
- **Saturation with Social Security Schemes' benefits:** The identified SSWs and their family members will be extended benefits of all the social security schemes.
- **Other assistance:** The scheme will include capital subsidies of up to ₹5 lakh on sanitation machinery costing up to ₹15 lakh and interest subsidies on loans.
 - ✓ Interest rates will be capped between 4-6% for the beneficiaries.
 - ✓ The scheme also provides for training the workers in the use of these machines, during which time a stipend of up to ₹3,000 per month will be provided.

Key Highlights

- **Practice of manual scavenging does not exist in India anymore** as per the Ministry of Social Justice and Empowerment (MoSJ&E). This is because all manual scavengers had been accounted for and enrolled into the rehabilitation scheme.
- **Earlier scheme for the Rehabilitation of Manual Scavengers**
 - ✓ Self-Employment Scheme for the Rehabilitation of Manual Scavengers (SRMS) was started in 2007.
 - Provisions of NAMASTE scheme are similar to the ones that the SRMS already provides for, save for one component — a one-time cash transfer of ₹40,000.
 - ✓ Under the SRMS, the Social Justice Ministry had identified a total of 58,098 eligible manual scavengers in a nationwide survey conducted in 2018.
 - ✓ As of July 2022, data from the Ministry showed that:
 - All of these beneficiaries had been given the one-time cash transfer of ₹40,000,
 - 18,880 had opted for skills training in alternative occupations, and
 - 2,051 had opted for loans under the scheme's subsidies to start alternative businesses.

Child Mortality: 35 Per 1,000 Live Births

- India has taken rapid strides in reducing child mortality since 2014 from 45 per 1,000 live births to 35 per 1,000 live births in 2019.
- Union Minister of State launched '**Paalan 1000**' National Campaign & Parenting App.
- A baby's brain development begins during pregnancy and is influenced by the pregnant woman's health, nutrition and environment
- At the event, she said that the first 1,000 days encompasses conception as well as the first two years of a growing child's life and during this period, the child needs the right nutrition, stimulation, love and support.
 - ✓ The first 1,000 days establishes a solid platform for a child's physical, mental, emotional, cognitive and social health.
- Therefore, the concept of 'Continuum of Care', that emphasises on care during critical life stages in order to improve child survival, is being followed under the national programme.

Paalan 1000

- The 'Paalan 1000 - Journey of the First 1000 Days', focuses on the cognitive developments of children in the first 2 years of its life.
- It also includes the parenting app to focus on child health.
- The app will provide practical advice to caregivers on what they can do in their everyday routine and will help clear doubts.
- The app combines coaching for parents, families and other caregivers with services designed to meet the families' basic needs.
- The programme is aligned with the mission of the

Rashtriya Bal Swasthya Karyakram (RBSK)

- Rashtriya Bal Swasthya Karyakram (RBSK) is a program to improve the overall quality of life of children enabling all children achieve their full potential.
- It aims at early identification and early intervention for children from birth to 18 years to cover 4 'D's –
 - Defects at birth, Deficiencies, Diseases, Development delays (including disability).
- Children diagnosed with identified selected health conditions are provided early intervention services and follow-up care at the district level.
- These services are provided free of cost, thus helping their families reduce out of pocket expenditure incurred on the treatment.
- To facilitate screening of children, there is a strong convergence with:
 - Ministry of Women and Child Development for screening children in the age group 0 – 6 years enrolled at Anganwadi centres and
 - Ministry of Education for screening the children enrolled in Government and Government aided schools.

Rashtriya Bal Swasthya Karyakram (RBSK), emphasising responsive care and focused interventions during the first 1,000 days.

52% Rural Homes Now Have Piped Water

- PM Modi recently declared that India had reached a landmark by connecting **10 crore rural households (52% of total rural households)** to piped clean water under the Jal Jeevan Mission.
- At the State level, Goa, Telangana and Haryana have achieved 100% tap connectivity to all households in the State.
- UTs like Puducherry, the Andaman and Nicobar Islands, Dadra & Nagar Haveli and Daman & Diu have also provided 100 % of their households with tap water connections.

Jal Jeevan Mission (JJM)

- Introduced in 2019. It emphasises the significance of reaching 100% **Functional Household Tap Connection (FHTC)** by 2024 to all households in **rural India (Har Ghar Jal)** at affordable service delivery charges envisaging supply of **55 litres of water per person per day**
- It aims to provide functional tap connection to schools, anganwadi centres, Health and wellness centres, community buildings, etc.
- It is an initiative of the **Ministry of Jal Shakti**
- The Mission also implements **source sustainability measures** (such as recharge and reuse through grey water management, water conservation, rain water harvesting, water supply infrastructure) as mandatory elements.
- The JJM is based on a **community approach** to water and will include extensive Information, Education and Communication (IEC) as a key component of the mission.
- The JJM rests on **four pillars** - people's participation, stakeholder participation, political will and optimum utilisation of resources.
- The fund sharing pattern between the Centre and states is 90:10 for Himalayan and North-Eastern States, 50:50 for other states, and 100% for Union Territories.

Objectives of JJM

- To promote and ensure voluntary ownership among local communities by way of contribution in cash, kind and/or labour and voluntary labour (shramdaan).
- To empower and develop human resources in the sector such as the construction, plumbing, water quality management, water treatment, etc.
- To bring awareness on various aspects and significance of safe drinking water and involvement of stakeholders in manner that make water everyone's business

Paani Samitis

- **Local people and Gram Sabhas** and other institutions of local governance have been given an unprecedented role in the campaign.
- Local women are trained for water testing and are members of 'Paani Samitis' (village water and sanitation committees under JJM).
- JJM is managed by paani samitis to plan, implement, manage, operate and maintain village water supply systems.
- These consist of 10-15 members, with at least 50% women members and other members from SHGs, accredited social and health workers, Anganwadi teacher, etc.
- The committees prepare a one-time village action plan, merging all available village resources. The plan is approved in a Gram Sabha before implementation.
- The mobile application will provide details of water infrastructure, an Aadhaar-verified data set of beneficiaries, and water quality and contamination-related information for each village.

- Water quality management information system provides details of water samples received and tested across labs and states.

Nicotine Replacement Therapy

Nicotine Replacement Therapy (NRT) is likely to be *added to the National List of Essential Medicines (NLEM)*.

Nicotine Replacement Therapy (NRT)

- It is a WHO-approved 12-week regimen that reduces smokers' dependency on cigarettes gradually and finally leads to them to quit smoking.
- NRT gives nicotine – in the form of **gum, patches, sprays, inhalers, or lozenges** – but not the other harmful chemicals in tobacco.
 - Lozenges are solid dosage forms that are dissolved slowly in the mouth.
- **NRT can help relieve some of the physical withdrawal symptoms so that a nicotine-addicted person can focus on the psychological (emotional) aspects of quitting.**
- Many studies have shown using NRT can double the chances of quitting smoking.
- On average, the daily therapy cost could range between Rs 10-13 per patient and is taken over 60-90 days.

National List of Essential Medicines (NLEM)

- Essential medicines are those that satisfy the priority healthcare needs of the majority of the population.
- The primary purpose of NLEM is to promote rational use of medicines considering the three important aspects i.e., **cost, safety** and **efficacy**.
- Medicines in NLEM should be available at affordable costs and with assured quality.
- The first NLEM of India was prepared and released in 1996.
- Under the latest NLEM 2015, a total 376 drugs are under price control.
 - ✓ The revision in the NLEM every 5 years was delayed in 2020 due to **Covid-19 pandemic**.
- **Issued by:** Ministry of Health and Family Welfare
- It is based on WHO's Model List of Essential Drugs.

Why NRT Is Needed To Be Added To NLEM

- India has one of the largest tobacco user populations globally, with 267 million tobacco users (99 million smokers & 199 million smokeless tobacco users).
- A huge consumer base lies untapped, with the NRT therapy used under 1% of the “quitter” population.
- NRT is a nearly Rs 200 crore market growing at a robust 10% and is dominated by a handful of companies.
- Once added to the NLEM, it will boost the availability of NRT across the country at affordable prices, with states and central agencies rolling out smoking cessation programmes.

Family Courts (Amendment) Bill

The Rajya Sabha has passed the Family Courts (Amendment) Bill, which seeks to extend statutory cover to family courts set up in **Himachal Pradesh & Nagaland**.

- The Family Courts (Amendment) Bill seeks to extend the application of the Act to the state of Himachal Pradesh, with effect from February 15, 2019, and to the state of Nagaland, with effect from September 12, 2008.
- All actions taken under the Act in both the states, including the appointment of judges, and orders and judgments passed by the Family Courts, will also be deemed to be valid from these dates retrospectively.

Family Courts (Amendment) Bill

- The Family Courts (Amendment) Bill was introduced and passed in Lok Sabha in July 2022. The Bill amends the **Family Courts Act, 1984**.

- The Family Courts Act, 1984 allows state governments to establish Family Courts.
- The Central Government is empowered to **notify dates** for the Act to come into force in different states.
- The governments of Himachal Pradesh and Nagaland have set up Family Courts in their states under the Act. However, the central government had not extended the application of the Act to these states.

Family Courts Act, 1984

- According to **59th Law Commission Report** (1974) and **Committee on the Status of Women** (1975), it was recommended that family disputes should get handled differently from conventional civil proceedings.
- Subsequently, the Family Courts Act was passed in 1984.
- Under the Act, setting up of family courts & their functioning comes under the purview of state governments in consultation with their respective **High Courts (HC)**.
- As per the Act, it is mandatory for the state government to set up a family court for every city or a town whose population exceeds one million.
- The state government appoints the family court judges with the approval of HC
- 716 Family Courts are functional across the country (February 2022).

What Was The Need For An Amendment And Why Does It Only Concern Two States?

- Notably, the Central government has to notify a date for the Act to come into force in a State where such courts have been set up. If there is no government notification, it raises questions about the jurisdiction and statutory powers of these family courts.
- While Himachal Pradesh set up family courts in Shimla, Dharamshala and Mandi, Nagaland established two such courts at Dimapur and Kohima.
- The issue came to light last year after a petition was filed in the Himachal Pradesh High Court (**Omkar Sharma vs. State of Himachal Pradesh**).

Challenges Faced by Family Courts in India

- **“Family” is not defined under the Act:** The family court only hears cases involving marriage, child support, and divorce. Thus, issues resulting from economic implications that affect the family in numerous ways are not addressed.
- **Lack of proper enforcement of the law:** The Act gives state governments the authority to create regulations for the operation of family courts in their jurisdictions. Still, most state governments have not effectively utilised these powers to create rules and set up family courts.
- **Complicated law:** Family court follows the **Code of Civil Procedure** principles in suits and proceedings, it is difficult for the average person to comprehend the complicated law.

Ayushman Bharat to Cover Trans People

The Union government has announced that the transgender persons will get yearly health insurance of Rs 5 lakh each under the Ayushman Bharat scheme. In this regard, National Health Authority, under the Health Ministry, signed a MoU with Social Justice Ministry.

Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PMJAY)

- Launched in September 2018, the scheme aimed to offer **cashless secondary and tertiary care services** to the poor & vulnerable population in the society.
 - ✓ It offers Health Benefit Packages which covers surgery, medical and day care treatments, cost of medicines and diagnostics.

✓ It was launched as a second component of the 'Ayushman Bharat' scheme.

- This scheme aimed to offer medical coverage of Rs. 5 lakh per family per year
- The scheme covers over nearly 40% of the population. The scheme is targeted to cover 10.74 crore rural families & identified occupational category of urban worker's families.
- The beneficiaries are identified by latest Socio-Economic Caste Census (SECC) data.

Role of National Health Authority (NHA)

- NHA is the apex body responsible for implementing India's flagship public health insurance/assurance AB-PMJAY scheme It has been entrusted with the role of:
 - ✓ designing strategy, building technological infrastructure
 - ✓ Implementation of National Digital Health Mission to create a National Digital Health Eco-system.
- To implement the scheme at the State level, State Health Agencies (SHAs) in the form of a society/trust have been set up by respective States.

Key Highlights

- **Eligibility:** The scheme will cover all transgender persons not receiving such benefits from other centre/state sponsored schemes.
 - ✓ Benefits will be extended to those holding a transgender certificate issued by the national portal for transgender persons.
- **Health package offered:** The health package, being offered to transgender persons, will also cover components of hormone therapy and gender re-affirmation surgery.
 - ✓ This package can be redeemed at all private and government healthcare facilities empanelled under the AB PMJAY.
- **New cards will be generated for verified beneficiaries**
 - ✓ An 'Ayushman Bharat TG Plus Card' will be generated for verified beneficiaries.
- **Definition of family changed:** The Rs 5-lakh cover is for an entire family under the Ayushman Bharat scheme. But the govt. changed the definition of the family to provide the total yearly coverage to transgender persons.
 - ✓ Health cards issued to trans persons will not cover their family members.

Other Changes Announced With Respect To The Ayushman Bharat Card

- The Ayushman Bharat card will now come with the logos of both the Centre and the state.
 - ✓ The NHA has allowed co-branding with logos and names of both schemes (Ayushman Bharat and State health insurance scheme) on the new cards.
 - ✓ Until now, cards issued to eligible beneficiaries, carried the logo of the Centre only. Many states had objected to this because they contribute 40% of the funds required to implement the scheme while the Centre pays the rest.
- Hence, the beneficiary card for Ayushman Bharat can now be used to avail benefits for any existing state health insurance schemes as well.

PARAKH

- The Union government plans to create a benchmark framework for assessing students at the secondary and higher secondary levels.
- The aim is to achieve **uniformity among state and central boards**, which now use diverse evaluation criteria, resulting in huge differences in scores.

- The proposed regulator, **PARAKH** - *Performance Assessment, Review and Analysis of Knowledge for Holistic Development*, will work to eliminate the emphasis on rote learning that the New Education Policy (NEP) envisions.

About

- PARAKH will act as a constituent unit of the NCERT and will be tasked with -
 - ✓ **Setting norms, standards and guidelines** for student assessment and evaluation for all recognised school boards of India.
 - ✓ Holding **periodic learning outcome tests** like the National Achievement Survey (NAS) and State Achievement Surveys.
 - If the plans are on track, the NAS in 2024 will be conducted by PARAKH.
- PARAKH team will consist of leading assessment experts with a deep understanding of the education system in India and internationally.
- PARAKH will eventually become the **national single-window source** for all assessment-related information and expertise, with a mandate to assist all forms of learning assessment, both nationally and globally, where relevant.

Significance

- **Uniformity:** PARAKH will contribute to addressing the issue of students from some state boards being at a disadvantage during college admissions when compared to their peers from CBSE schools.
- **Standardisation:** It will establish and implement technical standards for test design, administration, analysis and reporting at all levels of schooling.
- **Skill development:** It will encourage and help school boards to shift their assessment patterns towards meeting the skill requirements of the 21st century.

RBI's Seven Surveys

Speaking about the state of Indian economy, RBI recently released the results of seven surveys that it conducts

Confidence Survey (CCS)

- The CCS asks people across 19 cities about their current perceptions (vis-à-vis a year ago) and one-year ahead expectations on the general economic situation, employment scenario, overall price situation and own income and spending.
- Based on the responses, the RBI comes up with two indices: the **Current Situation Index (CSI)** and the **Future Expectations Index (FEI)**.
- The value of 100 is the neutral level for both CSI and FEI. An index below the 100 mark implies people are pessimistic and a value higher than 100 conveys optimism.
- The CSI has been recovering since falling to a historic low in July last year. However, despite the improvement, the CSI stays firmly in the negative territory — suggesting consumer confidence is still considerably away from the neutral territory.
- The FEI is in the positive territory but even now it stays below the pre-pandemic levels.

Inflation Expectations Survey (IES)

- IES tracks people's expectations of inflation. The biggest worry during phases of rapid inflation is that if inflation is not controlled soon, it can lead to people getting into the habit of expecting high inflation. This, in turn, alters people's economic behaviour.
- Households' inflation perception for current period has moderated by 80 bps to 9.3% in latest survey round.

OBICUS Survey

- OBICUS stands for "Order Books, Inventories and Capacity Utilisation Survey". This survey covered 765 manufacturing companies in an attempt to provide a snapshot of demand conditions in India's manufacturing sector from January to March 2022.
- The key variable is **Capacity Utilisation (CU)**. A low level of CU implies that manufacturing firms can meet the existing demand without boosting production.
- That, in turn, has negative implications for job creation and the chances for private sector investments in the economy.
- The CU is well above the pre-pandemic level — suggesting India's aggregate demand is recovering steadily.

Industrial Outlook Survey (IOS)

- Just like the CCS tries to find consumer confidence, this survey tries to track the sentiments of the businessmen and businesswomen.
- The survey encapsulates qualitative assessment of the business climate by Indian manufacturing companies for various quarters.
- As per the recent survey, businesses were optimistic (above the 100 level) for Q1:2022-23 (April, May and June).

Services and Infrastructure Outlook Survey (SIOS)

- Like CCS and IOS, SIOS does a qualitative assessment of how Indian companies in the services and infrastructure sectors view the current situation and the future prospects.

- As per the recent survey, the companies in the services space are far more optimistic than the companies in the infrastructure sector.

Bank Lending Survey (BLS)

- BLS captures the mood — qualitative assessment and expectations — of major scheduled commercial banks (SCBs) on credit parameters (viz., loan demand and terms & conditions of loans) for major economic sectors.
- The BLS found that the bankers' assessment of loan demand in Q1: 2022-23 remained positive for all major sectors though the sentiments were somewhat down from the level reported in the previous quarter.
- Sentiments on overall loan demand in the second, third and fourth quarters also remained high.

Survey of Professional Forecasters (SPF)

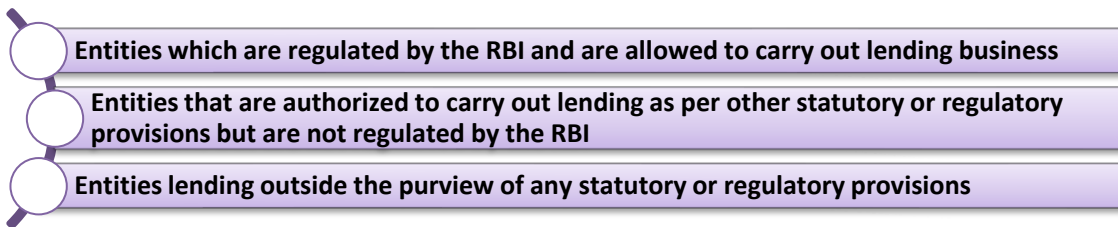
- SPF is a survey of 42 professional forecasters (outside the RBI) on key macroeconomic indicators such as GDP growth rate and inflation rate in the current year and the next financial year.
- India's real GDP is expected to grow by 7.1% in 2022-23, and it is expected to grow by 6.3% in 2023-24.

Digital Lending Regulation

- RBI recently instituted a framework for regulating the *digital lending* landscape in the country.
- The regulations are based on recommendations received from its **Working Group on 'Digital Lending including lending through online platforms and mobile apps'** (WGDL) which was constituted January 2021.

Digital Lending landscape in India

- Digital lending involves *giving and recovering loans* through **web platforms or mobile apps**.
- It utilises automated technologies and algorithms for decision making, customer acquisition, disbursements and recovery. Not only does it lower costs but also ensures speedy disbursal.
- RBI has categorised digital lenders into three groups:



- **Lending Service Providers (LSPs)** act in partnership with Non-Banking Financial Companies (**NBFCs**) who give credit to the customer using the former's platform, making it a multi-sided platform.

Need for Regulations

- LSPs often resort to *reckless lending* practices by giving credit beyond a borrower's repayment capacity. The risk is mitigated by spreading it to all users by charging higher interest rates.
- The absence of standardised disclosure and regulatory norms made it cumbersome to assess a participant's operational legitimacy.
- Between January and the end of February last year, there were about 1,100 lending apps available for Indian android users of which about 600 were illegal.
- They were either unregulated by the RBI or had NBFC partners with an asset size of less than ₹1,000 crore, prompting doubts on its operability.
- The space is largely dominated by NBFCs. Its customers particularly include small borrowers without a documented credit history and thus, not served by traditional financial institutions.

- RBI has pointed at concerns of mis-selling, breach of data privacy, unfair business conduct, charging of exorbitant interest rates, and unethical recovery practices hurting consumer confidence and said that they had to be mitigated.

New Regulations

- The latest regulatory framework is focussed on the digital lending ecosystem of RBI's regulated entities (REs) and LSPs engaged by them to extend credit facilitation services.
 - ✓ REs are entities regulated by RBI, such as a bank or a NBFC.
 - ✓ LSP is an agent of a balance sheet lender who carries out one or more of the lender's functions in customer acquisition, pricing support, etc.
 - Balance sheet lender undertakes balance sheet lending/portfolio lending - where the **platform entity** provides a loan **directly** to a consumer/business borrower thereby assuming the risk itself.
 - It is different from peer-to-peer (P2P) lending in which the **platform does not lend** to the borrower. The platform **links** borrowers with investors.
 - ✓ The majority of LSPs are non-recognized and thus unregulated by the RBI or others, resulting in the majority of digital loans emanating from them.
- However, the lenders in the other categories do not come under the new guidelines and can consider formulating appropriate rules and regulations on digital lending based on the recommendations of the working group.
- All loan disbursements and repayments are to be executed directly between bank accounts of the borrower and the entity (banks/NBFC). Thus, it eliminates the presence of a nodal pass-through or pool account of the LSP.
- Lenders must inform the borrower about all the fees, charges, and the annual percentage rate (APR) in a standardised format. This would also help borrowers make better comparisons with industry peers.
 - ✓ APR refers to the annual rate that is charged for borrowing a loan and is inclusive of processing fees, penalties and all other charges associated with it.
- Charges payable to LSPs in the credit intermediation process will be paid directly by the bank and not the borrower.
- Further, LSPs **cannot raise the credit limit** of their customers without prior consent of the customer.
- A **cooling-off period** shall be provided within the loan contract during which the borrower shall have the option to exit the digital loans by paying the principal and proportionate APR without any penalty.
- Regulated Entities are required to ensure that any lending carried out through digital lending apps has to be reported to **Credit Information Companies (CICs)**.

Grievance Redressal

- To address the need for a dedicated resolution framework, **entities** would have to appoint a grievance redressal officer.
- The ecosystem would also fall under the purview of the **RBI's Integrated Ombudsman Scheme (RB-IOS)** if the complaint is not resolved within **30 days of receipt**.

Data Protection

- Mobile phone resources, such as files and media, contact list, call logs, and telephony functions **cannot be accessed**.
- However, **one-time access** can be taken to camera, microphone, location, or any other facility necessary for **onboarding/ KYC requirements** only with the explicit consent of the borrower.
- All data collected by the apps should be "**need-based**" and must be with prior and explicit consent of the borrower. Further, users can also revoke previously granted consent.

- Considering the multi-sided nature of the business, user consent would be mandatory for sharing any personal information with a third-party.

Impact

- The digital lending guidelines will lead to greater regulation of fintechs.
- They will put the **onus** of customer and credit diligence **on the lending institution**, while enhancing the borrowing experience and combating malpractices such as privacy breaches, mis-selling, and excessive interest rates.
- While they will create short-term challenges for certain fintechs, the long-term protection of consumers/borrowers, coupled with the RBI's recognition of fintechs as LSPs will, be a boon for digital lending in the medium term.
- The regulations will increase consumer confidence in the digital lending ecosystem, through enhanced data privacy, security and transparency.

Way Ahead

- The share of digital lending may be small at present, but given their scalability they may potentially become significant players soon. Implications here may have a spillover effect on the broader financial system.
- With the economic activity reviving at a decent pace post pandemic and our expectations of a GDP growth of 7.3% this fiscal, it is expected that the demand for loans across the credit ecosystem to be higher this fiscal despite higher inflation and interest rates.

LIBOR

- Recently, LIBOR rose roughly by 2.5 basis points to 2.83%, the highest since November 2008.
- **London Interbank Offered Rate (LIBOR)**, is the benchmark interest rate at which major global banks lend to one another.
- It is an indicator of the health of the financial system and provides an idea of the trajectory of impending (forthcoming) policy rates of central banks.
- LIBOR is also the basis for consumer loans in countries around the world, so it impacts consumers just as much as it does financial institutions.
- The interest rates on various credit products such as credit cards, car loans, and adjustable-rate mortgages fluctuate based on the interbank rate.
- It is administered by the **Intercontinental Exchange (ICE)**, which asks major global banks how much they would charge other banks for short-term loans.
- It is computed for **five different currencies** - Swiss franc, Euro, Pound sterling, Japanese yen and US dollar.
- The rate is calculated using the Waterfall Methodology, a standardised, transaction-based, data-driven, layered method.
- **LIBOR is being phased out** as a loan benchmark because of the role it played in worsening the 2008 financial crisis as well as scandals involving Libor manipulation among the rate-setting banks.
- It is being replaced by the **Secured Overnight Financing Rate (SOFR)** on June 30, 2023, with phase-out of its use beginning after 2021.

Benami Law

Supreme Court Bench led by NV Ramana had delivered a Judgment on **Benami Transactions (Prohibition) Amendment Act, 2016** in an appeal filed by the central government against the Calcutta High Court Judgment holding that the 2016 Amendment act was prospective in nature.

- Supreme Court struck down **one of the provisions** of the Benami Transactions (Prohibition) Act of 1988 which provides for the punishment of a maximum jail term of 3 years or a fine or both for those indulging in benami transactions.
- Also, Supreme Court declared retrospective use of Benami law unconstitutional

What is a Benami Transaction?

- Benami is a Hindi word which literally means '**without a name**'.
- Under the act, Benami transaction refers to a transaction or an arrangement:
 - a. Where a property is transferred to, or is held by, a person and the consideration for such property has been provided, or paid by, **another person**; and
 - b. the property is held for the immediate or future benefit, direct or indirect, of the person who has provided the consideration

To simply put, if Mr. A has paid for the property but it is in the name of some other person Mr. B then it is labeled as a Benami property.

- But there are exemptions in the act:
 - ✓ when the property is held by a member of a **Hindu Undivided Family (HUF)** or on behalf of HUF or behalf of his spouse or children then it can't be considered Benami
 - ✓ Also, if the property is held in a **fiduciary (guardian/trustee) capacity** it doesn't come under the ambit of the law

Benami Transaction (Prohibition) Act, 1988: It was enacted in 1998 with following objectives:

- Prevent and restrict Benami transactions
- Give power to the state to acquire Benami property
- Prosecute persons who enters into Benami transactions

However, from 1988 till 2016 the act has not been put into effect as the *rules, regulations and procedures* for its implementation were never framed as a result of which it remained a '*toothless tiger*'. In particular there were no regulations relating to the confiscation of property

Benami Transaction (Prohibition) Act, 2016

- The Amended act increased the no of sections from 9 to 72.
- *Objectives of the act:*
 - ✓ To curb black money, money laundering, tax evasion, etc.
 - ✓ Strengthen the Benami Act, of 1988
 - ✓ Increase tax revenue by bringing down corruption and false trade practices
- *The Benamidar* is a person or fictitious person under whose name the benami property is transferred or held & is not the beneficial owner of the transaction under consideration
- *Scope of the term 'Property':*
 - ✓ Property has been defined in a very wide manner to mean asset of any kind
 - ✓ It may be movable or immovable, tangible or intangible, and corporeal or incorporeal covering within its ambit land, building, shares, securities etc.
- **Power of Authorities** are akin to those of civil court
- **Criminal prosecution Sec 3(2):** It extended the three-year imprisonment to seven years and fine of up to 25% of the fair market value of the property, if a person enters into any benami transactions.

- ✓ 1988 Act mandates punishment of 3 years' imprisonment for those who have entered into benami transactions between September 5, 1988 and October 25 2016-
- **Confiscation of Benami property: Sec 5** of the act empowers the Centre to confiscate any property that has been tagged as a Benami property

Changes Brought By SC Judgment To Benami Transactions (Prohibition) Act, 2016

- The SC ruled that Benami Transactions (Prohibition) Amendment Act, 2016 does not have retrospective application and will apply prospectively
 - ✓ Authorities concerned therefore cannot initiate or continue **criminal prosecution** on confiscation proceedings (Sec 5) for transactions entered into prior to the coming into force of the 2016 act
- Court termed Section **3(2) of the Benami Property Act, 1988** as unconstitutional as it is violative of *Article 20(1)* of the constitution. As an effect, Section 3(2) of the 2016 Act also becomes unconstitutional
 - ✓ It will not affect the civil consequences contemplated under the Act
- Forfeiture provision under **Section 5 of the 2016 Act** being punitive in nature could only be applied prospectively and not retroactively.

Article 20: makes up of 3 clauses:

- **Article 20(1):** Provision against Ex post facto law: No one should be convicted for any offence other than those violating the law in force at the time of the commission of the offence
- **Article 20(2):** No Double Jeopardy: no one could be convicted and punished more than once for the same offence involving the same set of facts
- **Article 20(3):** Prohibition against self-incrimination: No person accused of any offence shall be compelled to be a witness against himself.

Implementation of the Act

- Government has taken various steps for effective implementation of the act
- Till January 2019 Income Tax (IT) department had confiscated assets worth 6,900 crore and issued show-cause notices in more than 2,100 cases involving benami properties valued at over 9,600 crores
- The tax department has set up 24 dedicated '**Benami Prohibition Units**'.
- **Reward scheme** for informants was announced to encourage people give information about benami transactions and get rewards up to 1 crore

Core Sector Output

India's eight core sectors' output growth moderated to 12.7% in June from 18.1% in May, with all sectors except crude oil registering an uptick in production.

INDEX OF EIGHT CORE INDUSTRIES (ICI)

- ICI gives an indication of the production performance of the industries which are of a 'core' nature. These industries **have a major impact on the Indian economy and significantly affect most other industries** as well.
- It measures combined and individual performance of production in **eight core industries**. The eight core industries in the **decreasing order of their weight** are **Refinery Products, Electricity, Steel, Coal, Crude Oil, Natural Gas, Cement, Fertilizers**.
- The eight core industries comprise **40.27%** 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**, Department for Promotion of Industry and Internal Trade (DPIIT).

Index of Industrial Production (IIP)

- IIP is a composite indicator that measures changes in the volume of production of a basket of industrial products over a period of time

- It measures the growth rate of industry groups classified under:

Broad sectors

- Mining (14.4%), Manufacturing (77.6%) and Electricity (8%)

Use-based sectors

- Basic Goods, Capital Goods and Intermediate Goods.

- It is computed and published by **National Statistical Office (NSO)**, Ministry of Statistics and Programme Implementation, with a time lag of six weeks from the reference month
 - ✓ National Sample Survey Office (NSSO) merged with the Central Statistical Office (CSO) to form NSO.
- The **base year** for the calculation is **2011-12**. The index value is compared to the value it had in the same month last year to figure out the economy's industrial health.

Significance of IIP

- It provides a single representative figure to measure the general level of industrial activity in the economy on a monthly basis.
- It is used by government agencies including Ministry of Finance, RBI etc, for **policy purposes** & by financial intermediaries, policy analysts and private companies for various analytical purposes.
- It is used for the compilation of Gross Value Added (GVA) of the manufacturing sector in the **Gross Domestic Product (GDP)** on a quarterly basis.



Department for Promotion of Industry and Internal Trade (DPIIT)

- DPIIT is a 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 **foreign direct investment (FDI)** flows to the country

Extra Mile

Purchasing Managers' Index (PMI)

- It is derived after monthly surveys of different companies.
- It measures activity at the purchasing or input stage.
 - ✓ In this sense, it is very different from industrial production which is indicative of actual production. E.g., IIP measures output.
- There are two types of PMI — Manufacturing PMI and Services PMI.
- PMI does not capture informal sector activity.
- PMI data for India is released by S&P Global - a global major in financial information and analytics.
 - ✓ Earlier PMI data for India was released by IHS Markit before its merger with S&P.

Reading of the PMI

- A PMI number greater than 50 indicates expansion in business activity.
 - ✓ A number less than 50 shows contraction.
- The rate of expansion can also be judged by comparing the PMI with that of the previous month data.
 - ✓ If the figure is higher than the previous month's then the economy is expanding at a faster rate. If it is lower than previous month then it is growing at a lower rate

Outflow From Gold ETFs

- Gold Exchange Traded Funds (ETFs) witnessed a net outflow of Rs 457 crore in July as investors parked their money in other asset classes as part of their portfolio rebalancing strategy.
- Expectations of a rising interest rate cycle have led to a fall in gold prices, thus impacting the net flows into the gold ETFs.
- Also, a falling rupee is another factor that has impacted the demand and supply dynamics of gold.

Gold ETFs

- Gold ETF, which aims to track the **domestic physical gold price**, are passive investment instruments that are based on gold prices and invest in gold bullion.
 - ✓ **Bullion** is the general name for pure gold or silver (at least 99.5%) which have been transformed into bars or minted into coins for investment purposes.
- In short, gold ETFs are units representing physical gold which may be in **paper or dematerialized form**.
- Regulated by SEBI, one gold ETF unit is equal to 1 gram of gold and is backed by physical gold of very high purity.

Benefits of Gold ETFs

- An investor can buy or sell gold ETF units just like an equity share on the exchanges during market hours through a trading account. Thus, they combine the flexibility of stock investment and the simplicity of gold investments.
- The convenience of investing in multiple of 1 unit allows every investor to participate in the Gold ETF and makes it easy to accumulate units over a period.
- Since ETFs are held in electronic form in a Demat account, the investor does not have to worry about security, storage and gold purity.
- The cost of acquisition of Gold ETFs is low due to the absence of making charges and other related expenses.
- It is a **tax-efficient way** of owning gold as income earned from Gold ETF is treated as capital gains, short-term or long-term, depending on the holding period.
- There is no wealth tax, no security transaction tax, no VAT and no sales tax on them.
- They are also accepted as collateral for loans.

Exchange Traded Fund (ETFs)

- ▶ It is a marketable security that **tracks an index, a commodity, bonds, or a basket of assets like an index fund**. In simple terms, ETFs are funds that track indexes such as Nifty or BSE Sensex, etc.
- ▶ Unlike regular mutual funds, an **ETF trades like a common stock on a stock exchange**.
 - ▷ The traded price of an ETF changes throughout the day like any other stock, as it is bought and sold on the stock exchange. This is different from mutual funds, which only trade once a day after the market closes.
- ▶ The trading value of an ETF is based on the **net asset value (NAV)** of the underlying stocks that an ETF represents.
 - ▷ Net asset value (NAV) is the value of a fund's asset minus the value of its liabilities, per unit. **In simple terms it is the market value of the securities held by the scheme.**
- ▶ ETFs typically have **higher daily liquidity and lower fees** than mutual fund schemes, making them an attractive alternative for individual investors.
- ▶ **Passive management** is the chief distinguishing feature of ETFs. Essentially, passive management means the fund manager makes only minor, periodic adjustments to keep the fund in line with its index.

Essential Commodities Act Invoked

- With tur dal prices rising since mid-July and reports of some traders creating artificial supply squeeze by restricting sales, the Centre has invoked the **Essential Commodities Act, 1955**.
- Tur prices have risen amid slow progress in kharif sowing as compared to last year due to excess rainfalls and water logging conditions in parts of major Tur growing states of **Karnataka, Maharashtra and MP**.

- States and Union Territories have been asked to direct stockholder entities to upload the data of stocks held by them on an online monitoring portal of the Department of Consumer Affairs, on a weekly basis.

Background

- The Essential Commodities Act (ECA), 1955 was enacted at a time when India was facing food scarcity due to low levels of food grains production.
- The country was dependent on imports and assistance (wheat imports from the US under PL-480) to feed the population.
- ECA was enacted, to stop hoarding and black marketing of food and gives consumers protection against irrational spikes in prices of essential commodities.

Essential Commodity

- There is no specific definition of essential commodities in ECA, 1955. It states that an “essential commodity” means a commodity specified in the Schedule of the Act.
- The Act gives powers to the **central government** to add or remove a commodity in the Schedule.
- By declaring a commodity as essential, the government can control the production, supply, and distribution of that commodity, and impose a stock limit.

Essential Commodities Included Under The Act

The Schedule at present contains the following **seven commodities**:

- Drugs
- Fertilisers
- Foodstuffs including edible oils
- Petroleum and petroleum products
- Hank yarn made wholly from cotton
- Raw jute and jute textiles
- Seeds of food-crops and seeds of fruits and vegetables, seeds of cattle fodder, jute seed, cotton seed

Issues With ECA

- The Act has created **market distortions** that have prevented efficient development of agricultural markets.
- As almost all crops are seasonal, ensuring round-the-clock supply requires adequate build-up of stocks during the season. So, it may not always be possible to differentiate between genuine stock build-up and speculative hoarding.
- Also, there can be genuine shortages due to **weather-related disruptions** in which case prices will move up. So, if prices are always monitored, farmers may have no incentive to farm.
- Further, the Act does not distinguish between hoarders and firms that genuinely need to hold on to these stocks due to the nature of their operations.
 - ✓ For example, **food processing industries** need to maintain large stocks to run their operations smoothly. Stock limits curtail their operations.
- In such a situation, large scale private investments are unlikely to flow into food processing & cold storage facilities.
- The Act has also reduced the effectiveness of **free trade and flow of commodities** from areas with surplus stock to markets with higher demand.
- Despite, 76,000 raids conducted under the ECA in 2019, the conviction rate was very low. This shows that the ECA only seems to **enable rent-seeking and harassment.**

Kerala Opposes Changes To MMDR Act

The Kerala government has expressed its opposition to a new set of proposed amendments to the Mines and Minerals (Development and Regulation) Act.

The Mines and Minerals (Development and Regulation) Act (MMDR Act), 1957:

- It forms the basic framework of regulating mining sector in India and mandates the requirement for granting leases for mining operations. The Ministry of Mines is responsible for the administration of the Act.
- It describes the procedure and terms for obtaining a mining or prospecting license in India.
 - ✓ Prior approval from the Ministry of Environment, Forest and Climate Change (MoEFCC) is required for mining on forest land.
- This act is applicable to all minerals except minor minerals (such as river sand, which is under the purview of state governments) and atomic minerals.

Recent Amendments In Past Few Years

- **Prior to 2015**, mineral resources were granted on a "first-come, first-served" basis, which was discretionary and decision making was opaque.
- The process of renewing mining leases was proving to be an impediment to attracting large-scale investment in the mining sector.
- **The MMDR Amendment Act, 2015:** The Act was comprehensively amended in 2015 to bring several reforms in the mineral sector, notably:
 - ✓ Mandating auction of mineral concessions to improve transparency.
 - ✓ Establishing District Mineral Foundation and National Mineral Exploration Trust.
 - ✓ Stringent penalty for illegal mining.
- The Act was further amended in 2016 and 2020 to allow lease transfers for non-auctioned captive mines and to address the emerging issue of lease expiry.
- Furthermore, the MMDR Amendment Act, 2021, has been adopted **for**
 - ✓ Revitalising the mineral sector and by giving immediate boost to mineral production.
 - ✓ Promoting ease of doing business.
 - ✓ Other structural reforms.

Proposed Amendment

- **To Separate 8 Groups Of Minerals**
 - ✓ As per the proposal, 8 out of 12 groups of minerals will be removed from **Part B** of the **1st Schedule** (critical & strategic minerals) of MMDR Act.
 - ✓ They include lithium-bearing minerals, minerals of the 'rare earths' group containing **uranium and thorium**, beach sand minerals, etc.
 - ✓ It has been proposed to create a new part (part D) in the 1st Schedule and place the 8 minerals along with others like indium, gallium, graphite, nickel, cobalt and tin.
- **Concurrent Powers To Union Government:** The amendments will empower the Union government, along with the State governments, to sanction mining rights of minerals listed under Part D of the 1st schedule.

Criticism Of The Proposed Amendment

- As per MMDR Act and Mineral Concessions Rules, mining and the manufacture of value-added products should remain in the public sector.
 - ✓ According to the critics, some among the 8 minerals had great strategic importance, alleging that the proposal is an attempt to privatise the critical sector.

- ✓ The proposals may lead to improper handling of strategically important minerals such as uranium by select private companies and is against the national interest.
- Under Entry 23 of List II (State List) and Article 246(3) of the Indian Constitution, State Assemblies can make laws on such minerals.
 - ✓ According to the Kerala government, the amendments are a breach of States' rights as minerals come under the purview of States.
 - ✓ Kerala is endowed with rich resources of Beach Sand Minerals (Monazite - primary source of thorium) and some of them are significant for their economy and have strategic importance too.

Extra Mile: Coal Supply and Demand

The government recently shared the details of domestic supply & demand of coal during the last 5 years.

- The government has taken several steps to ramp up domestic coal production and achieve self-reliance in coal Industry. Some of the Major initiatives taken to increase domestic production of coal are as follows:

(in Million Tonnes)			
Year	Domestic Supply	Import	Total Demand
2017-18	690.00	208.25	898.25
2018-19	732.79	235.35	968.14
2019-20	707.18	248.54	955.72
2020-21	690.89	215.25	905.88
2021-22	818.65	208.93	1027.58

- 100% Foreign Direct Investment (FDI) is allowed for commercial mining.
- **Single Window Clearance portal** has been launched for the coal sector to speed up the operationalisation of coal mines. It is a unified platform that facilitates grant of clearances and approvals required for starting a coal mine in India.
- Mines and Minerals (Development and Regulation) Act, 1957 amended to allow sale up to 50% of their annual production after meeting the requirement of the end use plant.
- Commercial auction of coal blocks on revenue sharing basis and allotment of specific coal blocks for captive end use.
 - ✓ Captive mines are the mines that are owned by companies. The coal or mineral produced from these mines is for the exclusive use of the owner company & cannot sell coal or mineral outside
- A Monitoring Committee has been constituted under the Chairmanship of Secretary (Coal) to conduct regular reviews and to expedite the development of blocks.
- For capacity addition, 52 new & expansion projects have been approved with additional capacity of 250 Million Tonne per year (MTY) and projected to contribute additional production of about 102 Mt by FY 25.
- To improve evacuation efficiency, 44 **First Mile Connectivity (FMC) projects** are being implemented to consolidate Coal India Limited (CIL) effort towards upgradation and expansion of coal evacuation infrastructure and minimize transportation of coal through road mode in the first mile.
 - ✓ CIL has also invested in the construction of 7 **critical new rail line projects** for the expansion of Brownfield mining projects and Greenfield projects in Chhattisgarh, Odisha and Jharkhand with an estimated capital investment of Rs 20,000 Cr.

UDAN Completes 5 Years Since The Launch Of Its 1st Flight

Regional Connectivity Scheme UDAN (Ude Desh ka Aam Nagrik), the flagship program of **Ministry of Civil Aviation (MCA)** recently completed 5 years since the launch of its first flight in 2017.

Performance Evaluation

- UDAN was awarded the Prime Minister's Award for Excellence in Public Administration under Innovation Category for the year 2020.
- UDAN Scheme has benefitted a diverse set of stakeholders:

- ✓ Passengers have got the benefits of air connectivity;
- ✓ Airlines have received concessions for operating regional routes; and
- ✓ Unserved regions have received the direct and indirect benefits of air connectivity for their economic development.

Ude Desh ka Aam Naagrik (UDAN)

- UDAN was launched by MCA in 2016, as a **Regional Connectivity Scheme (RCS)**. It is a key component of the **National Civil Aviation Policy (NCAP)**.
- Its **objective** is to make air travel affordable and widespread, boost inclusive national economic development, job growth and air transport infrastructure development of all regions and states of India.
- It is jointly **funded** by the central government and state governments. Under the scheme, financial subsidies are given to airlines, from airport operators, Central and State government to reduce fares.
- Progress of UDAN has taken place in four phases, with several incremental developments in each phase. The scheme will run for 10 years and can also be extended further.

Components: The scheme has **two components**.

- **1st component** is to develop **new airports** and **enhance the existing regional airports** to increase the number of operational airports for scheduled civilian flights.
- **2nd component** is to add several hundred financially-viable, capped-airfare, new regional flight routes to connect **underserved and unserved airports** in smaller towns by using "Viability Gap Funding" (VGF) where needed.
 - ▶ **VGF** is a grant to support projects that are economically justified but not financially viable.
- UDAN has a self-financing mechanism with the development of **Regional Connectivity Fund(RCF)**. RCF was created, to fund the VGF requirements of the scheme through a levy on certain domestic flights.
- This way, funds generated from the sector themselves stimulate the growth and development of the sector.

- The launch of the regular flight operations on the route provides a catalyst to trade & tourism of the region. This scheme also improves the standard of living in the country.
- The number of operational airports has increased from 74 airports (in 2014) to 141.
- 68 underserved/unserved destinations which include 58 Airports, 8 Heliports & 2 Water Aerodromes have been connected under UDAN.
- With 425 new routes initiated under the scheme, UDAN has provided air connectivity across the length and breadth of the country.
- More than one crore passengers have availed the benefits of this scheme as of August 2022.
- The scheme has also provided a much-needed platform to the regional carriers to scale up their operations
- UDAN also led to the formulation of:

Lifeline UDAN

- for transportation of medical cargo during pandemic

Krishi UDAN

- Value realization of agriculture products especially in **Northeastern Region {NER}** and tribal districts.

International UDAN routes

- for NER to explore International Connectivity from / to Guwahati and Imphal

Challenges Associated

- **Lower demand:** Low demand on few routes awarded, adverse and unpredictable weather conditions lead to inconsistent operations and have also resulted in the closure of operations by some airlines. A whopping majority of 300 routes have been affected due to lower demand.

- **Market-driven scheme:** UDAN's failure draws from the fact that it is a market-driven scheme which makes it incumbent on the govt. to make the routes more lucrative for airline operators.
- **High operating costs:** The civil aviation ministry has also conceded to the parliamentary panel that the aviation industry is a difficult ecosystem, with low yields & high operating costs.
- **Delayed upgradation of infrastructure:** The slow progress of UDAN implementation is attributable to readiness of airports, lack of adequate right of way (insufficient runway lengths) at some of the airports and delays in securing necessary regulatory approvals.
- **Others:** Delays in obtaining commuter operator permits by new airline entrants, non-availability of suitable aircraft, aircraft leasing issues, long lead time for delivery and thorny maintenance issues of small aircraft as well as problems in procuring spares from abroad.

Future Targets

- 220 destinations (airports/heliports/water aerodromes) under UDAN are targeted to be completed by 2026 with 1000 routes to provide air connectivity to unconnected destinations in the country.
- Under UDAN, 954 routes have already been awarded to connect 156 airports.

Agriculture Census

- The Ministry of Agriculture recently launched the **11th agricultural census** to collect data on various parameters.
- It is organized by **Department of Agriculture and Farmers Welfare**, Ministry of Agriculture.
- The ministry is implementing an agriculture census scheme from **1970-71**. The tenth edition of the census was conducted with the reference year 2015-16. The present census with **reference year 2020-21** will be 11th in the series.
- Agriculture Census is **conducted every 5 years**, which is being undertaken now after a delay due to corona pandemic.
- It is the main source of information on a variety of parameters, such as the number and area of operational holdings, their size, class-wise distribution, land use, tenancy and cropping pattern, etc.
 - ✓ The concept of **agricultural operational holdings** adopted in India differs to some extent with that of Food and Agriculture Organization (FAO), as it does not include those holdings which are not operating any agricultural land and are engaged exclusively in the poultry, livestock & fishing etc.
 - ✓ FAO has been preparing the decennial **World Programme for the Census of Agriculture (WCA)** since 1950.
- This is the first time that data collection for the agricultural census will be conducted on smartphones and tablets so that data is available in time
- Most of the states have digitised their land records and surveys, which will further accelerate the collection of agricultural census data.
- The use of digitised land records and the use of mobile apps for data collection will enable the creation of a database of operational holdings in the country.

Decline In Counterfeit Currency

- The Ministry of Finance recently informed that the counterfeit currency in the banking system reduced from ₹43.47 crore in 2016-17 to about **₹8.26 crore in 2021-22**. This amounts to a sharp decline of 80%.
- The number of counterfeit banknotes has come down from 7.62 lakh pieces in 2016-17 to 2.09 lakh pieces in 2020-21.

- As per the National Crime Records Bureau (NCRB) data, the value of fake currency seized by various enforcement agencies in 2017 was ₹28 crore. However, it shot up to ₹92.18 crore in 2020.
- While notes seized by different law enforcement agencies have gone up, there is a clear trend of reduction in the number of counterfeit notes detected in the banking system.

Counterfeit Currency

- **Counterfeit currency** is currency produced without the legal sanction of a state or government, usually in a deliberate attempt to imitate that currency and deceive its recipient.
- Recent developments in photographic, computer and printing technologies, along with the availability of low-cost equipment, have made forgery much easier.
- Producing or using counterfeit money is a form of fraud or forgery, and is illegal. In India, it is punishable under **section 498A** of the IPC

Effects of Counterfeit Money

- If left unchecked, the circulation of counterfeit currency can undermine national economies, weaken financial institutions and threaten people's livelihoods.
- It fuels the underground economy and finances the activities of organized criminal networks and terrorists.
- Circulation of counterfeit currency, **increases inflation**, as there is more money being circulated in the economy, which leads to an increase in the demand for goods.
- The rise in demand in turn creates a scarcity of goods, leading to a rise in the price of the goods. This leads to **currency devaluation**.
- At the same time, in countries where paper money is a small fraction of the total money in circulation, the macroeconomic effects of counterfeiting of currency may not be significant.
- The **Non-reimbursement policy** of banks is another issue that occurs when banks reject the fake notes and do not reimburse the losses. Due to this, firms which are involved in daily cash transactions face heavy losses.
- Other effects of counterfeit currency include the loss of public confidence, black marketing of products, illegal stocking of products, etc.

Steps Taken By The Government Against Counterfeit Currency

- **Demonetisation:** On 8th November 2016, Rs. 500 and Rs. 1,000 notes were withdrawn from the system, to discourage their use for illegal transactions and to curb Counterfeiting.
- The provisions in the Unlawful Activities (Prevention) Act, 1967 have been strengthened to combat terror financing by criminalizing the production, smuggling or circulation of high quality counterfeit Indian currency as a terrorist act.
- A **Terror Funding and Fake Currency (TFFC) Cell** has been constituted in National Investigation Agency (NIA) to conduct focused investigation.
- **Fake Indian Currency Notes (FICN) Coordination Group (FCORD)** has been set up to share intelligence and information with the security agencies in the States and the Centre.
- The government conducts capacity-building programmes for various law enforcement agencies at the Centre/State level.
- **Bi-Luminescent Security Ink:** Council of Scientific and Industrial Research (CSIR)-National Physical Laboratory has developed a bi-luminescent security ink which glows in red and green colours when illuminated by two different excitation sources. It can be used to determine the legitimacy of identity cards, passports, tamper evident labels, Government documents etc.

- Security at the international borders has been strengthened by using new surveillance technology, deploying additional manpower for round the clock surveillance.
- Further, a **Joint Task Force** is functioning between India and Bangladesh for building trust and cooperation for exchange of information and analysis of smugglers of FICN.
- Training programmes are held for the police officers of Nepal and Bangladesh to sensitise them about the smuggling/counterfeiting of Indian currency.

GI Tag for Mithila Makhana

- Recently, the government awarded the Geographical Indication (GI) tag to Mithila Makhana.
- Over 5 lakh farmers of Mithila region of Bihar will be benefitted from this decision.
- This is the **5th product from Bihar** which has received the GI tag. Prior to this, given products have been recognised from Bihar.


Bhagalpur's Jardalu Mango	Katarni Dhaan (rice)	Nawada's Maghai Paan	Muzaffarpur's Shahi Litchi
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- Bihar harvests 80% of India's total Makhana. It is cultivated in adjoining areas of Nepal also.

Mithila Makhana

- Mithila Makhana is also simply known as 'makhan'. It is a special variety of aquatic fox nut.
- It is believed that the food is consumed during **Kojagara Puja** by Maithil Brahmins, who celebrate it for newly-married couples.
- These seeds are edible after they are processed. They grow on a leaf in a pond, before they are collected, washed and sun-dried for hours. After that, they are roasted in a pan. Following this, their outer shells are broken and the white puff comes out.
- Makhana is considered a healthy Indian snack, as it is said to be low in cholesterol, fat, sodium and calories.
- It has a high nutritional value and is a rich source of proteins, carbohydrates, fibre, potassium, iron, and zinc.

GI tag



- ▶ The World Intellectual Property Organisation (**WIPO**) defines a GI as a sign that can be used on products that have a specific geographical origin and possess qualities or a reputation that are due to that origin.
- ▶ GIs are typically used for agricultural products, **natural or a manufactured** product (handicrafts and industrial goods) like, Basmati rice, Darjeeling Tea, Chanderi Fabric, Mysore Silk, Kullu Shawl, Kangra Tea, Thanjavur Paintings.
- ▶ The tag conveys an **assurance of quality and distinctiveness**, which is essentially attributable to the place of its origin.
- ▶ This tag is valid for a period of 10 years following which it can be renewed.
- ▶ In India, Geographical Indications registration is administered by the **Geographical Indications of Goods (Registration and Protection) Act of 1999**.
- ▶ Internationally, GIs are covered as an element of intellectual property rights under the **Paris Convention** for the Protection of Industrial Property. They are also covered under the **Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement**.
- ▶ Getting a GI tag can provide a better market for the products and also helps to prevent misuse of the product names. Once a product gets this tag, **any unauthorized person or company cannot sell a similar item under that name**.
- ▶ A GI registration is given to an area, **not a trader**, but once a product gets the registration, traders dealing in the product can apply for selling it with the GI logo. Authorised traders are given a unique GI number.

Stablecoin Regulation

Recently, the **Financial Stability Board (FSB)**, a body which advises major economies on international finance, promised to push for stablecoin regulation.



Stablecoin

- ◆ It is a digital currency whose value is pegged to a 'stable' asset, such as the U.S. dollar or gold.
- ◆ The best-known stablecoin in the crypto ecosystem today is Tether (USDT), whose market cap is close to \$66 billion.
 - 1 USDT is meant to be worth 1 USD, though market factors can take prices slightly above or below this mark.
- ◆ Other stablecoins such as USD Coin (USDC) and Binance USD (BUSD) are also pegged to the U.S. dollar and are known for their high market cap values.
- ◆ Stablecoins are not authorised for use by a country's lawmakers or central bank. That means investors take on considerable legal and financial risk to hold them.

Utility of Stablecoins

- **Minimize volatility:** The value of cryptocurrencies like Bitcoin fluctuates a lot. An asset that's pegged to a more stable currency can give buyers and sellers certainty that the value of their tokens won't rise or crash unpredictably in the near future.
- **Gauge the market:** For a cryptocurrency trader, tracking stablecoin flows can help them gauge the state of the market, or even make educated guesses about future cryptocurrency price movements.
 - ✓ For example, when the stablecoin supply on crypto exchanges rises, it might be a sign that investors are cashing in their stablecoins to buy cryptocurrencies such as Bitcoin (BTC). Many traders believe this can lead to upward price moves.
- **International transfers:** One doesn't need a bank account to hold stablecoins, and they're easy to transfer. Thus, stablecoins' value can be sent easily around the globe, including to places where the U.S. dollar may be hard to obtain or where the local currency is unstable.
 - ✓ In Taliban-occupied Afghanistan, with remittance channels blocked by American sanctions, stablecoin transfers have helped to improve remittances.
- **Safeguard assets:** In countries such as Turkey, Nigeria, and Argentina where the local currency is rapidly losing value, converting funds to stablecoins is one way for residents to try and safeguard their earnings.
- **Low transfer fees:** People have sent as much as a million dollars' worth of stablecoins with transfer fees of less than a dollar.
- **Earn interest:** Stablecoins can also be used to earn interest (typically higher than what a bank would offer) on a stablecoin investment.

BBPS To Accept Cross-Border Inward Payments

RBI recently allowed the **Bharat Bill Payment System (BBPS)** to accept cross-border inward payments with an aim to ease the transaction process for non-resident Indians (NRIs).

BBPS

- BBPS is an RBI conceptualised system **owned and operated by National Payments Corporation of India (NPCI)**. It was launched in August 2016 under the recommendation of G. Padmanabhan committee.
- It offers interoperable and accessible bill payment services to consumers via **digital channels** along with a **network of agents & bank branches**.
- BBPS also provides a standardised bill payment experience, centralised customer grievance redress mechanism and uniform customer convenience fee, etc.
- These bills can be for electricity, telecom, DTH, gas, water bills, insurance, loan repayments, education fees, FasTag Recharge, municipal taxes, subscription fees, etc. in one single window.
- The **payment mode options** at BBPS are **Cash**, Cards (Credit, Debit & Prepaid), IMPS, UPI, Aadhaar Enabled Payment System (AePS), Internet Banking and wallets.

- More than 20,000 billers have been onboarded on the system and more than eight crore transactions are processed on a monthly basis.

Extension of BBPS to NRIs

- However, this system was till now available to only residents in India. Due to this, NRIs have been facing challenges in paying utility bills for their family and friends in India.
- Thus, to address this issue, RBI has allowed BBPS to accept cross-border inward payments.
- Apart from easing bill payments for NRIs in India, the development is also expected to increase **forex inflow** in India and **fee income** of banks and financial institutions.

Moonlighting

- Former Nasscom chairperson, Rishad Premji, recently called the practice of moonlighting in the tech industry as cheating.
- The practice of working for one organisation while also taking up extra responsibilities and jobs, typically without the employer's knowledge, is referred to as moonlighting.
- It is called so because the side employment is typically performed at night or on the weekends.
- The phrase became well-known when Americans began looking for second jobs in addition to their regular 9-to-5 jobs to supplement their income.
- The Indian IT sector is divided in its opinion. Some call it unethical while others believe it is the need of the hour.

Legality Of Moonlighting In India

- **Overemployment**, which is called **dual employment** in India, is technically permissible in the US and the UK from a tax perspective.
- A person may work in more than one job in India without breaking the law.
- However, a person with a similar set of jobs could give rise to concerns about a violation of confidentiality because many employers include such restrictions in their employment agreements in addition to prohibitions against holding down multiple jobs.
- Moonlighting could be considered cheating if an employee's contract calls for non-compete and single employment, which is the situation with the majority of conventional employment contracts.
- However, it is not cheating if the employment contracts do not have such a clause or provide relaxations.
- Under the **Factories Act, 1948** dual employment is prohibited. However, in some states, IT companies are exempt from that rule.

Passenger Name Record Information Regulations, 2022

- The Passenger Name Record Information Regulations, 2022, was recently notified by the **Central Board of Indirect Taxes and Customs (CBIC)** under the **Ministry of Finance.**
- The regulations come five years after the Finance Bill, 2017 proposed amending the Customs Act, 1962 to allow exchange of passenger data.
- It requires airlines to mandatorily provide details of all international passengers on flights arriving into and departing from India to the Customs department.
- This is for preventing and prosecuting offences under the Customs Act, 1962 relating to smuggling of contraband such as narcotics, psychotropic substances, gold, arms & ammunition etc that directly impact national security.

- Airlines will have to transfer the “passenger name record information” from their reservation system to the database of the Customs department.
- This includes details such as PNR (Passenger Name Record) locator code, date of reservation, date of intended travel, all available contact, billing information including credit card number, seat information as well as historical changes to the PNR.

Platform Economy

- Platform economy is the tendency for commerce to increasingly move towards and favour **digital platform business models**.
- It is any type of digital platform that uses the internet to connect dispersed networks of individuals to facilitate digital interactions between people.
- Within the platform economy there is a triangular relationship between three parties - the platform, the worker and the customer. It is the job of the platform to connect people with demand (the customer) to people that provide supply (the worker).
- There is a large variation between the function and type of digital platforms available in today’s marketplace.
- It ranges from platforms providing services (e.g. Uber and Airbnb), to products (e.g. Amazon and eBay), to payments (e.g. Square, PayPal), to software development (e.g., Apple, Salesforce) and many more.
- The platform economy is also known as the creative economy, sharing economy, gig economy, or the peer economy.

FTA Provisions To Prevail In Rules Of Origin Disputes

- Recently, the Central Board of Indirect Taxes and Customs (CBIC) asked its field officers to be sensitive in applying **CAROTAR**.
 - ✓ Customs (Administration of Rules of Origin under Trade Agreements) or CAROTAR Rules, came into effect from September, 2020.
- Thus, exemptions specified in Free Trade Agreement (FTA) with regard to country of origin will prevail in case of conflict between revenue department and importer.
- Currently, the CAROTAR rules require extensive submission of data and facts where, in certain cases, the requirement even goes beyond the stipulated conditions under the bilateral/multilateral FTAs.
- It empowers the customs officers to ask the importer to share further information, in case the officer has reasons to believe that the **country-of-origin** criteria have not been met.
- Where the importer fails to provide the requisite information, the officer can make further verification consistent with the trade agreement.

Rules of Origin norms

- Rules of origin norms help contain dumping of goods. The provision prescribes for minimal processing that should happen in the FTA country so that the final manufactured product may be called originating goods in that country.
- Under this provision, a country that has inked an FTA with India cannot dump goods from some third country in the Indian market by just putting a label on it.
- It has to undertake a **prescribed value addition** in that product to export to India.

POLITY AND GOVERNANCE

Mother Tongue As The Medium Of Instruction In Higher Education

Background

The Mother tongue in India never got the importance they deserve in the higher education system as most of the higher educational institutions offer courses only in English

Issues with English education at higher educational institutions	Advantages of using mother tongue in higher education
<p>It has been <i>creating many problems particularly for students who had their education in mother tongue till senior secondary level</i> in the following way:</p> <ul style="list-style-type: none"> ➤ It proved to be an obstacle in realizing their full academic potential: <ol style="list-style-type: none"> a. students face difficulties in understanding concepts, expressing their opinions and feelings in the classroom and in examinations b. Result of which is <i>poor learning outcomes</i> and development of <i>low self-esteem</i>. ➤ Many students stop pursuing higher education for the fear of education in English thereby affecting Gross Enrolment Ratio (GER) in Higher education ➤ Students particularly from weaker sections of society such as SCs, STs, minorities and from rural background are at a stark disadvantage ➤ Drop outs from colleges: Such drop outs are higher among SCs, STs and minorities 	<ul style="list-style-type: none"> ➤ Will help in building an <i>inclusive and equitable higher education system</i>: particularly for SC/ST/Minority communities. ➤ Increase the availability of high-quality learning and print material in Indian languages including textbooks, workbooks, videos, plays, poems, novels and magazines. ➤ Promotes Linguistic Diversity & help prevent language-based discrimination ➤ Increases (GER): Reduces drop-outs Helps Students in realizing their full academic potential. ➤ Quality of education imparted at higher educational institutions will also get enhanced. <u>UNESCO's 2003 guidelines</u> also supported instruction in mother tongue as a means of improving educational quality ➤ R&D will get a boost in the country ➤ Even the National Education Policy (NEP) 2020 had recommended that institutions of higher education should use mother tongue as medium of instruction and offer bilingual programmes

Issues With Introducing Regional Languages In Higher Education

- *Neglect of English completely can diminish career prospects* in today's world.
 - ✓ 2016 report of Cambridge university titled '*Findings of English at work: Global analysis of language skills in the workplace*' highlighted that about 90% of employers in India say that English language skills are important for their organization.
 - ✓ According to India Skills report 2019, English figured among the top three skills along with learning agility and adaptability that employers look for in India
- Availability of *well qualified faculty* and *learning material* in regional languages particularly in fields such as Engineering, Medicine, Law and applied sciences is a challenge
- Insignificant for Institutions with Pan-India Admissions: A regional language focus is not meaningful in a scenario where the institutes like IITs see entrants from across the country

Measures That Were Taken To Promote Mother Tongue In Higher Education

- *All India Council for Technical Education (AICTE)* had given approval to 19 engineering colleges in 10 states to introduce engineering courses in six Indian languages.
- It also developed "**AICTE Translation Automation AI Tool**" that translates English online courses in 11

Indian languages.

- **SWAYAM platform**- offering some popular courses in Indian languages
- NEP 2020 aims to increase the GER in higher education including vocational education from 26.3% (2018) to 50% by 2035. Around 3.5 Crore new seats will be added to Higher education institutions.

Conclusion

While it is important to promote regional languages in the higher education, at the same time it is necessary to ensure that the students who receive education in regional languages also gain good command over English language so that they will be able to seize the opportunities (local, regional and global) of 21st century as recommended by *NEP 2020*.

Panel Finds No Proof Of Pegasus On 29 Phones It Got

The SC said its technical expert committee could not find Pegasus spyware in the 29 mobile phones of complainants, but detected malware in 5 of them.

Key Highlights

- Justice Raveendran, who supervised the committee also made few recommendations to strengthen cyber security. This included:

- Enactment of amendment to existing laws and procedures for surveillance, particularly for securing the citizens' right to privacy
- no non-state entity to use spyware
- establishment of mechanism for citizens to raise grievances against illegal surveillance
- setting up of a well-equipped independent primary agency to investigate cybersecurity vulnerability

Pegasus Spyware

- Pegasus is a malware/spyware developed by Israel's NSO Group.
 - ✓ Spyware is a type of malicious software/malware that is installed on a computing device without the end user's knowledge.
 - ✓ It invades the device, steals sensitive information.
- The spyware suite is designed to access any smartphone through **zero-click vulnerabilities remotely**.
- Once a phone is infiltrated, the spyware can access entire data on that particular phone.
- It also has real-time access to emails, texts, phone calls, as well as the camera and sound recording capabilities of the smartphone.

PANEL REPORT IN BRIEF	
HIGHLIGHTS OF THE PEGASUS PROCEEDINGS IN COURT	
<ul style="list-style-type: none">> Pegasus not found in 29 mobile phones and devices submitted for scrutiny by an SC-appointed technical committee> Malware was detected in five devices, but data insufficient to determine it was Pegasus> Centre did not cooperate with the technical committee in the scrutiny of mobile phones and electronic devices to detect Pegasus> Report be kept secret, says Technical Committee(TC); some of the complainants too request report to be kept secret fearing leak of personal information> TC says its report contains data about malware information which may be misused and may create security problems as the application of the properties of the malware may lead to criminals to get a lead over law enforcing agencies> TC says information in its	<ul style="list-style-type: none">report can be misused to create new wares and more sophisticated malware using their expertise in design of malware systems and their knowledge about the mobile operating systems.> TC says contains information/research material related to malware, application of which may pose threat to national security apparatus> Oversight Judge, Justice R V Raveendran gives six recommendations for strengthening cyber security; creation of an exclusive primary agency to probe threats to cyber security; amendment of laws to protect citizens against illegal surveillance; no private party be permitted to carry out snooping> SC to hear the future course of action – creating an interim arrangement till Parliament fills the lacuna in surveillance laws – after four weeks

Snooping Row

- A global collaborative investigative project has discovered that Israeli spyware Pegasus was used to target thousands of people across the world.
- The report claimed that, in India, at least 300 people were targeted.
 - ✓ This included two serving Ministers in the current government, three Opposition leaders, one constitutional authority, several journalists and business persons.
- The Pegasus row also reached the SC when the Editors Guild of India filed a petition in the Supreme Court seeking direction for a probe by a special investigation team.
- In a judgment, the SC bench led by NV Ramana stated that national security ground raised by the State cannot totally exclude judicial review.
 - ✓ The SC emphasised the importance of free speech and press freedom and expressed concerns about unauthorised surveillance.

Technical Committee Constituted

- The Supreme Court constituted a technical committee under the oversight of Justice (ret'd) R.V. Raveendran to look into the allegations of snooping.
- The committee divided the court-appointed task into two areas:
 - ✓ One is regarding the inquiry itself.
 - I.e., the fact-finding report regarding the use of Pegasus malware to target mobiles of Indian citizens.
 - ✓ Second is regarding recommendations about the enhancement of existing laws and procedures related to surveillance and securing rights including privacy, cyber security, etc.
- The committee has submitted its report to the three-judge Bench led by N. V. Ramana.

Indian Laws On Snooping

- **Section 5(2)** of The **Indian Telegraph Act, 1885**, states that the government can intercept a message or class of messages.
- This can be done only in the interests of the sovereignty and integrity of India, the security of the state, friendly relations with foreign states, public order or for preventing incitement to the commission of an offence.
- In 1997, SC in its verdict in the ***People's Union for Civil Liberties (PUCL) vs Union of India*** case said telephonic conversations are covered by the right to privacy. This can be breached only if there are established procedures.
- After that Gol established a procedure for surveillance.
 - ✓ Under **Rule 419A** of the Telegraph Rules, surveillance needs the sanction of the Home Secretary at the Central or State level.
 - ✓ But in unavoidable circumstance can be cleared by a Joint Secretary or officers above, if they have the Home Secretary's authorisation.
- In the ***K.S. Puttaswamy vs Union of India*** verdict of 2017, the Supreme Court further reiterated the need for oversight of surveillance.
 - ✓ It stated that surveillance should be legally valid and serve a legitimate aim of the government.
- **Section 69** of the **Information Technology Act, 2000** also facilitates government interception of any information through any computer resource.
 - ✓ The procedure for it is detailed in the Information Technology Rules, 2009.

Government Withdrew Personal Data Protection (PDP) Bill, 2019

Government looks to come up with a **comprehensive legal framework** for regulating online space which will include:

- A separate legislation on data privacy, the overall internet ecosystem, cybersecurity, telecom regulations, and
- Harnessing non-personal data for boosting innovation in the country.

Background

- In *Puttaswamy Vs Union of India case* SC declared '*Right to Privacy*' as a Fundamental Right and directed government to come up with a '*Data Protection Framework*'.
- Government constituted '*Sri Krishna Committee*' submitted draft PDP bill in July 2018
- Subsequently in 2019 Government introduced '*PDP Bill, 2019*' in parliament which was then referred to Joint Parliamentary committee (JPC).
- Bill is now withdrawn from the Parliament.

What The Bill Was All About?

- It was primarily meant to safeguard the '*privacy of the individuals*' and '*ensure data protection*'
- It listed *people's rights* with respect to their personal information
- Placed certain obligations on Private entities on their data collection, processing and maintenance practices
- Proposed creation of '*Data Protection Authority*' to hold companies and individuals responsible for any violations

Factors That Contributed To Withdrawal Of Bill By Government

- JPC proposed 12 recommendations & 81 amendments to the bill which practically meant rewriting the entire bill
- Objections to several provisions of bill from various stakeholders such as Tech companies, civil society groups
- To bring a *comprehensive legal framework* on Data protection
 - ✓ The JCP's report also recommended changes on issues such as regulation of social media companies, and on using only "trusted hardware" in smartphones, etc.
 - ✓ It proposed that social media companies that do not act as intermediaries should be treated as *content publishers*, making them liable for the content they host.

Issues With The Current Bill

- Tech companies both big tech companies like facebook, Amazon, Google, Meta and Start-ups were unhappy about *data localization* as it would:

- Increase their cost of compliance burden and data storage requirements
- Restrict cross-border flow of data

- *Data Localization and restrictions on cross-border data flows* strained bilateral relationship between New Delhi and Washington
- **Clause 35** of the bill that enabled Union government to exempt any government agency from the application of the act, raised concerns of *surveillance* and *possible abuse* of data.
- Independent functioning of '*Data Protection Authority (DPA)*' was compromised, with the government retaining sole control over the selection of its chairman and members

- Lack of clarity over 'critical personal data' category
- It didn't cover *non-personal data* within its ambit

Consequences Of Lack Of Data Protection Framework

- Citizens will be the ultimate sufferers as their data will be at risk. "The *Internet Freedom Foundation* has argued that the existing legal vacuum on data protection is an infringement of the fundamental right to privacy"
 - ✓ According to *Dutch Cyber security firm 'Surfshark VPN'* India had the second highest number of data breaches in the first half of 2022
- Private players can't be held accountable for *data protection and privacy violations*
- Indian outsourcing industry will face difficulties while serving Global clients

Conclusion

The bill has been in the making for a very long time. There is an urgent need to fast track this entire process with *clear timelines* given the rapid pace with which the digitization is happening in the country.

If India has to be seen as a serious player in the fourth Industrial revolution, then we must have a strong comprehensive data protection ecosystem as early as possible. The recommendations made in *Justice AP Shah Committee* and *BN Sri Krishna committee reports* as well as *EU's General Data Protection Regulations (GDPR)* can be an important guide for the government.

Electricity (Amendment) Bill 2022

The All-India Power Engineers Federation called for a strike in protest of the government's intention to introduce the Electricity (Amendment) Bill 2022. The bill, which amends the *Electricity Act of 2003*, aims to bring competition and accountability to *electricity distribution*.

➤ Amid stiff opposition, bill was referred to the Parliamentary Standing Committee on Energy

Need For The Bill

- To improve the financial health of Distribution Companies (DISCOMS), the weakest link in the entire power value chain
- Distress in DISCOMS:
 - ✓ Accumulated debt: Rs 5.5 lakh crores
 - ✓ Debt to Power Generation Companies (GENCOS): Rs 1 lakh crores
 - ✓ Arrears from state governments: Rs 76,000 crores.

Key Provisions Of The Bill

- Allow **private sector participation** in distribution of electricity post license
- **Non-discriminatory open access** to the use of existing distribution network for all licensees on payment of certain charges
- Appropriate Electricity Regulatory commission to fix **minimum and maximum tariff ceilings** for supply of electricity
- Load dispatch centers (LDC) **to stop supply of electricity to distribution utilities** if payment is not made as agreed in the contract
- State governments shall set up **Cross-subsidy balancing fund** if multiple distribution licenses are granted in the same area
- Provisions relating to State regulatory commissions:
 - ✓ **Decide on grant of distribution license within 90 days** or else application will be considered to have been approved

- ✓ **Initiate graded tariff revision proceedings Suo moto** if DISCOMS or GENCOS fail to file tariff revision petitions before them
- ✓ Removal of members in case of any neglect of rules or willful violation of the provisions of the act
- ✓ Central government nominee will be a member of the selection committee to recommend appointments to SERCs
- Central Electricity Regulatory Commission (CERC) will grant license for multi-state distribution companies
- It also aims at increasing the share of green energy in the context of global climate change concerns and India's commitments at COP 26.

Benefits With The Bill	Concerns Expressed
<ul style="list-style-type: none"> ➤ Consumer Empowerment: Increase in choices available for consumers of electricity ➤ Entry of more players inject competition among DISCOMS boosting their efficiency ➤ Timely revision of tariffs: <ul style="list-style-type: none"> ✓ Address the issue of poor financial health of DISCOMS and GENCOS ✓ Quality of supply of electricity will get improved ➤ Minimum and Maximum tariff ceilings will: <ul style="list-style-type: none"> ✓ Prevent setting of unrealistically low prices by DISCOMS to drive out rivals ✓ protect the interests of the consumers ➤ Empowerment of load dispatch centers will address the recurrent problem of default in payments by DISCOMS to GENCOS 	<ul style="list-style-type: none"> ➤ Against the spirit of federalism: <ul style="list-style-type: none"> ✓ Central government intervention in the 'Power Distribution Sector' which is mostly the domain of State governments ✓ Electricity is on the Concurrent List ➤ Providing a choice of <u>multiple service providers</u> to <i>power consumers</i>: <ul style="list-style-type: none"> ✓ Further <i>weaken finances of state-run DISCOMS</i> ➤ Private companies will cater to <u>profit making areas</u> (industrial and commercial consumers) with burden falling on State-owned DISCOMS to meet power requirements of the rest (low-income groups) causing heavy burden on state exchequer ➤ <i>Might lead to ending of subsidies</i> for farmers and poor consumers ➤ <i>Fear of job losses</i> among the workers in the state-owned DISCOMS

Conclusion

With various stakeholders expressing concerns over the bill the need of the hour is to have wider consultations with state governments, farmers unions and employee unions. Referring the bill to parliamentary standing committee for wider consultations is a step in the right direction.

Extra Mile: Main Features Of The Electricity Act, 2003

- Generation is being de-licensed and captive generation freely permitted.
- Metering of electricity supplied is made mandatory.
- Provisions related to thefts of electricity were made more stringent.
- Trading as a distinct activity recognised with the safeguard of Regulatory commissions being authorised to fix ceiling on trading margins.
- For rural and remote areas, stand-alone systems for generation and distribution are permitted.
- The state governments are required to unbundle State Electricity Boards.
 - ✓ Before 2003, the generation, distribution and transmission of electricity were carried out mainly by the State Electricity Boards in various States. Due to the politico-economic situation, the cross-subsidies reached an unsustainable level.
- Setting up the Central Electricity Regulatory Commission (CERC) and the State Electricity Regulatory

Commission (SERC) has been made mandatory.

- An appellate tribunal to hear appeals against the decision of CERC and SERC.
- Central government to prepare National Electricity Policy and Tariff Policy.
- Central Electricity Authority (CEA) to prepare the National Electricity Plan.
- The act also recognized the **role of renewable energy** in the country's National Electricity Policy and in stand-alone systems.

Gujarat Government Decision To Remit Sentences Of Bilkis Bano Case Convicts

There has been a widespread outrage in the country over the Gujarat government's decision to grant **remission to 11 convicts** who gang raped Bilkis Bano and had murdered her family during the 2002 Gujarat riots.

Gujarat government had applied the 'remission policy of 1992' to approve their applications for remission of the sentence and not the current policy of 2014 as per Supreme Court directives which maintained that remission policy at the time of conviction will apply.

What is Remission?

- Reducing the amount of sentence without *changing its character*. For example, changing 4 years of rigorous imprisonment to 2 years of rigorous imprisonment
- It was born out of the central objective of prisons to operate as reformatory and rehabilitative spaces

Sources Of Powers Of Government To Grant Remission

Constitutional powers: Article 72 & Article 161

Statutory powers: Sec 432, 433A of CrPC

Article 72 and Article 161

- Article 72 reads as follows:
 - ✓ **President** has the power to grant pardons, reprieves, respites or **remissions** of punishment or to suspend, **remit** or commute the sentence of any person convicted of any offence in all cases where:
 - a. punishment or sentence is by a court Martial;
 - b. punishment or sentence is for an offence against any law relating to a matter to which the executive power of the Union extends;
 - c. sentence is a sentence of death
- Art 161 reads as follows:
 - ✓ Governor of a state shall have the power to grant pardons, reprieves, respites or remissions of punishment or to suspend, remit or commute the sentence of any person convicted of any offence against any law relating to a matter to which the executive power of state extends
- However, the President and governor are bound by the advice given by the council of ministers while exercising these powers

Sec 432 and 433A of CrPC

- **Sec 432:** Gives power to the appropriate government (central or state government) to suspend or remit sentence
- **Sec 433A:** Places restrictions on powers of remission. Life convicts have to undergo minimum of 14 years of actual imprisonment before they can be considered for remission.

Note: The constitutional powers that are enjoyed by the president and governor are different from remission power of state governments under CrPC.

- The powers of president under Art 72 and Art 161 are not governed by Cr.PC and are often used to bypass

the minimum 14 years of actual imprisonment under Cr.PC

- Prison is a State subject under Schedule VII of the Constitution and hence state governments have powers under Section 432 CrPC to remit sentences by setting up a Sentence Review Board.

Policies on Remission

Exercising powers under Sec 432 and 433A all state governments have come up with their own policies on grant of remission

Gujarat Government's 2014 policy on remission	Gujarat Government's 1992 policy on remission	Central Government 2022 policy
Prohibits remission to: <ul style="list-style-type: none"> o those convicted for murder with rape or gang rape o those cases which have been investigated by CBI 	Doesn't prohibit remission to: <ul style="list-style-type: none"> ➤ persons convicted for murder with rape or gang rape ➤ for those cases investigated by CBI 	➤ Prohibits release of rape convicts

Why Gujarat Government Decision Turned Controversial?

- Injustice to Bilkis bano as well as set dangerous precedent
- **Morally incorrect:** Improper exercise of discretion by state government
- **Favouring exceptionalism:** When the executive has otherwise made the choice to exclude this category of offenders from the benefit of remission, releasing these convicts is an act of exceptionalism which lies at the core of injustice in this case.
- Premature release of all convicts on same day clearly indicates that state government has mechanically granted **remission** without considering merits on individual case-by-case basis
- Central guidelines for special remission don't apply to people convicted for rape
 - ✓ Gujarat government 2014 remission policy bars the government from releasing them
 - ✓ Since the case was investigated by the CBI the concurrence of the central government is also a legal requirement but the same was not sought by state government

Important Judicial Verdicts On Remission

Maru Ram V. Union of India 1980

- Exercise of remission under CrPC must embrace **reason, relevance and reformation** as the determination of convicts reformation is an inherently individual and case-to-case exercise

Sangeet V. State of Haryana (2013)

- In-built checks on the power to grant remission must be faithfully enforced and that it was imperative to grant the same on a case-to-case basis and not in a wholesale manner

Guidelines To Be Followed While Granting Remission

In 'Laxman Naskar v. Union of India' (2000) case, the Supreme Court laid down five grounds on which remission is considered:

- Whether the offence is an individual act of crime that does not affect the society;
- Whether there is a chance of the crime being repeated in future;
- Whether the convict has lost the potentiality to commit crime;
- Whether any purpose is being served in keeping the convict in prison; and
- Socio-economic conditions of the convict's family.

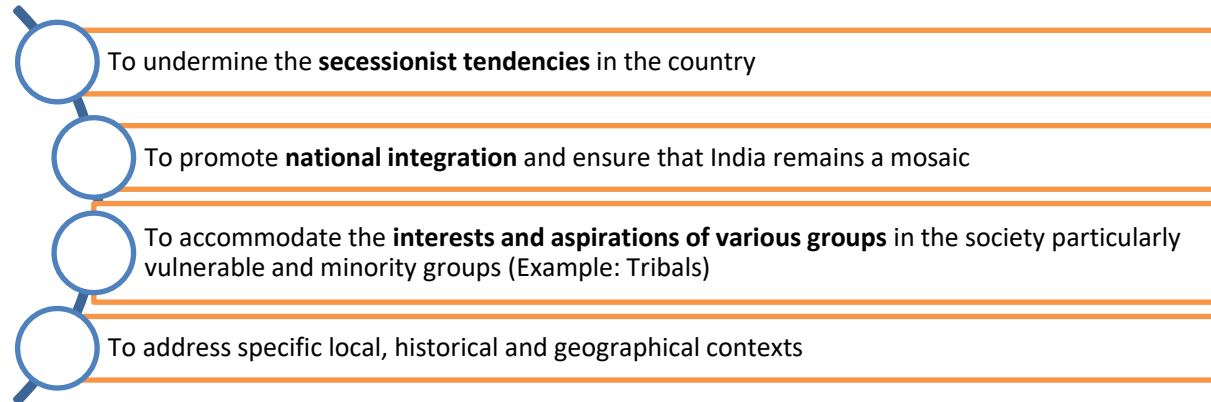
Asymmetrical Federalism in India

As India completes 75 years of Independence, the time is apt for us to look at the constitutional, institutional, political and fiscal arrangements that take into account the plurality of our country.

What is Asymmetrical Federalism?

- Asymmetrical federalism refers to a federal framework wherein the subunits within the federation possess unequal powers and rights.
- It involves providing greater autonomy to some states when compared with others.

Need for Asymmetrical Federalism



Asymmetrical Arrangements in Indian Federalism

- India is a country with asymmetrical arrangements in its federal setup
- The Indian model of asymmetrical federalism is based on the principle of weighted and differentiated equality that is “*equal treatment of all states while being mindful that some states are more equal and unequal than others*”.
- The asymmetrical arrangements in Indian federalism are reflected in the following provisions of the Indian constitution:
 - ✓ Recently abrogated Article 370 that granted special status to Jammu and Kashmir
 - ✓ Special provisions and powers under Article 371 and Articles 371(A-J) to certain states.
- **Sub-state Asymmetries**
 - ✓ **Asymmetry at the level of Union Territories**
 - Delhi and Puducherry have legislatures while the other territories under the Centre don't have legislatures or ministerial council to advise the administrator
 - Notable difference also exists between Puducherry and Delhi in terms of their powers. For example, Delhi don't have powers over Police, Land and Public order which Puducherry have. Also, special status of Delhi as the NCT & appointment of the Chief Minister of Delhi by the **President** of India on the recommendation of the Lieutenant Governor (LG).
 - ✓ **Fifth and Sixth schedule of the Constitution**
- **Fiscal Asymmetry:** Asymmetry can be noticed in horizontal devolution of funds on the recommendations of Finance commission (Art 280) as well as in non-statutory transfers from centre to states (central sector and centrally sponsored schemes)

Distinction between Political Asymmetry and Constitutional Asymmetry: In India both Political and Constitutional asymmetry (Self-rule within shared rule) exists

Political asymmetry

- It pertains to differences between federal units in terms of their **territorial and demographic sizes**
- Lok Sabha & Rajya Sabha can be taken as an example of political asymmetry where states don't have an equal standing and are represented according to their population

Constitutional asymmetry

- It refers to asymmetry **between the states** in terms of their **legislative and executive powers**. For example, the abrogated Art 370 which grants special status to Jammu and Kashmir.
- Special provisions and powers extended to certain states in the omnibus Article 371. The parliamentary statute cannot be implemented in the northeast States mentioned above without the consent of the legislatures of these States.

Flag Code of India

To celebrate the 75th Independence Day, the government had launched HAR GHAR TIRANGA campaign from August 13 to 15 targeting 20 crore households to hoist the flag. To meet the unprecedented demand for the Tricolour the Centre has changed the flag code of India 2002.

Constitutional Provisions, Laws And Rules Governing National Flag

- **Article 51A** of the Indian Constitution has imposed a non-binding duty upon its citizens to respect and adhere to the constitution and the National Flag of the country
- **Art 19(1)(a)** of the constitution that deals with freedom of speech and expression involves the right to fly National flag (**Union of India Vs Naveen Jindal 2004**)
- **Emblems and Names (Prevention of Improper use) Act 1950**: prevent improper use of certain emblems (which includes National flag) and names for professional and commercial purposes
- **Prevention of Insults to National Honour Act 1971**- regulates the manner in which National flag can be used and more importantly the manner in which it can't be used.
- Flag code of India 2002

Flag Code Of India

- It is a set of laws, practices, conventions and instructions that governs the use, display and hoisting of the Indian National Flag in the country.
- The Flag code of India came into effect on January 26, 2002 and went through some amendments in December 2021 and July 2022
- Divided into three parts, the Flag code of India 2022 contains:
 - ✓ The general description of the National Flag
 - ✓ Ways of displaying the national flag by the public, private and educational institutions
 - ✓ Hoisting of the flag by central and state governments and their associated agencies
- On *Description of the National Flag* code lays out standard dimensions of the flag. Flag code mentions that the flag must be rectangular in shape with a height-width ratio of 3:2.
- On *Hoisting and Disposing of Tricolour* the code:
 - ✓ Directs to prevent the flag from touching the ground or the floor
 - ✓ Prohibits hoisting a *damaged or disheveled flag*
 - ✓ Directs that the flag should not be used as a portion of costume, uniform, or accessory
 - ✓ Directs that disposal of flag needs to be done in private and dignity

Amendments Brought In By Centre To The Flag Code Of India 2022

- December 2021 amendment allowed
 - ✓ The manufacture and use of **machine-made and Polyester** national flags which were not allowed earlier under the code. Earlier only hand-woven and handspun khadi was allowed for making national flag.
- July 2022 amendment allowed:
 - ✓ The National flag to be flown both during the **day as well as at night**. Earlier the flag allowed to be hoisted only between sunrise and sunset

Why did Centre amend the Flag code of India?

- To ensure the success of Centre's 'Har Ghar Tiranga' Campaign targeting 20 crore households to hoist the flag on 75th Independence Day
- To meet the unprecedented demand for flag and make them easily available and affordable to public

Controversy over the amendments to the Flag code of India

- Allowing machine-made and Polyester national flags *will sever (break off) the association between the national flag, Indian independence movement and khadi.*
- Enabling tricolour production using non-khadi fabric would result in *import of replacement material benefitting countries like China.*
- Setback to khadi industry:
 - ✓ Allowing non-khadi material for national flag created fear among employees working in Kadhi industry.
 - ✓ Karnataka Khadi Gramodyog Samyukta Sangha the only unit authorized to manufacture and supply Indian flag called for scrapping the flag code amendment

Parliament Passed National Anti-Doping Bill

The Anti-Doping bill has been passed by the Indian Parliament to provide statutory framework for prohibition of doping in sports in the country

About Doping

- Doping is the consumption of certain prohibited substances by athletes to enhance performance
- The substances include cannabinoids, narcotics, stimulants, Hormone and metabolic modulators among a host of other substances

National Anti-doping Agency (NADA)

- It was set up as a registered society in 2005
- It has been implementing the anti-doping rules in the country to control the use of performance enhancing drugs by athletes in sports. It however lacked statutory status

Need for Anti-Doping Legislation

- *To combat doping in India and improve India's global sporting profile*
 - ✓ As per the World Anti-Doping Agency report, India is third in the list of countries with the greatest number of violations.
 - ✓ 152 doping violations were reported by India behind only Russia and Italy in 2019.
- *To reinforce India's commitments to international obligations for clean sports*
- *To provide statutory backing to NADA:*
- Parliamentary Standing Committee on Sports (2021) observed that Anti-doping rules are not backed by legislation and are open to challenge in a court of law and therefore recommended the Department of Sports to bring in an anti-doping legislation

Key Provisions Of The Legislation

- It categorically prohibits doping across the spectrum which includes athletes, support personnel, and other persons engaged in sports
- **Therapeutic use exemptions are permitted:** if an athlete requires a prohibited substance or method, they can apply for Therapeutic use exemption to the National Anti-doping Agency
- Provides for severe consequences in case of violations:
 - ✓ Ban on participation for a certain duration
 - ✓ Disqualification of results including forfeiture of medals or winnings
 - ✓ Financial sanctions
 - ✓ Other consequences as may be prescribed
- To determine the consequences of anti-doping rule violation the existing *disciplinary and appeal panel* will be **reconstituted**.
- The Disciplinary panel will have a:
 - ✓ Chairperson
 - ✓ 4 Vice-Chairpersons (legal experts)
 - ✓ 10 members (medical practitioners and retired eminent athletes)
- Appeals against the decision of the Disciplinary panel will go to the **Appeal panel** headed by a retired High court Judge as its chairperson
- Provides for the creation of a **NADA as a statutory body** headed by a director general. The agency is supposed to plan, implement and monitor all anti-doping activities in sports
- Empowers NADA to *enter and search premises*
- Provides for a **National board for anti-doping** in sports to make recommendations to the government on anti-doping regulation and oversee the functioning of the NADA
- Legal sanctity for the operation of National Dope Testing Laboratory (NDTL)

Importance Of Legislation	Concerns With The Legislation
<ul style="list-style-type: none"> ➤ India will join the club of select countries like USA, China, Japan, France which have their own laws related to checking doping in sports ➤ Will improve the testing capacity in the country significantly ➤ Will help in establishing a robust independent mechanism for anti-doping adjudication 	<ul style="list-style-type: none"> ➤ It does not mention the qualifications & experience required of the director-general of NADA. ➤ The qualifications required for the members of the National board for anti-doping in sports remain unclear ➤ Board has powers to remove the members of the Disciplinary Panel and Appeal Panel on grounds which will be specified by regulations and are not specified in the Bill. Further, there is no requirement to give them an opportunity of being heard.

Conclusion

With the bill having been passed there is a need to ensure the independence of the proposed agency, board and disciplinary panel.

To Help India Host U-17 WC, SC Disbands CoA

- The Supreme Court terminated the mandate of its Committee of Administrators (CoA) to manage the affairs of the All India Football Federation (AIFF).
- This was done to overcome suspension of the Indian football body by FIFA.

Background

- The current set of troubles for Indian football began after the erstwhile AIFF president, Praful Patel, refused to relinquish his post as the head of football in the country.
 - ✓ Patel completed his three terms and 12 years as AIFF president in December 2020.
 - ✓ However, the polls could not take place because of pending cases in the SC regarding the constitution of AIFF.
- In May, the Supreme Court intervened, and removed Patel from his post.
- The SC also appointed a Committee of Administrators (COA) to run the AIFF.
 - ✓ COA comprises of Justice (retired) Anil Dave, Former Chief Election Commissioner of India SY Quraishi, Former India captain Bhaskar Ganguly.
- The appointment of CoA was considered as the third-party interference by the FIFA.
- As a result, in August, 2022, FIFA suspended the All-India Football Federation.

Why FIFA Suspended the AIFF?

- The appointment of CoA is considered 3rd-party interference, which is against FIFA statutes.
 - ✓ Initially, FIFA believed that the COA would not make any major changes to the AIFF constitution and hence it did not impose the ban immediately.
 - ✓ It was when the CoA released the first draft of the constitution of AIFF, FIFA got the notion that it is changing the constitution.
 - ✓ These changes to how the AIFF functioned, without any scope of an executive committee present to ratify or challenge these decisions, were considered as third-party interference by the FIFA
- Other Major Alterations: The CoA also made changes in laying down that the AIFF would be running the top league solely.
 - ✓ Previously, the long battle, in this regard, had ended in 2018, with the or Indian Super League(ISL) being made India's top league and the I-League being demoted as a second division league.
- FIFA had made it clear that it wants an elected body, and not a court-appointed entity like the CoA, to manage AIFF affairs.

Key Highlights

- **Disbanded CoA**
 - ✓ The Supreme Court disbanded the Committee of Administrators (COA).
 - ✓ It transferred the day-to-day management of the AIFF from the hands of the CoA to the federation's administration led by its Acting Secretary-General.
- **Mode of AIFF Constitution**: FIFA wanted the AIFF constitution to be revised on the terms of FIFA policies, and for the election to be held on current AIFF membership structures that are based on **state associations only**.
 - ✓ The draft constitution, submitted by CoA to SC, states the electoral college had representatives from 36 State associations and 36 eminent football players, 24 male and 12 female.
 - ✓ As a result, 36 state associations with voting rights would have to contend with 36 eminent players who would have the same voting rights.
- **Order Passed To Ensure The Prestige Of The Nation**
 - ✓ SC held that it is passing the current order to ensure that the prestige of the nation in holding the Under 17 Women's World Cup is not affected.

INTERNATIONAL RELATIONS

Nepal's New Citizenship Law

Nepal President Bidhya Devi Bhandari sent back the Citizenship Amendment Act, 2006 to the lower house of the Nepal Parliament, urging the members to reconsider the Act.

- Parliament of Nepal passed the first ever "Citizenship Amendment Bill" in July, 2022.
- It will amend the Nepal Citizenship Act 2006

Background: Nepal's citizenship law

- Nepal transitioned into a democracy beginning with the fall of the monarchy in 2006 and the subsequent election of the Maoist government in 2008.
- The emergence of the multiparty system was followed by the adoption of a constitution in September, 2015.
- **All Nepalese citizens born before this date got naturalised citizenship.** But their children remained without citizenship as that was to be guided by a federal law which has not yet been framed.
 - In the case of Nepalese men marrying Indian women, many women could not become citizens of Nepal.
 - This is because they were subjected to the seven-year cooling off period before they could apply for citizenship in Nepal.
 - As such women were state-less, children of such families were also often found to be without Nepalese citizenship.
- This amendment Act is expected to pave the way to citizenship for many such stateless youth as well as their parents.
 - The new amendments have **done away with the cooling off period** for these stateless women.
 - This will benefit the children of such families where the mother and children remained stateless for years.

Controversy With The Amendment Act

- The main criticism against the Citizenship Amendment Act, 2006 is that it goes against established parameters of gender justice.
 - ✓ A person born to a father or a mother with Nepalese citizenship can get citizenship by descent.
 - ✓ However, a section in the act says a person who is born to a Nepalese mother (who has lived in the country) and an unidentified father will also get citizenship by descent.
 - ✓ This appears humiliating for a mother as she has to declare that her husband is unidentified for the child to be eligible for citizenship.
 - ✓ In case of a Nepalese father, such declarations are not required.
- Another provision says that a child born to a Nepalese mother and a father holding a foreign citizenship can get naturalised citizenship.
 - ✓ This places a condition of permanent residency on the mother (and the child) which will determine the grant of citizenship for the child.
 - ✓ Also, in case the unidentified father (as mentioned above) turns out to be a foreigner, the citizenship by descent would be converted to naturalised citizenship.
- Furthermore, the act supports punitive action against the mother if the father is found later.

Sri Lanka Allows Chinese Ship To Dock At Hambantota Port

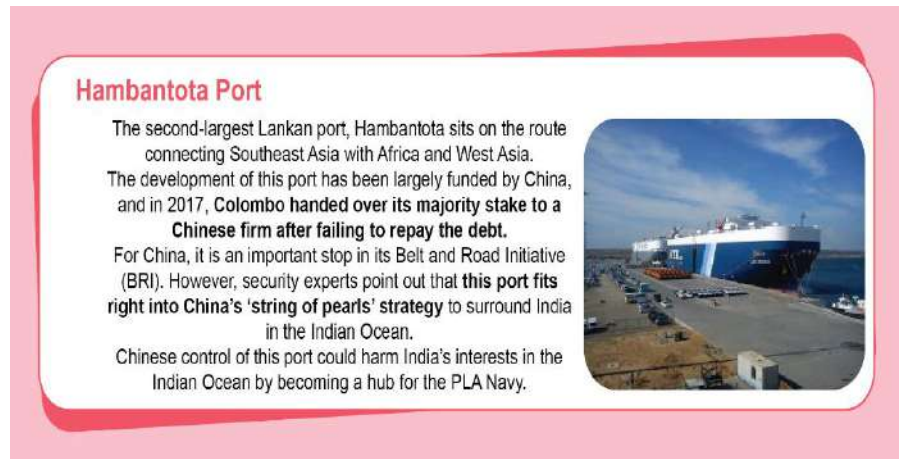
The Sri Lankan government allowed the Chinese research ship, Yuan Wang 5, to dock at the southern port of Hambantota from August 16-22.

Background

- The Chinese ship Yuan Wang 5 - was en route from the Chinese port of Jiangyin and due in the Chinese-run Sri Lankan port of Hambantota on August 11.
- Upon learning that the government in Colombo had given clearances for the Chinese military vessel to berth at Hambantota, India expressed its concern.
- As a result, the **Sri Lanka Foreign Ministry asked China to defer the arrival** of its military ship until further consultations.
- Later, in a U-turn, Lanka allowed Chinese vessel to dock from Aug 16-22.

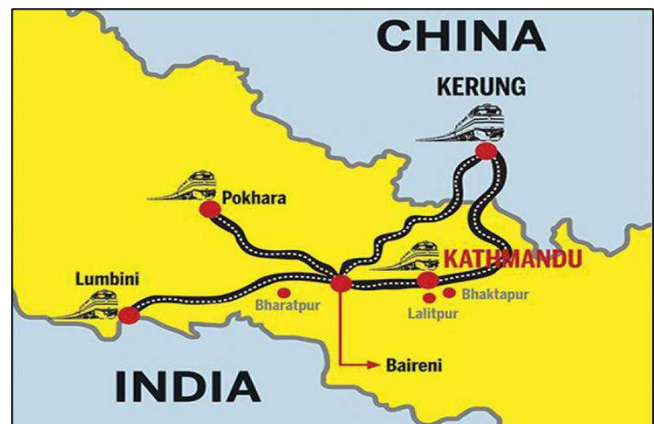
India's Concern

- The 'Yuan Wang 5' is a powerful tracking vessel whose significant aerial reach is reportedly around 750 km. This means that several ports in Kerala, Tamil Nadu, and Andhra Pradesh could be on China's radar.
- Reports have claimed that several vital installations in South India could be under threat of being snooped upon.
- India was worried that the surveillance vessel could be involved in mapping the ocean floor for **potential anti-submarine operations against the Indian Navy**.



China, Nepal Agreed to Build Trans-Himalayan Network

- China and Nepal have agreed to build the so-called **Trans-Himalayan Multi-Dimensional Connectivity Network**. The network, dubbed as economic corridor between China and Nepal, is a part of the Belt and Road Initiative (BRI).
- ✓ China has also pledged \$118 million in grant assistance to Nepal to invest in various projects.
- ✓ This was decided in a meeting between the foreign ministers of the two countries.
- The network involves the building of railways and communication networks.
- ✓ One such project is China–Nepal railway. Others include - Construction of a tunnel road; Upgrading of the **Araniko Highway**; restoration of border ports.
- This network, however, has raised concerns in India. This is due to the fact that:
 - ✓ It will lead to increased presence of China in Nepal, which is considered as India's strategic backyard.
 - ✓ India has, so far, opposed the Chinese BRI due to the issue of sovereignty.
 - ✓ India is worried that through this route increased Chinese goods will find access to the markets of Nepal.



- ✓ Since, India and Nepal share an open border, **experts fear that these goods will ultimately land in Indian market.**

Political Crisis In Iraq

- Recently, Iraq's political crisis took a violent turn in clashes between the supporters of influential Shia cleric Muqtada al-Sadr and the country's security personnel.
- After Mr. Sadr announced that he was quitting politics amid a political deadlock, his supporters stormed the Republican Palace of the government and fought the security personnel.

Background:

- The October 2021 elections to the Council of Representatives were considered to be a new beginning and opportunity for Iraq.
- The Sadrist Movement won 73 out of the 329 seats available, but failed to secure absolute majority.
- He entered into a tripartite coalition with *Sunni and Kurdish parties*. Together, they had absolute majority in the House. However, the **Shia Coordination Framework**, the coalition of **Iran-backed** Shia parties, opposed Mr. Sadr resulting into a bitter power struggle.

Constitutional Provision On Election Of President & PM Of Iraq

- The Constitution of Iraq requires a new Parliament to pick a President first, who then should ask the largest parliamentary bloc to nominate someone for the post of Prime Minister.
- The PM nominee should then form a government and get parliamentary approval.
- For the Presidential election to take place, **two-thirds of the representatives should be present in the House.**

Triggering of Crisis

- The subsequent Presidential votes in Iraq failed to go through as the quorum was not met as different blocs boycotted parliament sessions.
 - ✓ Therefore, without a new President, a new government could not be formed.
- In protest against the *rival parties' continued boycott of Parliament*, Mr. Sadr, in June 2022, asked all the 73 legislators of the Sadrist Movement to resign.
- According to Iraq's electoral laws, if a parliamentary seat becomes vacant, it will be filled by the candidate who receives the second-highest number of votes in their electoral district.
- The Coordination Framework took advantage of this resignation and became the largest bloc. They went ahead with plans to form their government.
- Mr. Sadr, now out of Parliament, called for protests in the streets.

1Malaysia Development Berhad Scandal

- Recently, Malaysia's top court upheld the conviction and 12-year prison sentence awarded to former Prime Minister Najib Razak in the multi-billion-dollar graft scandal.
- The scandal is linked to the looting of funds from **1Malaysia Development Berhad (1MDB)**.

1MDB Scandal

- Now insolvent, 1MDB was a state-owned company co-founded by Najib in 2009 purported to promote development.
- During its initial years, 1MDB signed ventures with companies like PetroSaudi and was also funded by investment company Goldman Sachs.

- In 2015, prominent newspaper reported that millions of dollars from 1MDB accounts were transferred to Najib’s personal accounts.
- It brought global attention to money laundering through the state-owned 1MDB fund and subsequent investigations unearthed the corruption.

Russia Blocks Adoption of N-disarmament Text

- Russia blocked agreement on the final document of a four-week review of the U.N. treaty - **Nuclear Non-Proliferation Treaty (NPT)**.
- Russia had one key objection on some paragraphs which, according to the Russian officials, were blatantly political in nature.
 - ✓ The latest draft text had expressed grave concern over military activities around Ukrainian power plants, including Zaporizhzhia.
 - ✓ The shelling around these plants has raised the fears of nuclear radiation due to the possibility of damages to the reactors.
 - ✓ Russia was opposed to this paragraph concerning the Ukrainian nuclear power plant in Zaporizhzhia, which is occupied by the Russian military.

Nuclear Non-Proliferation Treaty (NPT)

- The NPT is an international treaty whose objective is to prevent the spread of nuclear weapons and weapons technology, to foster the peaceful uses of nuclear energy, and to further the goal of disarmament.
- The Treaty represents the only binding commitment in a multilateral treaty to the goal of disarmament by the nuclear-weapon States.
- Opened for signature in 1968, the Treaty entered into force in 1970.
- A total of 191 States have joined the Treaty, including the five nuclear-weapon States.
 - ▲ South Sudan, India, Pakistan, and Israel have never joined the NPT.
 - ▼ North Korea joined the NPT in 1985, but withdrew in 2003.



Key Features

- The Treaty is regarded as the cornerstone of the global nuclear non-proliferation regime and an essential foundation for the pursuit of nuclear disarmament.
- The Treaty establishes a safeguards system under the responsibility of the **International Atomic Energy Agency (IAEA)**.
 - ✓ Safeguards are used to verify compliance with the Treaty through inspections conducted by IAEA.
- The provisions of the Treaty envisage a **review** of the operation of the Treaty **every 5 years**.
- The treaty's term was originally 25 years, but it was extended indefinitely at a review conference in 1995.

NPT: A Success	NPT: Failed To Prevent The Spread Of Nuclear Weapons
<ul style="list-style-type: none"> • With adherence of 191 countries, the NPT is close to universal world participation. • It remains unique as there is no other international agreement based on a bargain between nuclear- and non-nuclear-weapon states. • The Treaty facilitates cooperation on peaceful applications of nuclear technology under the watch of the IAEA. • It can be credited with embedding the 	<ul style="list-style-type: none"> • NPT in its present form tries to prevent horizontal proliferation but cannot prevent vertical proliferation. <ul style="list-style-type: none"> ○ Failure to prevent horizontal spreading can be seen in the case of Iran, Libya and North Korea. • There are still almost 16,000 nuclear weapons in existence, many of them on hair-trigger alert and far more powerful than the bomb dropped on Hiroshima. • There is no truthful adherence to the treaty. Many countries even after joining NPT continued clandestine nuclear programmes including Brazil, South Africa, Iran

<p>non-proliferation norm that is responsible for keeping the number of countries armed with nuclear weapons lower than ten.</p>	<p>and Iraq.</p> <ul style="list-style-type: none"> • Today NPT has been reduced to a treaty which protects the rights of five nuclear weapon state. These states are contributing to the vertical proliferation of nuclear weapons.
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Conclusion

- NPT is a **discriminatory treaty** which divides the world into **nuclear haves and have nots**. In the absence of truthful adherence, the treaty does not make world safer from the threat of nuclear weapons.
- It is believed that Treaty is at risk of becoming obsolete and eventually collapsing, because of proliferation challenges and disputes about disarmament.
- It is high time to formulate a global, time bound, verifiable & non-discriminatory treaty to eliminate all nuclear weapons from the face of the earth, which has been India’s consistent position since the beginning.

Global Pandemic Treaty Draft to be Ready in 18 Months



WHO chief scientist Dr Soumya Swaminathan said that the draft for the global pandemic treaty will be available in the next 18 months.

Background

- In December 2021, the World Health Assembly agreed to start a global process to draft the pandemic treaty. This was the **second special session** since it was founded in 1948.
- At this session, the Health Assembly adopted a decision titled “The World Together”.
- Under the decision, the WHO established an **Intergovernmental negotiating body (INB)**.
- INB is mandated to draft and negotiate the contents of the pandemic treaty in compliance with **Article 19** of the WHO Constitution.
 - ✓ Article 19 of the WHO Constitution gives the World Health Assembly the authority to adopt conventions or agreements on matters of health.
 - ✓ A **two-third majority is needed** to adopt such conventions or agreements.
 - ✓ The WHO Framework Convention on Tobacco Control was set up under Article 19 and it came into force in 2005.

The Pandemic Treaty

- The pandemic treaty is expected to cover aspects like

-  **Data sharing and genome sequencing of emerging viruses**
-  **Equitable distribution of vaccines and drugs and related research throughout the world**

- The European Union (EU) also wants a **ban on wildlife markets** to be included in the treaty.
 - ✓ A widely-accepted theory points that the novel coronavirus may have jumped from animals to humans in a wildlife market of China.
- While the EU wants the treaty to be legally binding, the U.S., Brazil and India have expressed reservations about the same.
- The **legal nature of the treaty is yet to be defined**.
 - ✓ As of now, it may not be legally binding as several countries have expressed reservations, but it will give a broad working guideline.



About WHO

- ▲ Founded in 1948 and based in Geneva, Switzerland, it is the UN agency responsible for global public health. It has 194 member states.
- ▲ 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.
- ▲ 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. Currently, the post has again been occupied by an Indian appointee, Dr Poonam Khetrpal Singh, who has been in office since 2014.
- ▲ Dr. Soumya Swaminathan has been serving as WHO's chief scientist since 2019.

US Navy Ship Docks in India for Repairs

- A US Navy ship named 'Charles Drew' made history when it landed in India for repairs and ancillary services at Larsen & Toubro's (L&T) Shipyard in Kattupalli, Chennai.
 - ✓ This is the first ever repair of a US Navy ship in India.
- In April 2022, at the US-India 2+2 Ministerial Dialogue both countries decided to look at the **possibility of using Indian shipyards for the upkeep** and repair of ships owned by the US Maritime Sealift Command in order to assist with mid-voyage repairs of US naval ships.
- This move added a new facet to the rapidly growing Indo-U.S. strategic cooperation. It also signals **leveraging of the Logistics Exchange Memorandum of Agreement (LEMOA)**-the military logistics agreement India signed with the U.S. in 2017.
- The event signifies the capabilities of Indian shipyards in the global ship repairing market. This shipbuilding project opens a new section of defence exports.
 - ✓ India currently has six significant shipyards with a **combined annual revenue of around \$2 billion**.
 - ✓ A brilliant example of the expansion of the Indian shipbuilding sector is the nation's first indigenous aircraft carrier, Vikrant.
 - ✓ India is also on its course to design and develop its first large-scale marine diesel engine over the next two to three years.

India Re-Established Its Diplomatic Presence In Kabul

The Foreign Ministry of the Taliban dispensation (special permission) in Afghanistan has welcomed India's diplomatic presence in Kabul.

Key Highlights

- **Taliban on immunity of the diplomats**
 - ✓ Besides ensuring security to the Indian mission, the Taliban said that they will pay close attention to the immunity of the diplomats and cooperate well in endeavours.
- **Taliban remains optimistic about strengthened India – Afghan relationship**
 - ✓ The Taliban govt expressed hope that upgrading diplomatic representation and dispatching diplomats would strengthen Afghan-India relations.
 - ✓ This would lead to the completion of unfinished projects by India and the commencement of new vital projects.

Background

- In **June 2022**, India re-established its diplomatic presence in Kabul by deploying a technical team in its embassy in the Afghan capital.
- This team was posted with a task to focus on business and trade opportunities and distribution of food and medical aid.
 - ✓ For now, the embassy is focused on distribution of food and medicines through various agencies and ensuring the upkeep of Indian projects that had been handed over to the Afghan authorities.
 - ✓ In the next phase, Indian infrastructure companies are hoping to return to incomplete infrastructure projects.
- The embassy, however, has not opened any visa facilitation services yet. Only a limited number of visas have been issued to Afghanistan citizens through the e-visa route.
- Hundreds of students and patients requiring treatment in India are waiting the visa facility to be reopened.

US Exit and Rise of Taliban in Afghanistan

- US, under its new President Joe Biden, announced its decision to withdraw all its troops from Afghanistan by September 11, 2021. However, the US and its allies exited Afghanistan in July 2021.
- Following the withdrawal of allied forces, the Taliban re-grouped itself in a bid to topple the democratically elected govt. of Afghanistan.
- Facing little resistance, Taliban fighters overrun the capital, Kabul, and take over the presidential palace on August 15, 2021. Since then, Taliban is ruling in Afghanistan.

India's response after takeover

- **India closed its consulates and embassies in Afghanistan and evacuated citizens**
 - ✓ India shut down its embassy in Kabul on August 17, two days after the Taliban takeover of Afghanistan.
 - ✓ Before closing its embassy, it had shut down all its consulates in Afghanistan.
 - India had consulates in Herat, Kandahar, Jalalabad and Mazar-i-Sharif.
 - ✓ It also launched Operation Devi Shakti to evacuate its citizens.
- **Did not recognise Taliban Govt.**
 - ✓ India has not yet recognised the Taliban regime and it has urged the international communities to do the same.
 - ✓ India also reiterated its call for an inclusive government that has representation of women and minorities.
- **Calls upon the Taliban to not allow Afghanistan territory to be used against others**
 - ✓ India expressed hope that the UN Security Council resolution 2593 would guide the international community's approach towards Afghanistan.
 - The recent UNSC resolution passed on August 30, 2022, calls for Afghan soil not being used for terrorism.
- **India continued its humanitarian assistance in Afghanistan**
 - ✓ Even after closing its operations in Afghanistan, India kept on supporting people of Afghanistan by providing humanitarian assistance.
 - ✓ India has, so far, transferred 40,000 tonnes of a promised shipment of 50,000 tonnes of wheat to the World Food Programme via trucks through Pakistan.
 - ✓ It also sent winter clothing and medicines for the people of Afghanistan.

SUMMITS AND ORGANISATIONS

US-led Critical Minerals Alliance - Minerals Security Partnership

- India is concerned that it is not finding a place in the Minerals Security Partnership.
- The Finance Ministry have communicated with the Ministry of External Affairs to explore the possibility of how New Delhi can join the 11-member group.



Why India Has Not Been Included In The Partnership So Far?

- It is because the **country does not bring much expertise to the table**.
- In the group, countries like Australia and Canada have reserves and also technology to extract them and countries like Japan have the technology to process.

Why India Wants To Join The Partnership?

1. Critical minerals are necessary for India's growth

- India's growth strategy is powered by an ambitious shift in the mobility space through the conversion of a large part of public and private transport to electric vehicles (EVs).
- This, alongside a coordinated electronics manufacturing push, underlines the need to secure the supply of critical minerals.

2. MSP has the potential to revamp supply chain of critical minerals

- The new grouping could focus on the supply chains of minerals such as Cobalt, Nickel, Lithium and also the 17 rare earth (RE) minerals.
 - ✓ Cobalt, Nickel and Lithium are required for batteries used in EVs
 - ✓ Rare earth minerals are critical, in trace amounts, in the semiconductors and high-end electronics manufacturing.

3. MSP As An Alternative to China

- Currently, China has created processing infrastructure in rare earth minerals and has acquired mines in Africa for elements such as cobalt.
- The partnership is also seen as a part of a global '**China-plus-one**' strategy adopted post the Covid-19 pandemic that caused massive supply-chain disruptions.
 - ✓ The strategy also known as Plus One, is the business strategy to avoid investing only in China and diversify business into other countries.

India and Rare Earth (RE) Metals

- Rare earth comprises 17 elements and are classified as **light RE elements (LREE)** and **heavy RE elements (HREE)**.
- Some RE are available in India such as Lanthanum, Cerium, Neodymium, Praseodymium and Samarium.
 - ✓ India has the world's fifth-largest reserves of rare earth elements, nearly twice as much as Australia
- Others such as Dysprosium, Terbium, Europium that are classified as HREE are not available in Indian deposits in extractable quantity.
- Hence, there is a dependence on countries such as China for HREE, which is one of the leading producers of RE with an estimated 70% of the global production.
- In mid-2020, India, through a newly floated state-owned company, had signed an agreement with an Argentinian firm to jointly prospect lithium.
 - ✓ The State-owned company, **Khanij Bidesh India Ltd**, was incorporated in August 2019.
 - ✓ Its mandate is to acquire strategic mineral assets such as lithium and cobalt abroad.

{For details on "India, Australia Brings Critical Minerals Into Strategic Ties" refer may 2022 Recitals}

Latvia, Estonia Leave China-Backed East Europe Forum

- **Latvia and Estonia** have left a **Chinese-backed forum** aimed at boosting relations with Eastern European countries.
- The move follows China's boosting of its relations with Russia. China has refused to criticise Russia and has condemned punishing economic sanctions imposed on Moscow by the West.
 - ✓ Many Baltic countries fear that Russian invasion of Ukraine is a possible first step in a series of moves against countries that were once part of the Soviet Union.
- The move also comes after Beijing launched economic and diplomatic retaliation against another Baltic state, **Lithuania**.
 - ✓ Lithuania was also a member of this forum. **It was the 1st country to leave the forum** in June 2021.
 - ✓ Later, it expanded ties with the self-governing island democracy of Taiwan. This step irritated China which has now resorted to the diplomatic retaliation against Lithuania.

About The Forum

- It is a China-led format with an aim **to expand cooperation between Beijing and the CEE** (Central and Eastern Europe) member countries, with investments and trade for the development of the CEE region.
- It was founded in 2012 in Budapest as 17+1 cooperation forum.
 - ▶ However, three countries have so far left the forum and now it has been reduced to 14+1.
- The then member countries included twelve EU member states and five Balkan states:
 - ▶ Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Macedonia, Montenegro, Poland, Romania, Serbia, Slovakia and Slovenia.
- This platform is largely seen as an extension of China's flagship Belt and Road initiative.

International Chemical Safety Cards (ICSCs)

- Department of Chemicals and Petrochemicals (DCPC) and International Labour Organisation (ILO) have signed an MoU to adopt the International Chemical Safety Cards (ICSCs) for **information dissemination** to the chemical industry.
- ICSCs are **data sheets** intended to provide essential safety and health information on chemicals in a clear and concise way.

- The primary aim of the Cards is to promote the safe use of chemicals in the workplace. The main target users are workers and those responsible for occupational safety and health.
- The ICSCs project is a common undertaking between **ILO and WHO**, with the cooperation of the **European Commission**.

New Leader of UNMOGIP

U.N. Secretary General has appointed Rear Admiral Guillermo Pablo Rios of Argentina as the Head and Chief Military Observer for the **United Nations Military Observer Group in India and Pakistan (UNMOGIP)**.

UNMOGIP: Background

- After the independence in 1947, accession of Kashmir to India became a matter of dispute between India and Pakistan. As a result, fighting broke out later that year.
- In January 1948, the Security Council adopted **resolution 39**, establishing the **United Nations Commission for India and Pakistan (UNCIP)** to investigate and mediate the dispute.
- In April 1948, by its resolution 47, the Council decided to enlarge the membership of UNCIP and to recommend various measures including the use of observers to stop the fighting.
- At the recommendation of UNCIP, the **Secretary-General appointed the Military Adviser to support the Commission on military aspects** and provided for a group of military observers to assist him.
 - ✓ These military advisers formed the nucleus of the United Nations Military Observer Group in India and Pakistan (UNMOGIP).
- The first team of such observers arrived in the mission area in January 1949.

Functions of UNMOGIP

- To supervise, in the UT of Jammu and Kashmir, the ceasefire between India and Pakistan;
- To assist the Military Adviser to UNCIP
- To accompany the local authorities in their investigations, gather as much information as possible, and report as completely, accurately and impartially as possible

Karachi Agreement and UNMOGIP

- The conclusion of the **Karachi Agreement in July 1949** established a **ceasefire line to be supervised by UN military observers**.
- It specified that UNCIP would station observers where it deemed necessary, and that the ceasefire line would be verified mutually on the ground by local commanders on each side with the assistance of UN military observers.
- **Disagreements** were to be referred to the UNCIP Military Adviser, whose decision would be final.

India's Position on UNMOGIP

- After Shimla Agreement of 1972, India took the position that the mandate of UNMOGIP had lapsed. Since then, India has not gone to UNMOGIP with complaints against Pakistan.
 - ✓ In the Shimla Agreement, India and Pakistan agreed to move the **ceasefire line to the Line of Control** and to resolve their disputes bilaterally, without the intervention of a third party.
- India contended that the ceasefire line, established under the Karachi Agreement of 1949, does not exist anymore after the Shimla agreement.
 - ✓ Since the Shimla agreement, India has also adopted a non-recognition policy towards third parties over the question regarding the UT of Jammu and Kashmir.
- Time and again, India has requested UNMOGIP to cease its operation in Kashmir.

DEFENSE AND SECURITY

Skylight Exercise

Indian Army has conducted a major pan-India exercise codenamed 'Skylight'. It is to test the operational readiness and robustness of its hi-tech satellite communication systems in the event of an attack by an adversary, and to train personnel manning these.

Rationale behind this exercise

- The idea was to validate and showcase the resilience of its communication capabilities in case terrestrial connectivity is disrupted in future conflicts.
- Space-based communications will then prove to be decisive. Hence, it is important to build and refine technical competence in this field.
- This exercise also assumes significance against the backdrop of China's long-standing thrust on "informatised" and "intelligentised" warfare.
 - ✓ China is leagues ahead in space, cyberspace, robotics, lethal autonomous weapon systems, Artificial intelligence (AI) warfare.
 - ✓ Keeping this in mind, Indian Army is also pursuing 'Quantum Computing and Communications' for much better and secure C4I2SR systems for wars of future.
 - C4I2SR stands for command, control, communication, computers, intelligence, information, surveillance and reconnaissance.

Space communication by Indian Army

- The Indian Army uses the services of a number of ISRO satellites that connect hundreds of communication terminals of various types.
- These include static terminals, transportable vehicle mounted terminals, man-portable and small form factor man-pack terminals.
- Unlike the Indian Air Force and the navy, the army currently does not have a dedicated satellite.

Indian Army satellite by 2025

- The army is on course to get its own satellite by December 2025.
- The Defence Acquisition Council, the government's top weapons procurement body, gave the go ahead for the **Indian Army's Satellite GSAT-7B in March 2022**.
 - ⇒ GSAT-7 series of advanced satellites built by ISRO is designed to provide communication capabilities to users over vast expanses including oceans.
- The satellite has been designed as an **indigenous multiband** satellite with advanced security features.
- It will support tactical communication requirements for not only troops deployed on the ground, but also for remotely piloted aircraft, air defence weapons and other mission critical and fire support platforms.

Combined Maritime Forces

- India formally commenced cooperation with the Bahrain-based multilateral partnership, Combined Maritime Forces (CMF). At the India-U.S. 2+2 in April 2022, India had announced that it would join the CMF as an Associate Partner.
- However, the modalities of the exact nature of cooperation are still being worked out, according to official sources.

Working

The work of the CMF-B is divided into 4 combined task forces (CTF) — CTF 150, CTF 151, CTF 152, and CTF 153.

CTF 150 focuses on ensuring maritime security in the Gulf of Oman and Indian Ocean.

CTF 151 focuses on counterpiracy

CTF 152 aims to ensure maritime security in the Persian Gulf

CTF 153 (established in April 2022) — focuses on ensuring maritime security in Red Sea and Gulf of Aden

Combined Military Forces-Bahrain (CMF-B)

- It is the US-backed counterterrorism coalition aimed at protecting international waters. It was established in 2001 with only 12 members.
 - The United States Naval Forces Central Command (NAVCENT) was tasked with leading the then CMF in 2001.
- The coalition was formed with like-minded partners to counter the threat of international terrorism and uphold the international rules-based order.
- The coalition is headquartered in Bahrain.

Role

- The CMF-B is primarily tasked with ensuring stability and security across 3.2 million square miles of international waters.
- It acts against **illegal non-state actors** operating in vital sea lines of communication.
- Its scope has expanded from just counterterrorism to counter-narcotics, counter-smuggling operations, and suppressing piracy.

Membership

- Participation in the CMF-B is voluntary — it's mandated **neither by a political agreement nor a military one.**
- The coalition has 34 members from all across the world. **Recently, India became the associate member of the maritime partnership.**
 - Other Asian members (full members) include Pakistan, Philippines, Seychelles, Singapore and Malaysia.

India and CMF-B

- Recently, India joined the coalition as an associate member. So far, India was conducting similar anti-piracy missions on its own.
 - ✓ India has two ships deployed round the clock between the Gulf of Aden and the Persian Gulf for anti-piracy and anti-smuggling operations.
- With India now joining this grouping, it will operate in coordination with the CMF-B members.
- As an associate member, India will reportedly not get command of the task forces' and will also have a limited say in planning operations.

Significance

1. **Increased maritime regional security:** It will strengthen cooperation in regional security in the Western Indian Ocean. It is also in line with the India's commitment to the collective responsibility of maritime security in the Indian Ocean.
2. **India has already worked with CMF in the past on various occasions:** E.g., the CMF's CTF 151 has coordinated with Indian and Chinese warships deployed on anti -piracy duties to patrol the Maritime Security Transit Corridor.
3. **Widening military diplomacy:** Joining the CMF is the latest in a series of multilateral engagements by the Indian Navy as part of India's widening military diplomacy.

Army Gets Several Made-In-India Defence Equipment

Defence Minister handed over several new indigenously-developed defence systems, including the F-INSAS, the Nipun mines, the Landing Craft Assault (LCA), to the Army.

F-INSAS system	<ul style="list-style-type: none">● F-INSAS stands for <u>Future Infantry Soldier As A System</u>, a programme for infantry modernisation aimed at increasing the operational capability of the soldier.● As part of the project, soldiers are being equipped with modern systems that are lightweight, all-weather-all-terrain, cost-effective and low maintenance.● Weaponry system: Full-gear of F-INSAS system includes an AK-203 assault rifle, multi-mode hand grenade.● Other gears: F-INSAS provides soldiers with ballistic helmets and ballistic goggles, along with a bullet-proof vest.● The F-INSAS also comes with hands-free, secured advanced communications set for real-time
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	exchange of information with the command post.
Nipun mines	<ul style="list-style-type: none"> • These are indigenously designed and developed <u>anti-personnel mines</u>, termed by the DRDO as 'soft target blast munition'. ✓ They have been developed with the efforts of Armament Research and Development Establishment, a Pune-based DRDO facility, and Indian industry. • These mines are meant to act as the first line of defence against infiltrators and enemy infantry. • Anti-personnel mines are meant to be used against humans as against anti-tank mines that are aimed at heavy vehicles.
Landing Craft Assault	<ul style="list-style-type: none"> • It is meant to serve as a replacement for the boats with limited capabilities currently in use in the Pangong Tso lake. • The LCA has been indigenously developed by Goa-based Aquarius ShipYard Limited. • It is said to have better launch, speed and capacity to operate across water obstacles in eastern Ladakh.

Moscow Conference on International Security (MCIS)

- Recently, Defence minister Rajnath Singh participated in the Moscow Conference on International Security (MCIS).
- MCIS, held annually since 2012, is an important security dialogue. It acts a platform for an open dialogue of defence agencies, international organizations and military experts.
- This year, the Ministry of Defence of the Russian Federation organised the 10th Moscow Conference on International Security.
- This year's Conference program included the most topical problems of global and regional security.

Military Exercises

Exercise Pitch Black 2022	<ul style="list-style-type: none"> • The Indian Air Force (IAF) took part in multiple missions with the participating Air Forces in the 1st phase of Exercise Pitch Black 2022 in Australia. • Exercise Pitch Black is a biennial three-week multi-national large force employment exercise hosted by the Royal Australian Air Force (RAAF).
AL NAJAH-IV	<ul style="list-style-type: none"> • India and Oman carried out a nearly two-week military exercise beginning August 1, with a focus on counter-terror cooperation. • This fourth edition, known as AL NAJAH -IV, was conducted in Rajasthan.
Vijay Prahar	<ul style="list-style-type: none"> • It is a combat exercise between the elite Special Forces of India and USA. • The 13th edition of the Vajra Prahar exercise was held recently in Himachal Pradesh.
Exercise Udarashakti	<ul style="list-style-type: none"> • It is a bilateral exercise between Indian Air Force and Royal Malaysian Air Force. • Recently, this exercise was held in Malaysia.

GEOGRAPHY AND ENVIRONMENT

India Adds 11 New Wetlands, Total Ramsar Sites Now At 75

- In the 75th year of independence, India added 11 more wetlands to the list of Ramsar sites to make a total of 75 Ramsar sites in the country.
- The 11 new sites include 4 sites from Tamil Nadu, 3 from Odisha, 2 from Jammu & Kashmir and 1 each from Madhya Pradesh and Maharashtra.
- Total **75 Ramsar sites covers an area of 13,26,677 ha in the country. (1hectare (ha) = 0.01 square kms)**

About 11 New Ramsar Sites

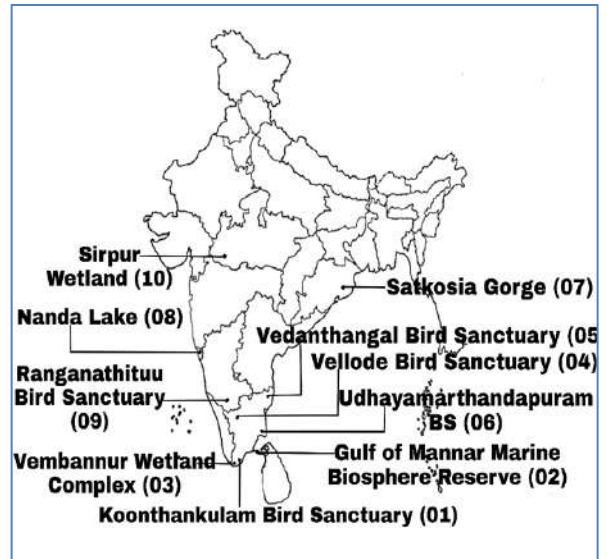
Odisha	Tampara Lake	It is one of the largest freshwater lakes in Odisha.
	Hirakud Reservoir	It is the longest earthen dam in the world which started operating in 1957.
	Ansupa Lake	It is the largest freshwater lake of Odisha situated in Cuttack district. This wetland is an oxbow lake formed by River Mahanadi.
Tamil Nadu	Chitrangudi Bird Sanctuary	It has been declared as a Bird Sanctuary. It is surrounded by agricultural fields, where different crops are grown throughout the year.
	Suchindram Theroor Wetland Complex	It is part of the Suchindram-Theroor Manakudi Conservation Reserve in Tamil Nadu. It lies at the southern tip of the Central Asian flyway of migratory birds. It is declared an Important Bird Area (IBA).
	Vaduvur Bird Sanctuary	It is a large human-made irrigation tank
	Kanjirankulam Bird Sanctuary	It is a Protected area in Tamil Nadu. It is adjacent to Chitrangudi Bird Sanctuary It is notable as a nesting site for several migratory heron species that roost in the prominent growth of babul trees
Jammu & Kashmir	Shallbugh Wetland Conservation Reserve	It plays a major role in the natural control, amelioration or prevention of flooding.
	Hygam Wetland Conservation Reserve	It falls within the river Jhelum basin. It is also recognized as an Important Bird Area (IBA).
Maharashtra	Thane Creek	The area is an important part of the wetland complex of the Central Asian Flyway of the birds and has been categorized as an IBA. It is fringed by mangroves on both banks & comprises around 20% of the total Indian mangrove species.
Madhya Pradesh.	Yashwant Sagar	It is one of the most important birding sites in Malwa region of MP. Presently it is mainly used for water supply to the city. It is one of the two IBA in the Indore region

The Central Government previously **designated 10 new wetlands of international importance which took the count to 64**. Six wetlands are from Tamil Nadu, 1 each from Karnataka, Goa, MP and Odisha.

6 Wetlands from TN Are

- **Koonthankulam Bird Sanctuary (BS)** – It is a man-made wetland, located in Tamil Nadu. It is the largest reserve for migratory waterbirds and breeding residents in south India. It is the part of the Central Asian Flyway.

- **Gulf of Mannar Marine Biosphere Reserve** - It is located in south-eastern coastline of Tamil Nadu. It is the 1st Marine Biosphere Reserve in South and South-East Asia.
- **Vembannur Wetland Complex** - It is a man-made inland tank, located in Tamil Nadu. It forms the southernmost tip of peninsular India. This wetland is part of the Birdlife International Data Zone.
- **Vellore Bird Sanctuary** - It is located in Tamil Nadu. It is locally known as Periyakulam Yeri.
- **Vedanthangal BS** - It is one of the oldest freshwater bird-protected areas in Tamil Nadu.
- **Udhayamarthandapuram BS** - It is monsoon fed wetland, located in Tamil Nadu.



Remaining 4 From Other States

Odisha	Satkosia gorge	It expands along Mahanadi River in Odisha. The Deccan Peninsula and the Eastern Ghats meet at Satkosia. It was established in 1976 as a wildlife sanctuary
Goa	Nanda Lake	It is the freshwater marshes, located adjacent to one of rivulets of the Zuari river in Goa. It helps the locals to store water in the off-monsoon season.
Karnataka	Ranganathituu BS	Also known as Pakshi Kashi of Karnataka. It is the largest bird sanctuary in the state.
MP	Sirpur wetland	It is located in Indore. It was created by the Holkars in the early 20th century.

Union Government last month **designated 5 new wetlands of international importance**, taking the total number of Ramsar sites in the country to 54.

5 wetlands are :

1. **Karikili Bird Sanctuary** - It is a protected area located in Tamil Nadu. This region is surrounded by open areas, paddy fields and scrub forest.
2. **Pallikaranai Marsh Reserve Forest** - It is a freshwater marsh in Chennai, Tamil Nadu. It is situated adjacent to the Bay of Bengal. **It is the last remaining natural wetlands of South India.**
3. **Pichavaram Mangrove** – It is located in Tamil Nadu. It is located between two prominent estuaries, the Vellar estuary in the north and Coleroon estuary in the south.
4. **Sakhya Sagar** - It is a human-made reservoir, located near Madhav National Park in Madhya Pradesh.
5. **Pala Wetland** - It is the largest natural wetland in Mizoram. It falls under the Phura forest range.

About Ramsar Convention

- The **convention signed in 1971 in Ramsar, Iran**. It is the only global treaty that **focuses specifically on wetlands**. 170 countries are signatories to the convention.
- A contracting party agrees to nominate at least one wetland in its territory to the List of Wetlands of International Importance based on enumerated criteria.
- **India signed this convention in February 1982.**

About Wetland

- It is an area of land that is saturated with water either permanently or seasonally.
- It is known as the Earth's kidneys because, they serve the very important function of filtering water.

Montreux Record

- It is a register of wetland sites in the List of Wetlands of International Importance where ecological character is changing due to technological development, pollution or other human intervention.
- Currently, 48 sites from all over the world are listed in the Montreux Record.
- 2 wetlands of India are in Montreux record

Keoladeo National Park (Rajasthan)

Loktak Lake (Manipur)

- Chilika lake (Odisha) was placed in the record but was later removed from it.

Important Facts Related to Wetlands

- World's 1st Ramsar site was the Cobourg Peninsula in Australia.
- With 175 Ramsar sites, the **United Kingdom has the largest number of Ramsar sites** in the world.
- **Bolivia has the largest area** of listed wetlands with 148,000 sq km.
- Globally, wetlands cover 6.4% of the geographical area of the world.
- India has 19 types of wetlands, which spread over 1,52,600 sq km which is 4.63% of the total geographical area of the country.
- In **India inland-natural wetlands account for 43.4% and coastal-natural wetlands 24.3%**.
- In state-wise distribution **Gujarat is in the top with 22.7% of total wetlands areas of the country**. It is followed by Andhra Pradesh, Uttar Pradesh and West Bengal.
- Tamil Nadu has maximum no. of Ramsar sites (14), followed by UP which has 10 nos. of Ramsar sites
- **Sundarbans in West Bengal is the largest and Renuka Wetland in Himachal Pradesh is the smallest Ramsar Site of India**.
- Chilika Lake (Odisha) and Keoladeo National Park (Rajasthan) were recognized as the 1st Ramsar Sites of India.

Stronger Climate Targets for 2030

The Union Cabinet recently approved **India's revised climate pledge** - Nationally Determined Contribution (NDC) - to the Paris Agreement.

- The pledge will outline India's clean energy transition roadmap from now until 2030 and will be shared with the United Nations Framework Convention on Climate Change (UNFCCC).

India's Intended Nationally Determined Contribution

- Countries from all over the world had pledged to arrive at **Paris Agreement** at UNFCCC Conference of the Parties (**COP21**) in 2015.
 - ✓ The accord aims to keep global warming far below 2°C, preferably 1.5°C, when compared to pre-industry levels.
- Countries have agreed to publicly outline their **Intended Nationally Determined Contributions** (INDCs) for post-2020 climate action to meet Paris Agreement targets.
 - ✓ INDC is a non-binding national plan highlighting climate change mitigation, including climate-related targets for greenhouse gas emission reductions.

- In 2015, India submitted its INDC to the UNFCCC.
- According to the Paris Agreement, countries must 'update' their pledges every 5 years to make larger commitments to reduce GHG emissions

India's First Pledge	Revised/Enhanced INDC
<p>It had 8 goals, but only 3 had quantified targets. India's first pledge had 3 primary targets.</p> <ul style="list-style-type: none"> ➤ To <u>reduce emissions intensity of the economy (emission per unit of GDP) by 33-35% below 2005 levels.</u> ➤ To have <u>40% of installed electric power from non-fossil-based</u> energy resources by 2030. ➤ To create an <u>additional carbon sink of 2.5-3 gigatonnes of carbon dioxide equivalent (GtCO₂e) by 2030</u> through additional forest and tree cover. 	<p>India at the COP26 to UNFCCC held in Glasgow, UK in 2021, expressed to <i>intensify</i> its climate action by presenting 5-set of new targets (Panchamrit) of India's climate action. These were -</p> <ul style="list-style-type: none"> ➤ India will increase its non-fossil fuel energy capacity to 500 gigawatts (GW) by 2030. ➤ The total projected carbon emissions will be reduced by 1 billion tonnes from now through 2030. ➤ <i>It will meet 50% of its energy requirements from renewable sources by 2030.</i> ➤ <i>Reduce emissions intensity by 45% by 2030 from the 2005 level.</i> ➤ <i>India will achieve its target of net zero by 2070.</i>

Key Highlights

- The Union Cabinet recently approved last three of the five targets.
- The NDC also highlights India's goal of "sustainable lifestyles" and "climate justice" to protect the poor and vulnerable from the detrimental effects of climate change.
- It also emphasizes on the need for a mass movement for 'LIFE' (Lifestyle for Environment) as a cornerstone to combating climate change.
- India's updated NDC, soon to be communicated to the UNFCCC, will be **implemented by 2030** through programmes and schemes of relevant ministries and departments and with due support from states and UTs.
- However, India has said clearly that it would meet its aim of 50% cumulative electric power from non-fossil-fuel-based energy resources through technology transfer and low-cost international finance, notably from Green Climate Fund (GCF) established within the framework of UNFCCC.

Glasgow Summit, 2021

- It has **urged countries to consider strengthening their 2030 targets by COP27** to be held in Egypt in 2022.
- The summit targeted global warming not to exceed +1.5°C and got about 140 countries to announce target dates for bringing emissions down to net zero.
- India has also joined the consensus and announced its **net-zero target of 2070**.

Hasdeo Aranya Forest

The Chhattisgarh Legislative Assembly passed a private member resolution urging the Centre to cancel allocation of all coal mining blocks in the **Hasdeo Aranya forest area**.

Controversy Over Coal Mining In Hasdeo Aranya

- In the year 2010, the Centre categorised Hasdeo Aranya to be a "**no-go**" zone for mining.
- However, in 2011, the Ministry of Environment, Forest and Climate Change (MoEF) granted clearance for the mining for one coal block.
- At present, of the 22 blocks, 7 blocks have been allotted to different companies.

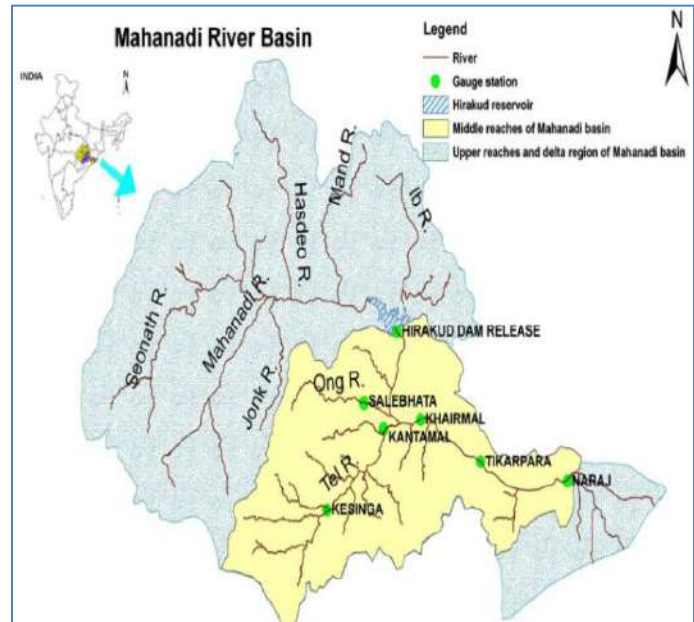
- Over the past few years, protests against mining in this region have erupted several times.

How Can Mining Of Coal Affect Hasdeo Aranya?

- Deforestation is required for mining, which can destroy the rich biodiversity.
- Mining will release toxic materials into the soil and water.
- Bad mining can lead to coal fires that can burn for decades, producing "fly ash" and smoke filled with greenhouse gases and toxic chemicals.
- Coal dust can cause respiratory problems in humans who lived near the area.

About Hasdeo Aranya Forest

- It is spread across 1,878 sq km in North-Central Chhattisgarh.
- It lies in the catchment area of the Hasdeo river.
 - ✓ The **Hasdeo river** is a tributary of the Mahanadi River, which originates in Chhattisgarh and flows through Odisha into the Bay of Bengal.
 - ✓ Hasdo River merge into the Mahanadi River in Chandarpur in Chattisgarh, 28 kms before Mahanadi river reaches the Hirakud Dam.
 - ✓ The principal sub tributary of the Hasdo River is Gej River.
- Hasdeo forests are also the catchment area for the Hasdeo Bango Dam built across the Hasdeo river which irrigates 6 lakh acres of land, crucial to a State with paddy as its main crop.
- It is called the **lungs of Chhattisgarh**.
- It lies on top of the Hasdeo coalfield, which represents one of the largest coal reserves in India, having estimated reserves of 5.18 billion tonnes of coal.
- The forests are ecologically sensitive due to the rich biodiversity and presence of a large migratory corridor for elephants. (Lemru Elephant Reserve)



The Great Barrier Reef's Recovery

- As per a recent report, the **highest levels of coral cover, within the past 36 years**, have been recorded in the northern and central parts of Australia's Great Barrier Reef (GBR).
- However, the researchers also warned that this could be quickly reversed due to rising global temperatures.
- Coral cover is measured by determining the increase in the cover of **hard corals**.
 - ✓ The hard coral cover in northern GBR had reached 36% while that in the central region had reached 33%. Meanwhile, coral cover levels declined in the southern region from 38% in 2021 to 34% in 2022.

Corals Are Of Two Types

Hard Corals: These extract calcium carbonate from seawater to build hard, white coral exoskeletons. Hard corals are in a way the engineers of reef ecosystems.

Soft Corals: These attach themselves to older skeletons built by their ancestors. Soft corals also add their own skeletons to the hard structure over the years. These growing multiplying structures gradually form coral reefs.

Reasons For Recovery

- **Recovery was fuelled largely by increases in the fast-growing Acropora corals**, which are a dominant type in the Great Barrier Reef.
- The **low levels of acute stressors in the past 12 months**, no tropical cyclones, lesser heat stress in 2020 and 2022, and a decrease in crown-of-thorn starfish (COTs) attacks.

About The Great Barrier Reef

- It is the **world's largest coral reef system**, which extends for over 2,300 kms.
- It is **located in the Coral Sea**, off the coast of Queensland in Australia.
- It was designated as a **World Heritage Site** in 1981.
- In the year 2021 **UNESCO has decided to downgrade the status** of the Great Barrier Reef
 - ✓ It been placed on the "in danger" list primarily due to impacts of climate change.

Threats to Great Barrier Reef

- The Reef has suffered three **mass coral bleaching events** in just five years due to heat stress caused by climate change.
- **Increasing sediment, nutrients and contaminants, combined with rising sea temperatures and ocean acidification are damaging the Reef.**
- As Queensland continues to grow, so does **development along the coast** and islands adjacent to the Great Barrier Reef Region.

Coral Bleaching

- When water is too warm, **corals expel the algae (zooxanthellae) living in their tissues causing the coral to turn completely white**. This is called coral bleaching.
- Bleached corals continue to live, but they are more vulnerable to disease and starvation because Zooxanthellae provide up to 90% of the coral's energy.

{For more about corals, refer The Recitals - June 2022}

India's 32nd Elephant Reserve

- Tamil Nadu Government has notified its 5th Elephant Reserve in the state at Agasthyamalai.
 - ✓ Agasthiyamalai is also a Biosphere Reserve.
- The announcement was made on World Elephant Day 2022 (12th of August).

About Agasthyamalai Elephant Reserve

- It is situated at the southernmost end of the Western Ghats.
- The new reserve will be spread over an area of 1,197 sq. km.
- It will cover Kanyakumari and Tirunelveli areas.
- The **elephant reserve** status will put more of an emphasis on protecting and conserving elephants as indicator animals.
- 4 Existing Elephant Reserves in Tamil Nadu are:

Nilgiris-Eastern
Ghat

Nilambur Silent Valley
in Coimbatore

Srivilliputhur

Anamalai

About Indian Elephant

- It is found in the central and southern Western Ghats, North East India, eastern India and northern India

and in some parts of southern peninsular India.

- It is listed as Schedule I of the Indian Wildlife (Protection) Act, 1972; IUCN Red List: Endangered
- It occurs in 16 of the 28 states in the country.
- Karnataka had the highest number of elephants (6,049), followed by Assam (5,719) and Kerala (3,054).
- India has around 25000 – 29000 elephants in the wild. However, the tuskers (male) in India are as threatened as the Tigers as there are only around 1200 tusker elephants left in India.

Various Government Initiatives

- **Project Elephant** is a Central Government sponsored scheme launched in February 1992. Through it, the government helps in the protection and management of elephants to the states having wild elephants in a free-ranging population.
- **MIKE (Monitoring of Illegal Killing of Elephants)** program was started in South Asia in 2003 after the conference of parties a resolution of CITES. The aim was to provide the information required by the *elephant range countries* for proper management & long-term protection of their elephant populations.
- **Campaign Haathi Mere Saathi:** The Ministry of Environment and forests in partnership with Wildlife Trust of India has launched this campaign in 2011. The aim was to increase public awareness and develop friendships between elephants and the local population
- The government of India in the year 2010 declared Elephant as the **national heritage animal** on the recommendations of the standing committee of the national board for wildlife

Declining Mangrove Cover

- NASA has highlighted the loss of mangrove cover on Katchal island, a part of India’s Nicobar archipelago.
- After the magnitude-9.2 Aceh-Andaman earthquake in December 2004, the islands experienced up to 10 feet of land subsidence.
 - ✓ This submergence has caused more than 90% loss of mangroves in some areas.
- According to the study, the mangroves had the **highest ratio of loss to gain** among the three types of tidal wetlands it studied. The other two were tidal flats and marshes.

About Mangroves

- These are a **group of shrubs or trees that grow in coastal saline or brackish water.**
- It occurs worldwide, mainly between latitudes 30° N and 30° S.
- They can **survive under extreme hostile environments** such as high salt and low oxygen conditions.

Mangrove Cover In India

- According to the India State of Forest Report, 2021, the **mangrove cover in India is 4,992 sq. km**, which is 0.15% of the country’s total geographical area
- **West Bengal accounts for the highest 42.45% of India's mangrove cover**, followed by Gujarat at 23.66% and Andaman and Nicobar Islands at 12.39%.
- **Sundarbans in West Bengal is the largest mangrove forest region in the world.**
- The **2nd largest mangrove forest in India is Bhitarkanika in Odisha** created by the two river deltas of River Brahmani and Baitarani.

Significance of Mangroves	Major Threats to Mangroves Ecosystem
<ul style="list-style-type: none"> • Natural Barriers - It acts as natural barriers against storm surge, coastal flooding and sea-level rise. 	<ul style="list-style-type: none"> • Development activity - Coastal development,

<ul style="list-style-type: none"> • Habitat Provider for a diverse array of terrestrial organisms. Many species of coastal and offshore fish rely exclusively on mangroves. • Carbon Sequester - It can sequester greater amounts of carbon than other trees in the <u>peat soil</u> beneath. They store this carbon for thousands of years. • Sources of Livelihood - Many people living in and around mangroves depend on them for their livelihood. The ecosystem also supports tourism. • Filters Water: Mangrove thickets maintain water quality by filtering pollutants and trapping sediments originating from land. 	<p>including the construction of hotels, and other structures, is the primary threat to mangroves.</p> <ul style="list-style-type: none"> • Increasing demand of land - Mangrove forests are cleared to make room for agricultural land and human settlements. • Pollution - and rising sea levels
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Conservation Steps to Protect Mangroves

- **National Mangrove Committee** - It was established in 1976 to advise the government on the conservation and development of mangroves.
- **International Day for the Conservation of the Mangrove Ecosystem** - UNESCO celebrates this July 26 with the aim of raising awareness about mangrove ecosystems.
- **Mangroves for the Future Initiative** - IUCN and UNDP have developed this initiative to promote investment in the conservation of coastal ecosystems.

Godavari River

The Godavari River breached the third and final level flood warning of 53 feet at Bhadrachalam town in Telangana.

About The Godavari River

- It is the **largest Peninsular River system, also known as the Dakshin Ganga.**
- It **originates in Brahmagiri Mountain** at Trimbakeshwar in Maharashtra (Nashik region) and **empties into the Bay of Bengal** in Andhra Pradesh.
- The Godavari basin spans Maharashtra, Andhra Pradesh, Chhattisgarh, and Odisha, as well as minor sections of Madhya Pradesh, Karnataka, and the UT of Puducherry (Yanam)

Right bank tributaries	Left bank tributaries
Pravara, Manjira, Mula, Peddavagu and Maner	Purna, Pranhita, Dharna, Penganga, Wainganga, Wardha, Pench, Kanhan, Indravathi and Sabari

- Important Projects on Godavari are **Polavaram Irrigation Project, Kaleshwaram, Sadarmatt Anicut, Inchampalli project and Sriram Sagar Project (SRSP).**
- **Pushkar Mela**, a major bathing festival is held on the banks of the river, after every 12 years.
- One of the ships of the **Indian Navy called INS Godavari** has derived its name from the name of the river.

Rhine River

- Water levels on the Rhine River are very low because of unusually hot and dry weather.
- It prevented many vessels from navigating the critical European shipping route fully loaded.

About River Rhine

- It is **one of the longest and most important river in Europe.** It is the second-longest river in Central and Western Europe after the Danube.

- It runs for over 1,232 km from its **source in the Swiss Alps** (in Switzerland), issuing from the Rheinwaldhorn Glacier.
- It flows through 6 countries– Switzerland, Principality of Liechtenstein, Austria, Germany, France and Netherlands-- before flowing into the North Sea at Rotterdam.

Arctic Amplification

The Arctic is **warming 2-3 times as fast as the global rate** due to the unique features in the Arctic climate system, this phenomenon known as Arctic amplification.

Key Findings of The Recent Study

- The **Arctic is heating 4 times faster than the rest of the planet.**
 - ✓ While earlier studies have proved that the Arctic is warming two or three times faster.
- The **warming is more concentrated in the Eurasian part of the Arctic**, where the Barents Sea north of Russia and Norway is warming at an alarming rate.
 - ✓ Here it is increasing 7 times faster than the global average.
- The **best climate models may not be able to capture the rate of change** and predict its exact change in the Arctic region.

Factors Contributing to Arctic Amplification

- **Sea ice loss** is the dominant driver
 - ✓ Sea ice and snow have **high albedo** implying that they are capable of reflecting most of the solar radiation as opposed to water and land. As the sea ice melts, the Arctic Ocean will be more capable of absorbing solar radiation, thereby driving the amplification.
- The lapse rate or the rate at which the temperature drops with elevation, decreases with warming.
- Studies show that the **ice-albedo feedback** and the **lapse rate feedback** are responsible for 40% and 15% of polar amplification respectively.
- Some additional factors include increases in radiation from **greenhouse gases, atmospheric water vapor, and cloud cover as well as changes in ocean heat content and atmospheric circulation patterns.**

Consequences of Arctic Amplification

- **Reason for Extreme Events** - It brings changes in atmospheric circulation, which can disrupt the stratospheric polar vortex, ultimately affecting the tropospheric jet stream and leading to extreme cold outbreaks in the mid-latitudes.
- **Rise in Sea Level** - Greenland ice sheet is melting at an alarming rate capable of subsuming island countries
- **Impact on Biodiversity** - It is acidifying water, changing salinity levels, thereby affecting biodiversity including marine species and dependent species.
- **Thawing of Permafrost** releases carbon and methane which are the major greenhouse gases responsible for global warming.
 - ✓ Experts fear that the thaw and the melt will also release the long-dormant bacteria and viruses that were trapped in the permafrost and can potentially give rise to diseases

Impact on India of Arctic Amplification

- A group of Indian and Norwegian scientists published a study titled 'A possible relation between Arctic Sea ice and late season Indian Summer Monsoon Rainfall extremes.'
 - ✓ The study found that the reduced sea ice in the Barents-Kara Sea region **can lead to extreme rainfall events.**

- According to the World Meteorological Organization's (WMO) report, 'State of Global Climate in 2021', sea level along the **Indian coast is rising faster than the global average rate.**
 - ✓ One of the primary reasons for this rise is the melting of sea ice in the polar regions, especially the Arctic.

Step by India to Minimise the Impact

- **Himadri** - A research centre 'Himadri' was inaugurated in July 2008 at Arctic, where meteorological, biological, glaciological and past climate studies are undertaken.
- **IndARC** - In 2014, India deployed IndARC, India's 1st moored-underwater observatory, to monitor the impact of the changes in the Arctic Ocean on the tropical processes such as the monsoons.
- **Arctic Policy** - The Ministry of Earth Sciences has launched India's Arctic Policy, aimed at promoting better analysis, forecasting and coordinated policy making on the impacts of melting ice in the Arctic.

Forever Chemicals

Scientists have found that rainwater from many places across the globe is contaminated with **Per- and Polyfluoroalkyl Substances (PFAs).**

About PFAs

- PFAs are a diverse **group of human-made chemicals.**
- They are called **forever chemicals because of their tendency to stick around in the atmosphere, rainwater and soil for long periods of time.**
- PFAs are also listed in the **Stockholm Convention** which is a global treaty to protect human health & environment from persistent organic pollutants (POPs).
- It used to make non-stick cookware, water-repellent clothing, stain-resistant fabrics, cosmetics, firefighting forms and many other products that resist grease, water and oil.

Harm Cause by PFAs

- A variety of health risks include decreased fertility, developmental effects in children, interference with body hormones, increased cholesterol levels and increased risk of some cancers.
- Recent research has also revealed that *long-term low-level exposure to certain PFAs* can make it difficult for humans to build antibodies after being vaccinated against various diseases.

How to Reduce the Effect of PFAs?

- There is no known method that can extract and remove PFAs from the atmosphere itself.
- To be safe do not consume contaminated water which is above the level specified by the state government.
 - ✓ Use an alternative water source for drinking, food preparation, cooking, brushing teeth and any other activity in which you may ingest.
- Must destroy the old contaminated material.
- Follow applicable advice or warnings in your area about agricultural products that may be contaminated with PFAS.

Centre for Wildlife Rehabilitation and Conservation (CWRC)

The Centre for Wildlife Rehabilitation and Conservation (CWRC) at Panbari near Kaziranga National Park and Tiger Reserve has completed 20 years.

About CWRC

- It was a joint initiative of the Assam Forest Department, the Wildlife Trust of India (WTI) and the International Fund for Animal Welfare (IFAW)

- It provides continuous emergency care, treatment and rehabilitation to indigenous wild animals displaced due to various reasons.
- It's the only facility in India that rescues, hand-raises, and rehabilitates animals such as the one-horned rhinoceros and Asian elephant.

About Kaziranga National Park

- It is spread across the floodplains of the Brahmaputra River, in the state of Assam.
- It was declared as a national park in 1974 and a UNESCO world heritage site in 1985.
- It was also declared as a tiger reserve in 2007.
- It is also recognized as an Important Bird Area (IBA) by BirdLife International.
- It is inhabited by the world's largest population of one-horned rhinoceroses, as well as many mammals, including tigers, elephants, panthers and bears, and thousands of birds.

R Selected Species And K Selected Species

- **R-selection** - R is for reproduction. Such a species invests a small amount of resource in each offspring. It is more common in small animals with shorter lifespans, such as fish or insects.
- **K-selection** - K is for carrying capacity. In this, children enter the competitive world. It is more common in larger animals, such as whales or elephants, with longer lifespans.

ECO system and Spaceborne Thermal Radiometer Experiment on Space Station (ECOSTRESS)

- It is an ongoing scientific experiment in which a radiometer is mounted on the International Space Station (ISS).
- It measures the temperature of plants growing in specific locations on Earth over the course of a solar year.

Chlorpyrifos, Fipronil, Atrazine And Paraquat

- Chlorpyrifos is a pesticide, used on crops, animals, and buildings, to kill a number of pests.
- Fipronil is an insecticide, used to control insects like ants, beetles, cockroaches, fleas, ticks.
- Atrazine is an herbicide, used to prevent pre-emergence broadleaf weeds.
- Paraquat is widely used as an herbicide, primarily for weed and grass control.

Geothermal Power

It refers to the heat stored beneath the earth's surface that is carried to the surface by water and/or steam. It can be directly used or converted into electricity.

- India's 1st geothermal power project will be established at Puga village of eastern Ladakh.
- Other places with potential geothermal energy are **Manikaran** in Himachal Pradesh, **Jalgaon** in Maharashtra, **Tapovan** in Uttarakhand, **Bakreshwar** in West Bengal and **Tuwa** in Gujarat.

Iraq's Lake Sawa Runs Dry

- It is an **endorheic** lake in the **Muthanna area, Iraq** near to the **Euphrates River**.
 - ✓ This lake has no inlet or outlet, but it draws water from the Euphrates through a system of joint cracks and fissures which transport water to aquifers beneath it.

- The Lake was declared a Ramsar site in 2014.

Indian Virtual Herbarium

- It is the biggest virtual **database of flora** in the country.
- It is developed by scientists of the Botanical Survey of India (BSI).
- Each record in the digital herbarium includes an image of the preserved plant specimen, scientific name, collection locality, and collection date, collector name, and barcode number.

Build Ahead Coalition

- It is the construction industry-first coalition.
- It aims to bring together multiple stakeholders from India's **construction value chain**, including producers, consumers, financiers, and technology providers, to accelerate the use of **low-carbon building materials**.

Vanilla Islands

- It is formed by the islands of Seychelles, Madagascar, Reunion (France), Mauritius, Comoros, and Mayotte (France) in the Indian Ocean.
- The **goal of the cooperation**, which was created on August, 2010, to pool resources and sell the region as a whole, rather than marketing each island separately as was previously done.
- Tourism specialists realised that the only way to promote these islands as tourist destinations was to share resources and expertise

Pilbara Craton

- It is an old and stable part of the continental lithosphere located in the Pilbara region of Western Australia
- It is famous for containing some of the Earth's oldest well-preserved rocks and fossil stromatolites.
- The researchers looked for evidence in **zircon crystals** embedded in rocks from the Pilbara Craton
- Zircons are formed by the crystallization of magma or are found in metamorphic rocks. They act as tiny time capsules, recording the period of geologic activity. Newer zircon adds to the original crystal as time progresses

Nagorno-Karabakh Region







- It is a landlocked region in the **South Caucasus**, within the mountainous range of Karabakh.
- It is a disputed territory, internationally recognized as part of Azerbaijan, however, ethnic Armenians reject the legal system of Azerbaijan.




Species In News

Vilayati Kikar



- It is an **invasive tree species** introduced under the British Empire as part of development of Delhi.
- It is **native to Mexico, South America and the Caribbean**.
- The tree does not let any other tree or shrubs survive around it.
- These trees can dry up underground aquifers through its deep-root system, going as far as 20 metres or more in search of water.

<p>Peninsular Rock Agama</p> 	<ul style="list-style-type: none"> • It is a type of garden lizard that has a strong presence in southern India. • They do not generate their own body heat, so they need to seek warmth from external sources like a warm rock or a sunny spot on the wall. • It is listed as Least Concern in the IUCN red list. • It belongs to the Precocial Species- in which the young are relatively mature and mobile from the moment of birth or hatching.
<p>Portulaca Oleracea</p> 	<ul style="list-style-type: none"> • It also known as little hogweed, or parsley/purslane. • It has the evolutionary adaptations that help it to be both <u>highly productive and drought tolerant</u>, an unlikely combination for a plant. • It is widely distributed around the globe and is popular as a potherb in many areas of Europe, Asia, and the Mediterranean region. • It has been used as a <u>folk medicine</u> in many countries, acting as a febrifuge, antiseptic, and vermifuge.
<p>Sloth Bears</p> 	<ul style="list-style-type: none"> • It is found in India, Sri Lanka, Bhutan and Nepal. • It is myrmecophagous, which means that it feeds on ants and termites. It also eats fruits and honey. • It is listed as Vulnerable in the IUCN Red List and Schedule I under the Indian wildlife protection act, 1972. • The Daroji Sloth Bear Sanctuary is Asia's first dedicated sanctuary for Sloth Bears, established in 1994 in Karnataka.
<p>Great Indian Bustard</p> 	<ul style="list-style-type: none"> • It is one of the heaviest flying birds in the world. • It is usually found in dry grasslands and scrublands on the Indian subcontinent. • Its largest populations are found in the Indian state of Rajasthan. It is the state bird of Rajasthan. • It is listed as Critically Endangered on the IUCN Red List and Schedule I of the Indian Wildlife (Protection) Act, 1972.
<p>Megalodon</p> 	<ul style="list-style-type: none"> • It is an extinct species of mackerel shark which used to exist millions of years ago. • It roamed the oceans an estimated 23 million to 2.6 million years ago. • It was the largest shark to ever swim through Earth's oceans. • It would have weighed around 70 tonnes and have length around 50 feet from nose to tail.
<p>Tasmanian Tiger</p> 	<ul style="list-style-type: none"> • Also known as the thylacine (a dog headed pouched dog), it was a carnivorous marsupial group thought to be extinct. ➤ Marsupials are mammals whose members are born incompletely developed and are usually carried and suckled in a pouch on the mother's abdomen. • It was native to the Australian mainland and the islands of Tasmania and New Guinea. • The last known thylacine died in captivity 80 years ago, in 1936 at the Hobart Zoo in Tasmania. • It disappeared mainly due to over-hunting by humans, diseases and competition from the dingo, a wild dog native to Australia.

<p>Mudhol hound</p> 	<ul style="list-style-type: none"> • It is a native dog breed that comes from the border region of Karnataka and Maharashtra. • These dogs are known for their loyalty, endurance, stamina and agility. • Indian Air Force has recently decided to induct these dogs to drive away birds and animals from the runway to reduce the accidents during flight.
<p>Bluefin Tuna</p> 	<ul style="list-style-type: none"> • It is a predatory species of tuna found widely in the northern Pacific Ocean. • It is commercially valuable specie and several thousand tonnes are caught each year, making it overfished. • It is listed as Endangered in the IUCN Red List. • To raise awareness about the tuna fish World Tuna Day is observed annually on 2nd of May.
<p>Dugong</p> 	<ul style="list-style-type: none"> • It is also known as Sea Cow, which is a herbivorous marine mammal. • They are found in more than 30 countries and are seen in Gulf of Mannar, Gulf of Kutch, Palk Gulf and Andaman and Nicobar Islands in India. • It is listed as Vulnerable in the IUCN Red List and Schedule I in the Wild life protection act 1972. • The Government of Tamil Nadu has decided to set up India's 1st conservation reserve for Dugong in the Gulf of Mannar, the Palk Bay. • Dugongs graze on seagrass and the loss of seagrass beds due to ocean floor trawling is one of the most important factors behind decreasing dugong populations

AzaadiSAT

- ISRO undertook the maiden flight of its newly developed Small Satellite Launch Vehicle Developmental Flight 1 (SSLV-D1) carrying 'AzaadiSAT'.
- It is the **part of the Azadi Ka Amrit Mahotsav celebrations**, to mark the 75th anniversary of Independence.
- SSLV also carried one of India's Earth Observation Satellites (EOS-2) – that will have applications in mapping and developing various GIS applications.

Why Has The Mission Failed?

- **SSLV-D1 placed the satellites into 356 km x 76 km elliptical orbit instead of 356 km circular orbit. 76 km is the lowest point close to the surface of the earth.**
- **In such an orbit, the satellites would not stay for long and come back down.**
- The two satellites have already come down from that orbit and **they are no longer usable.**
- The failure of the **mission appears to have been the result of a faulty sensor.**

About AzaadiSAT

- It comprises 75 payloads.
- These **payloads have been built by 750 young girl students from 75 rural government schools of India.**
- It has 75 **Femto experiments**, selfie cameras to click pictures of its own solar panels.
- It also comprises a solid-state PIN diode-based radiation counter that will measure the ionising radiation in its orbit, as well as a long-range transponder.

About SSLV

- It is a rocket that is **designed to orbit satellites weighing less than 500kg in Low Earth Orbit (LEO) and 300 kg to Sun Synchronous Orbit (SSO).**
- It is a 3 stage Launch Vehicle configured with three Solid Propulsion Stages and liquid propulsion-based Velocity Trimming Module (VTM) as a terminal stage.
- It will take only 72 hours to integrate, unlike the 70 days taken now for a launch vehicle.
- The other features include: flexibility in accommodating multiple satellites, Launch on demand feasibility, minimal launch infrastructure requirements, etc.

African Swine Fever (ASF)

African swine fever reported in Kerala's Wayanad district.

- It is a highly contagious hemorrhagic viral animal disease that infects domestic and wild pigs.
- It is caused by a DNA virus of the Asfarviridae family. The **mortality is close to 100%.**
- Symptoms: high fever, loss of appetite, redness of skin on ears, abdomen, vomiting, diarrhoea.
- Currently, there is **no approved vaccine for ASF**. Pigs are culled to prevent the spread of infection.
- It is **not a threat to human beings** since it only spreads from animals to other animals.
- It is listed in World Organisation for

World Organisation for Animal Health (OIE)

- It is an intergovernmental organization responsible for improving animal health around the world.
- It has 182 member countries. **India is also one of the members.**
- Headquartered in Paris, France.
- It develops regulatory documents relating to the rules that member states can use to protect themselves from diseases and pathogens. One of them is the Terrestrial Animal Health Code.
- OIE standards are recognised by the WTO as reference international sanitary rules

Hellfire R9X Missile

US military used a weapon, the Hellfire R9X missile, to kill Al Qaeda chief Ayman al-Zawahiri in Kabul.

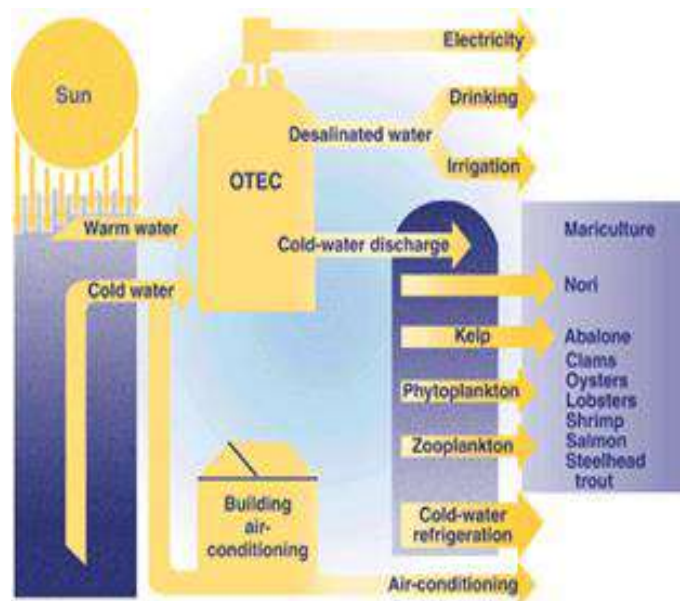
- It is a **modified version of the renowned Hellfire missile which was an anti-tank weapon.**
- Hellfire means Heliborne, Laser, Fire and Forget Missile
- It is developed by Lockheed Martin and Northrop Grumman (US).
- This **weapon does not carry a warhead and instead deploys razor-sharp blades** at the terminal stage of its attack trajectory.
- The blades pop out of the missile and cut down the intended target without causing massive damage to the surroundings.
- The missile is designed in a way that it can shove more than 100 pounds of metal in order to kill its target, be it a car or building.

Danuri – Lunar Orbiter

- **South Korea** has launched the **1st lunar orbiter** named Danuri.
- It was launched by **SpaceX Falcon 9 launch vehicle** from US Space Force Station in Cape Canaveral, Florida.
- It carried a payload including a new interference-tolerant network. It will send data from space to see the Moon. It is expected to reach the Moon by mid-December.
- Before coming back to its destination, it will fly towards sun. This route is generally considered a longer route, also known as a Ballistic lunar transfer which uses a gravity assist by the sun.
- **If the mission is successful, South Korea will become the world's 7th lunar explorer** after the United States, Russia, China, Japan, Israel and India.

Ocean Thermal Energy Conversion Plant (OTEC)

- The **National Institute of Ocean Technology**, an autonomous institute under the Union Ministry of Earth Sciences (MoES) is establishing an **Ocean Thermal Energy Conversion plant** with a capacity of 65 kW.
- It is **being established in Kavaratti, the capital of Lakshadweep.**
- It is a process or technology **for producing energy by harnessing the temperature differences between ocean surface waters and deep ocean waters.**
- Beyond the production of clean power, the OTEC process also converts seawater into potable water.
- The plant can also deliver the cool water to the surface and can be used in air-conditioning systems.
- This water can also be used in chilled-soil agriculture, which allows for the cultivation of temperate-zone plants in tropical environments.



There are 2 types of OTEC Technologies

Closed cycle method	<ul style="list-style-type: none">• A working fluid (ammonia) is pumped through a heat exchanger for evaporation and the steam runs a turbine.• The vapour is turned back to fluid (condensation) by the cold water found at the depths of the ocean where it returns to the heat exchanger.
Open cycle method	<ul style="list-style-type: none">• The warm surface water is pressurized in a vacuum chamber and converted to steam which runs the turbine. The steam is then condensed using cold ocean water from lower depths.

Significance

- The total OTEC potential around India is estimated as 180,000 MW.
- Two of the biggest advantages of OTEC are that it produces *clean environmentally friendly renewable energy* and, unlike solar plants which can't work at night and wind turbines which only work when it's windy, OTEC can produce energy at all times.

National Institute of Ocean Technology (NIOT)

- It is an **autonomous society under the MoES**. It was established in November 1993.
- It aims to develop reliable indigenous technologies to solve various engineering problems associated with harvesting of non-living & living resources in Indian Exclusive Economic Zone (EEZ).

Langya Henipavirus (LayV)

- Cases of a novel Langya henipavirus (LayV) have been reported in Shandong and Henan provinces of China.
- It was discovered during surveillance testing of patients who had fever along with a recent history of animal exposure.

About LayV

- The **newly discovered virus is a phylogenetically (evolutionary) distinct Henipavirus**.
 - ✓ The types of Henipaviruses that had been identified prior to this included Hendra, Nipah, Cedar, Mojiang and the Ghanaian bat virus.
 - ✓ Cedar virus, Ghanaian bat virus, and Mojiang virus are *not known to cause human disease*. But Hendra and Nipah infect humans and can cause fatal illness
- This virus is known **to cause fever**.
- **Some infected also complained about the fatigue, cough, nausea, headache and vomiting.**

Where Has LayV Come From?

- In all likelihood, the **new virus has jumped from an animal to humans**.
- The **LayV virus RNA has been predominantly found in shrews**, which may be its natural hosts.
- There are **no clear answers yet about human-to-human transmission**.

AGM-88 HARM

- The United States confirmed that it has supplied some "**anti-radiation missiles**" to Ukraine.
- After this Russia allegations become more solid, that an American anti-radar missile, AGM-88 HARM, which is part of NATO inventory, has been used in the theatre of conflict.
- The acronym 'HARM' in the AGM-88 HARM stands for **High-Speed Anti-Radiation Missile**.
- It is an **air-to-surface missile**, which can cover a range of more than 100 km.

- The missile is produced by American defence contractor Raytheon Corporation.
- It has the **capability to detect and penetrate into the radiation emitted by enemy radar stations with surface-to-air detection capability.**
- It also has an anti-radar homing seeker broadband RF antenna and receiver, and a solid-state digital processor.

Vasculitis

A Hollywood Actor Ashton Kutcher has revealed that he had vasculitis that affected his ability to see, hear or walk for a year.

About Vasculitis

- It is simply **an inflammation of blood vessels.**
 - ✓ Inflammation is the natural response of the body's immune system to any injury or infection, which in normal course can help the body fight invading germs.
 - ✓ It reduces the width of the passageway through the vessel. If blood flow is restricted, it can result in organ and tissue damage.
- The **exact cause isn't fully understood.** Some types are related to a person's genetic makeup. Others result from the immune system attacking blood vessel cells by mistake.
- The effect can be of different types, minor problems like affecting the skin, or can be a serious condition that restricts blood flow and leads to organ and tissue damage.
- For the **treatment of vasculitis, steroids are frequently prescribed.**

Different Types of Vasculitis

- There are around **20 different disorders that are classified as vasculitis.**
- Angiitis and Arteritis are used as synonyms for vasculitis meaning "inflammation within blood vessels" or "inflammation in arteries."
- Although the diseases are similar in some ways, they often differ with respect to which organs are affected, which medications are used to treat them, and other characteristics.

Butterfly Mine

The UK Defence Ministry has reported on the possible use of PFM-1 series 'Butterfly Mines' by the Russian military in Ukraine.

About Butterfly Mine

- It is a **scatterable, high explosive *anti-personnel* landmine.**
- It has two wings (one of which is heavier than the other) that allow it to glide to the ground without exploding after being released in the air, then spin, stabilizing it and slowing its descent.
- The **PFM-1 and PFM-1S are two kinds of landmines** that are commonly referred to as Butterfly mines or "**Green Parrots**". These names are derived from the shape & colour of the mines.
 - ✓ The major difference between PFM-1 & PFM-1S is that the latter one comes with a self-destruction mechanism which gets activated within one to 40 hours.
- These mines are also **difficult to detect because they are made of plastic and can evade metal detectors.**
- It is **very sensitive** to touch and just the act of picking it up can set it off.
- Because of the relatively lesser explosive packed in this small mine, it often injures and maims the handler rather than killing them.

- These mines can be deployed in the field of action through several means, which include being dropped from helicopters or through ballistic dispersion using artillery and mortar shells.

Conventions on Anti-Personal Mines

- These are banned by *international convention on land mines* but Russia & Ukraine are not signatories to it. India has not acceded to the Mine Ban Treaty.
- There is a 1996 Amended Protocol II to the *Convention on Certain Conventional Weapons*-the Landmines Protocol to which Russia and Ukraine are signatories.

Advanced Towed Artillery Gun System (ATAGS)

ATAGS howitzer became a part of the 21-Gun salute during the **75th anniversary of the country's freedom**.

- It is an **indigenous howitzer gun developed by the DRDO**.
 - ✓ Howitzer is an umbrella term for a category of long-range artillery guns.
- It set a world record for the longest unassisted projectile range of 48 kilometres.
- It has an **all-electric drive to ensure reliability and minimum maintenance over a long period of time**.
- It has advanced features like high mobility, quick deployability, auxiliary power mode, advanced communication system, automatic command and control system with night capability in direct fire mode.
- The **ATAGS project was started in 2013 by DRDO to replace older guns in service** in the Indian Army with a modern 155mm artillery gun.
- The specialised gun system is compatible with C4I (command, control, communications, computers, and intelligence) systems.

Facial Recognition Technology (FRT)

The records, shared under two RTI requests, throw light for the first time on how the Delhi Police uses facial recognition matches during investigations. Delhi Police considers the match positive if it has an accuracy rate of 80%.

About FRT

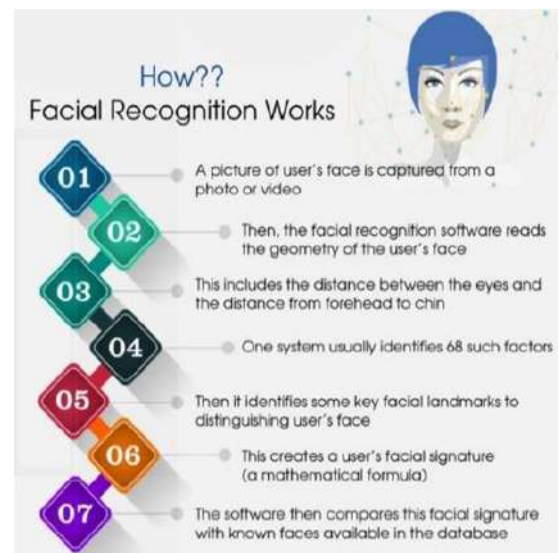
- It is a type of **image identification technology**.
- It uses distinctive facial features to identify & differentiate a person.
- These technologies **rely on many of the processes and techniques associated with artificial intelligence (AI)**.

Use of FRT

- **Face Identification** - It is widely used to unlock smartphones, tablets and other such devices.
- **Security** - Law enforcement agencies can use it to trace missing persons and identify perpetrators of crimes.
- **Surveillance** - It can also be used to find criminal suspects in large crowds.
- **Force multiplier**: In India, where there are just 144 constables per 1 lakh citizens, this can act as a force multiplier. It neither requires too much manpower nor regular upgradation.

Challenges with FRT

- **Infrastructural Cost** - Technologies like AI and Big Data are expensive to implement.



- **False Identification** - It isn't perfect, therefore it also raises a question of false identification.
- **Reliability** - Criminals can trick facial recognition by wearing masks or facial disguises. This could lessen the effectiveness of this tech.
- **Ageing** - Studies have found that as people age, and their features change, FRT has an increasingly difficult time identifying them.
- **Concerns over privacy**

Concerns

- **80% Threshold:** It is unclear why 80% has been chosen as the threshold between positive and false positive. The categorisation of *below 80% results as false positive* instead of negative shows that the Police may still further investigate below 80% results.
 - ✓ People who share familial facial features (extended families or communities), could end up being targeted.
 - ✓ This could result in targeting communities who have been historically overpoliced.
- **Criminal Procedure (Identification) Act, 2022** will lead to collection of personal data in violation of internationally recognised best practices

Way Forward

- In this digital age, data is a valuable resource that should not be left unchecked. In this context, now **India has to come up with a robust data protection regime.**
- The state must work to **prevent misuse of data and encourage data security.**

Hayabusa-2

Scientists are scrutinising the material that was brought to earth from an asteroid named **Ryugu** by Japanese space probe Hayabusa-2. Now scientists are saying water and organic materials might have been brought to our planet from the outer edges of the solar system.

About Hayabusa-2

- It was launched in December 2014 for a six-year voyage to study the asteroid Ryugu.
- It is an **asteroid sample-return mission operated by the Japanese state space agency JAXA.**
- **It landed on the diamond-shaped asteroid Ryugu in July 2018.**
- The probe collected 5.4 grams of rocks and dust.
- It is a successor to the Hayabusa mission, which returned asteroid samples for the 1st time in June 2010.

Hayabusa-1

- Launched in 2003, it was a robotic spacecraft designed to collect & return asteroid samples back to Earth
- The **mission was performed on the asteroid named 25143 Itokawa.**
- The entire mission was completed in almost 7 years.

Bioengineered Cornea Implant

Researchers in **Sweden** have been able to create a successful alternative bioengineered cornea implant made of *collagen derived from pig skin.*

About Bioengineering

- It **overlaps substantially with biotechnology and the biomedical sciences.**

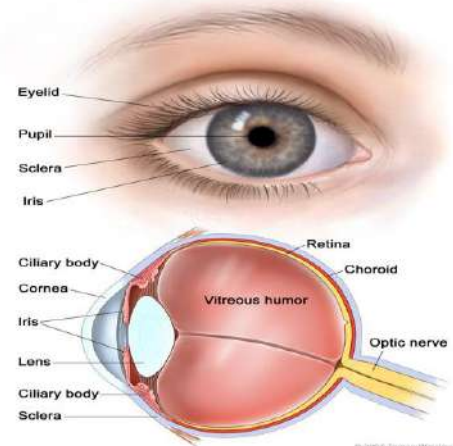
- It attempts to either mimic biological systems to create products, or to modify and control biological systems.
- Examples of bioengineering include bacteria engineered to produce chemicals, new medical imaging technology, portable and rapid disease diagnostic devices, prosthetics, biopharmaceuticals, and tissue-engineered organs.

Why Researchers Used Collagen Derived From Pig Skin

- Researchers claim that there is a severe shortage of corneas, with only one available for 70 patients.
- Collagen derived from pig skin is a by-product of the food industry that is already used in medical devices for *glaucoma surgery*. Glaucoma is a conditions that damage the optic nerve
- This is cheaper and easier to access than donated corneas.
- It requires a less invasive procedure and can be stored for a significantly longer period.

About Cornea

- The **transparent avascular (lack of blood vessels) tissue** part of the eye that covers the iris and the pupil and allows light to enter the inside is called Cornea.
- The cornea consists mainly of the protein collagen.
- It helps to shield the rest of the eye from germs, dust, and other harmful matter.
- It acts as the eye's outermost lens.
- It **contributes between 65-75% of the eye's total focusing power**.
- If the cornea becomes damaged through disease, infection or injury, the resulting scars or discoloration can interfere with vision by blocking or distorting light as it enters the eye.



Exo-moon

- Scientists have developed a model to trace the so far elusive exo-moons with the help of the James Webb Space Telescope (JWST).
- This may help detect **habitable exo-moons** in the future and understand new worlds beyond our own.

About Exo-moon

- It is a **natural satellite** that orbits an exoplanet or other non-stellar extrasolar body.
- A large number of exo-moons are expected to be present in the universe.
- They may play a crucial role in the habitability of rocky exoplanets in the habitable zone of their host stars.
- The solar system is made up of multiple naturally occurring satellites of various masses and sizes. A few of these satellites have an impact on the solar planet's surrounding environment.
- **Most exoplanets are detected through the photometric transit method. Signals from exo-moons are too weak to detect, mainly because of their extremely small size.**

About Exoplanet

- It is a **planet that orbits around other stars located outside our solar system**.
- It is also called an extrasolar planet.
- **Most of the exoplanets discovered so far are located in the Milky way galaxy.**
- More than 4,400 exoplanets have been discovered till now.

National Automated Fingerprint Identification System (NAFIS)

- The union home minister inaugurated the National Automated Fingerprint Identification System (NAFIS) at the National Security Strategies (NSS) Conference 2022.
- It is a country-wide, **centralised and searchable database of crime- and criminal-related fingerprints**.
- It is conceptualized and managed by the **National Crime Records Bureau (NCRB)** at the Central Fingerprint Bureau (CFPB) in New Delhi.
- It assigns a **unique 10-digit National Fingerprint Number (NFN)** to each person arrested for a crime.
- This unique ID will be used for the person's lifetime, and different crimes registered under different FIRs will be linked to the same NFN.

National Security Strategies Conference 2022

- It brings together the top leadership to address the national security challenges.
- Officers held discussions on different subjects of national security including counter-terrorism, radicalisation, counter Rogue-drone technology, issues related to crypto currencies, challenges of Maoist outfits.

Space Situational Awareness (SSA) Observatory

India's 1st commercial space situational awareness observatory will be set up in the **Garhwal region of Uttarakhand**. It will be set up by Digantara, a Bengaluru-based space sector start-up.

About SSA Observatory

- It refers to **keeping track of objects** (as small as 10 cm in size) **in orbit and predicting** their location, speed, and trajectory.
- It will track any activity in space including that of space debris and military satellites hovering over the region.

Significance of SSA Observatory

- It will be able to reduce the potential for collisions between satellites and other spacecraft.
- Improve the effectiveness of tracking and identifying pre-existing resident space objects (RSO).
- It will result in the creation of a hybrid data pool that will serve both the commercial and the defence sectors of the space industry.

Tomato Flu

According to a report in the Lancet Respiratory Journal, a new infection dubbed tomato flu has been detected in India.

About Tomato Flu

- It gets its name because of the red, painful blisters that appear on a patient's body and gradually enlarge to the size of a tomato.
- It is a variant of the already endemic hand, foot, and mouth disease (HFMD).
- It is **caused by Coxsackie virus A 16**.
- It **mainly affects children below 5 years of age**.

- Primary symptoms include high fever, rashes, and skin irritation. Children might also experience abdominal cramps, body aches, fatigue, nausea, vomiting, or diarrhoea.
- This **flu is a self-limiting one** and there is no specific drug for this.

Extra Mile

As per data provided by the state's public health department, till August 28, Maharashtra has reported 250 cases of **hand-foot-and-mouth disease**.

About Hand, Foot, and Mouth Disease

- It is common in children under the age of 5, but anyone can get it.
- It is caused by a coxsackie virus, which belongs to a group of viruses called non-polio enteroviruses. The illness is usually not serious, but is very contagious.
- It spreads through person-to-person contact.
- Symptoms include fever, sore throat, painful blister-like lesions on the tongue, gums and inside of the cheek's, ulcers inside their mouth, rashes on the **palms and soles**.
- It is mostly treated with anti-allergic medicines and ointments.

Tiangong

- It is a space station being constructed by China in low Earth orbit (LEO).
- The country has previously launched two temporary trial space stations, named as Tiangong-1 & Tiangong-2.
- The station will have its own power, propulsion, life support systems and living quarters.
- It is also designed to provide refuelling power to China's new **space telescope**, called **Xuntian**, which will fly close to the space station.
- In May 2021, China launched Tianhe, 1st of the orbiting space station's **three modules**. In July 2022, China had launched Long March 5B rocket which carried a lab module (2nd of three modules) to Tiangong station.
- China hopes Tiangong will replace the International Space Station (ISS), which is due to be decommissioned in 2031. Tiangong will be much smaller than ISS, with only 3 modules compared with 16 modules on the ISS.

Artemis-1 Lunar Mission

NASA is set to launch the Artemis-1 mission.

About Artemis Mission

Artemis 1

- The mission was formerly known as Exploration Mission-1.
- It is a planned **uncrewed** Moon-orbiting mission. It will deploy 10 CubeSat satellites.
- It will test the agency's **Space Launch System (SLS) rocket and Orion crew capsule**.

Artemis 2

- It is a **crewed mission**, scheduled for 2024, will orbit the Moon without making a surface landing

Artemis 3

- Since **NASA's Apollo 17** in December 1972, it will be the first to send **astronauts to the Moon in 2025**. The southern pole of the Moon, where water in the form of ice has been discovered, will be the site of NASA's first crewed spaceship landing.

Significance of Artemis Missions

- With these missions, NASA will land the first woman and first person of colour on the Moon.
- NASA will build an Artemis Base Camp on the surface and the Gateway in lunar orbit. These elements will allow robots and astronauts to explore more.

Sickle Cell Disease (SCD)

African health ministers launched a campaign to ramp up awareness, bolster prevention and care to curb the toll of sickle cell disease.

About SCD

- It is a group of inherited red blood cell disorders.
- The cause of SCD is a defective gene, called a sickle cell gene.
- People with the disease are born with **two sickle cell genes**, one from each parent.
- With SCD, the haemoglobin forms into stiff rods within the red blood cells. This changes the shape of the red blood cells.
- The cells are supposed to be disc-shaped, but this changes them into a crescent, or sickle, shape.

Impact of SCD

- The sickle-shaped cells **stick to vessel walls**, causing a blockage that slows or stops the flow of blood. When this happens, oxygen can't reach nearby tissues.
- Poor blood oxygen levels and blood vessel blockages can cause extreme pain in the back, chest, hands and feet.

Symptoms of SCD: Painful swelling of the hands and feet, fatigue or fussiness from anaemia, yellowish colour of the skin.

Treatments for SCD: The only cure for SCD is **bone marrow or stem cell transplantation**.

- There are treatments that can help relieve symptoms, lessen complications, and prolong life, like some antibiotics, pain relievers, childhood vaccination and blood transfusion.

Initiatives to Tackle with SCD

- The United Nations General Assembly (UNGA) adopted a resolution in December 2008 recognizing SCD as a public health problem.
- The Ministry of Tribal Affairs (MoTA) has launched the Sickle Cell Disease Support Corner to bridge the gap between patients and health care services in tribal areas.

Stellar Pulsations, Coronal Mass Ejection, Betelgeuse Star

Stellar pulsations - It is periodic variations of the size, brightness, and temperature of the star induced by some internal physical processes.

Coronal mass ejection - It is a significant release of plasma and accompanying magnetic field from the Sun's corona into the heliosphere. It is capable of reaching and colliding with Earth's magnetosphere.

Betelgeuse star - It is a **red supergiant** (over 20 times bigger than the Sun) in the constellation of Orion. One of the largest stars visible to the naked eye, it's usually the 11th brightest star in the sky, taking its position as the right shoulder of Orion. But in the last few months, it's dimmed down to 38% of its usual brightness, now the 24th brightest star in the sky.

Formation of Moon

There are several theories related to the formation of the moon. It is the Earth's only natural satellite. In the Solar System it is the 5th largest satellite. It lacks atmosphere, hydrosphere, or magnetic field. Its surface gravity is about one-sixth of Earth's.

- **Capture theory** suggests that the Moon was a wandering body (like an asteroid) and was captured by Earth's gravity as it passed nearby.

- **Accretion theory** suggested that the Moon was created along with Earth. Earth had been spinning so fast that some material broke away and began to orbit the planet.
- The most widely accepted theory is **giant-impact theory**, which suggest that the Moon is formed during a collision between the Earth and another small planet. The debris from this impact collected in an orbit around Earth to form the Moon.

APOBEC Protein In Human Body

- The study suggests that several mutations that have been identified in the new sequences of the monkeypox virus may have emerged due to interaction between the virus genome and an important family of proteins coded by the human genome known as the Apolipoprotein B Editing Complex (or APOBEC3).
- These proteins offer protection against certain viral infections by editing the genome sequence of the virus while it replicates in the cell.
- It has an intrinsic ability to bind to both RNA and single-stranded (ss)DNA.
- Loss of cellular control of APOBEC activities leads to **DNA hypermutation** and random RNA editing associated with the development of cancer or viral drug resistance.

Polycyclic Aromatic Hydrocarbons (PAHs)

- PAHs are a class of chemicals that occur naturally in coal, crude oil, and gasoline.
- They result from burning coal, oil, gas, wood, garbage, and tobacco.
- They can bind to or form small particles in the air.

CAR-T Therapy

- Chimeric antigen receptor (CAR) T-cell therapy is a type of cell-based gene therapy. It involves altering the genes inside T cells to help them attack the cancer.
- T cells have their own proteins called receptors that attach to foreign antigens and help trigger other parts of the immune system to destroy the foreign substance.

MIST Submarine Cable Network

- The project is known as the Myanmar/Malaysia-India-Singapore Transit (MIST) Submarine Cable System
- It is an 8,100 km-long undersea transnational fibre optic cable system, to connect India with Myanmar, Thailand, Malaysia and Singapore.
- It will provide secure, reliable, robust and affordable telecom facilities in Asia.

Talc and Asbestos

- Talc and Asbestos both are naturally occurring mineral.
- Talc is used in cosmetics and other personal care products. For example, it may be used to absorb moisture, to make facial makeup opaque.
- Asbestos is used in insulation, brakes, shingles, flooring and many other products
- Direct inhalation of both minerals can cause serious and fatal illnesses.

Aurobindo Ghose

- The 150th birth anniversary of spiritual leader Sri Aurobindo was celebrated on 15th August, 2022.
- He was an Indian philosopher, yoga guru, poet and Indian nationalist. Born in 1872, in Calcutta he went on to complete his education at King's College in England.
- After returning to India he took up various civil service works under the Maharaja of the Princely state of Baroda.
- He published articles in the Bombay-based journal **Indu Prakash** attacking the British.
- Aurobindo's pragmatic strategies to get rid of British rule marked him as "the **Prophet of Indian Nationalism**".
- In 1893, 22 years before Gandhi, he had asked the Congress to give the leadership of the independence struggle to the *proletariat (working class people)*.
- The partition of Bengal in 1905 provoked Aurobindo to leave his job in Baroda. He became increasingly involved in the nationalist politics and joined the Indian National Congress in 1906.
- He started the patriotic journal **Bande Mataram** to propagate radical methods and revolutionary tactics instead of moderate ways.
- He was the first proponent of 'Purna Swaraj' more than 20 years before the Indian National Congress' declaration in 1930
- He was one of the founders of the youth club **Anushilan Samiti** which protested against the atrocities of the British government
- Aurobindo, a revolutionary and a militant nationalist, was charged in the **Alipore Bomb Case** and was sentenced to jail in 1908
- He died on 5th December, 1950 in Pondicherry

Spiritualism

- He decided to give up active politics after his stint in jail and devoted himself to spiritualism. He reached Pondicherry in 1910, where his spiritual movement began.
- At Pondicherry, Sri Aurobindo developed a spiritual practice called **Integral Yoga**. He believed in a *spiritual realisation that not only liberated but transformed human nature, enabling a divine life on earth*.
- In 1926, with the help of his spiritual collaborator, **Mirra Alfassa** (referred to as "The Mother"), Sri Aurobindo Ashram was founded.
- His main literary works are *The Life Divine*, which deals with the philosophical aspect of Integral Yoga; *Synthesis of Yoga*, which deals with the principles and methods of Integral Yoga; and *Savitri: A Legend and a Symbol*, an epic poem.

Mandala Art

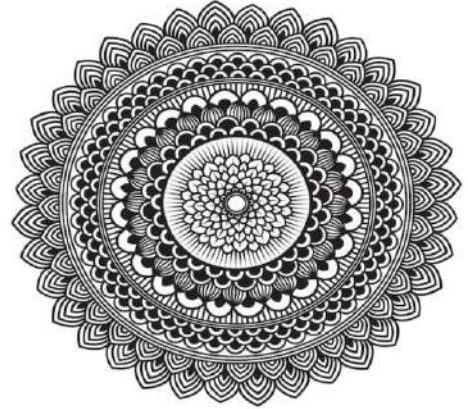
- Recently, a mandala, the size of one and a half football pitches in length was created by artist James Brunt, in Liverpool, UK with materials such as leaves and rocks.
- Mandala literally means "circle" or "centre" in Sanskrit. It is defined by a *geometric configuration that usually incorporates the circular shape in some form*.
- While it can also be created in the shape of a square, a mandala pattern is essentially interconnected.

Background

- It is believed to be **rooted in Buddhism**, appearing in the 1st century BC in India.
- Over the next couple centuries, Buddhist missionaries travelling along the silk-road took it to other regions.
- By the 6th century, mandalas have been recorded in China, Korea, Japan, Indonesia and Tibet.
- In Hinduism, the mandala imagery first appeared in **Rig Veda** (1500 – 500 BCE).
- In Hinduism, a mandala or yantra is in the shape of a square with a circle at its center.

Meaning of The Motif

- It is believed that by entering the mandala and moving towards its center, one is guided through the cosmic process of transforming the universe *from one of suffering to that of joy*.
- A traditional Buddhist mandala, a circular painting drawn with coloured sand, aided in meditation, with the main objective of aiding its creator to discover their true self.
- There are various elements incorporated within the mandala, each of which has its own meaning.
- For instance, the eight spokes of the wheel (the **dharmachakra**) represent the **eightfold path of Buddhism** (practices that lead to liberation from rebirth).
- The *lotus flower depicts balance, and the sun represents the universe*.
- Facing up, triangles represent action and energy, and facing down, they represent creativity and knowledge.



Mandala In Modern Indian art

- Deep-rooted in ancient philosophy, the mandala has attained varied forms in modern and contemporary Indian art.
- While it continues to appear in **thangka paintings**, it has a central place in the practice of mainstream artists associated with the *tantric and neo-tantric spiritual movements*.

Pingali Venkayya

- The **Ministry of Culture** recently organized **Tiranga Utsav** to celebrate the contributions of Pingali Venkayya to the nation on the occasion of his **146th Birth Anniversary**.
- Pingali Venkayya was a freedom fighter and the designer of India's National Flag. He worked as a teacher, author, agriculturist and linguist.
- He had enrolled in the British Army and was deployed to South Africa during the Second Boer War (1899-1902).
- It was during the war when the soldiers had to salute the Union Jack, the national flag of Britain, that Venkayya realised the need for having a flag for Indians.
- In 1916, he even published a book 'Bharatha Deshaniki Oka Jatiya Patakam' (National flag of India).
- The draft presented to Gandhi by Venkayya had two colour bands - red and green to symbolise the two major communities in India - Hindus and Muslims.
- But Gandhi suggested adding a white colour band to represent peace and harmony between communities along with a spinning wheel to represent progress of the country.
- A postage stamp was issued to commemorate him in 2009 and in 2011 it was proposed that he be posthumously awarded the Bharat Ratna.

National Flag of India

- The present form of the flag was adopted by the Constituent Assembly of India on 22 July, 1947 - 24 days prior to the formal declaration of Independence
- The National flag of India is rectangular in shape and consists of three colors – saffron, white and green.
- At the center of the white stripe is a depiction of Ashok Chakra in navy blue. It is round hollow wheel and has 24 spokes radiating from the center.
- This chakra depicts the Dharma Chakra - the "wheel of the law" in the Sarnath Lion Capital made by the 3rd-century BC Mauryan Emperor Ashoka. The chakra intends to show that there is life in movement and death in stagnation.
- In India, the term "tricolour" refers to the Indian national flag.
- The dimension of the flag should be of 2:3 ratio, i.e. the length should be 1.5 times the breadth.

Veer Durgadas Rathore

- The Defence Minister of India unveiled the Statue of Veer Durgadas Rathore on his **385th birth anniversary in Jodhpur, Rajasthan.**
- Durgadas Rathore was the Rathore Rajput General of the Kingdom of Marwar.
- He is credited with preserving the rule of the Rathore dynasty over Marwar, following the death of Maharaja Jaswant Singh in the 17th century. In doing so he had to defy Aurangzeb, a Mughal emperor.
- He commanded the Rathore forces during the Rajput War (1679–1707) and played a major role in the Rajput Rebellion (1708–1710) which became one of the main reason of decline of Mughal Empire.
- He won a number of victories against the Mughals and forced many Mughal officers to pay tribute to him in the form of **chauth**.

Women Heroes of India

Recently, in his Independence Day address, the Prime Minister paid tribute to women freedom fighters. Following are the women that the Prime Minister named in his speech:

Rani Laxmibai

- The queen of the princely state of Jhansi, Rani Laxmibai is known for her role in the First War of India's Independence in 1857.
- Born in 1835, she was named Manikarnika Tambe. She married the king of Jhansi. The couple adopted a son before the king's death, which the British East India Company refused to accept as the legal heir and decided to annex Jhansi.
- Refusing to cede her territory, the queen decided to rule on behalf of the heir, and later joined the uprising against the British in **1857**.
- Cornered by the British, she escaped from Jhansi fort. She was wounded in combat near Gwalior's Phool Bagh, where she later died.

Jhalkari Bai

- A soldier in Rani Laxmibai's women's army, Durga Dal, she rose to become one of the queen's most trusted advisers.
- Till date, the story of her valor is recalled by the people of Bundelkhand, and she is often presented as a representative of Bundeli identity.

- Many Dalit communities of the region look up to her as an incarnation of God and also celebrate **Jhalkaribai Jayanti** every year in her honour.

Durga Bhabhi

- Born in Allahabad in 1907, Durgawati Devi, popularly known as Durga Bhabhi, was a revolutionary who joined the armed struggle against colonial rule.
- A member of the **Naujawan Bharat Sabha**, she helped **Bhagat Singh** escape in disguise from Lahore after the 1928 killing of British police officer John P Saunders.
- Later, as revenge for the hanging of Bhagat Singh, Rajguru, and Sukhdev, she made an unsuccessful attempt to kill the former Punjab Governor, Lord Hailey.
- Married to Hindustan Socialist Republican Association (HSRA) member Bhagwati Charan Vohra, Durgawati, along with other revolutionaries, also ran a **bomb factory in Delhi**.

Rani Gaidinliu

- Born in 1915 in present-day Manipur, Rani Gaidinliu was a Naga spiritual and political leader who fought the British.
- She joined the **Heraka religious movement** which later became a movement to drive out the British. She rebelled against the Empire, and refused to pay taxes, asking people to do the same.
- Gaidinliu was finally arrested in 1932 when she was just 16, and later sentenced for life. She was released in 1947 and **Prime Minister Jawaharlal Nehru**, described Gaidinliu as the “**daughter of the hills**”, and gave her the title of ‘**Rani**’ for her courage.

Rani Chennamma

- The queen of Kittur, Rani Chennamma, was among the first rulers to lead an armed rebellion against British rule. Kittur was a princely state in present-day Karnataka.
- She had lost her husband, **Raja Mallasarja**, in 1816. She fought back against the attempt to control her dominion in 1824 after the death of her young son.
- She is seen among the few rulers of the time who understood the colonial designs of the British.
- Rani Chennamma defeated the British in her first revolt, but was captured and imprisoned during the second assault by the East India Company.

Begum Hazrat Mahal

- After her husband, Nawab of **Awadh Wajid Ali Shah**, was exiled after the 1857 revolt, Begum Hazrat Mahal, along with her supporters, took on the British and wrested control of **Lucknow**.
- She was forced into a retreat after the colonial rulers recaptured the area.

Velu Nachiyar

- Many years before 1857 Revolt, Velu Nachiyar waged a war against the British and emerged victorious.
- Born in **Ramanathapuram** in 1780, she was married to the king of **Sivagangai**. After her husband was killed in battle with the East India Company, she entered the conflict, and won with support of neighbouring kings.
- She went on to produce the **first human bomb** as well as establish the **first army of trained women soldiers** in the late 1700s.
- Her army commander **Kuyili** is believed to have set herself ablaze and walked into a British ammunition dump. She was succeeded by her daughter in 1790, and died a few years later in 1796.