



VAJIRAM & RAVI

(Institute for IAS Examination)

Current Affairs (March 2022)

the RECITALS

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Mortality

Ukraine Approaches
ICJ

CONSTITUTION
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- India-Japan Annual Summit
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Maharashtra may follow several other big states and withdraw from the Pradhan Mantri Fasal Bima Yojana (PMFBY) if changes to it are not carried out.



Pradhanmantri Fasal Bima Yojana

- Launched in 2016, PMFBY is an **insurance service for farmers** for their yields. It insures farmers against all non-preventable natural risks from pre-sowing to post-harvest.
- Farmers have to pay a maximum of 2% of the total premium of the insured amount for kharif crops, 1.5% for rabi food crops and oilseeds as well as 5% for commercial / horticultural crops.
- The difference between actuarial premium rate and the rate of insurance premium payable by farmers, which is called the **Rate of Normal Premium Subsidy**, shared between the Centre and the states on 50:50 basis and on a 90:10 basis in the case of northeastern states.
- However, states and Union Territories are free to extend additional subsidy over and above the normal subsidy from their budgets.

Objectives of PMFBY

- Providing **financial support** to farmers suffering crop loss/damage.
- **Stabilizing the income of farmers** to ensure their continuance in farming.
- Encouraging farmers to adopt innovative and modern agricultural practices.
- Ensuring **flow of credit** to the agriculture sector which will contribute to food security, crop diversification and enhancing growth and competitiveness of agriculture sector.

Changes In The Scheme

- Enrolment in the scheme has been made **voluntary** for all farmers, including those with existing crop loans. When the PMFBY was launched in 2016, it was made mandatory for all farmers with crop loans to enroll for insurance cover under the scheme.
- Until now, there was no upper limit for the central subsidy. However, the Cabinet has decided to **cap the Centre's premium subsidy for premium rates up to 30% for unirrigated areas/crops and 25% for irrigated areas/crops**. This reduces the burden on the Centre and increases the share of States, as they will be left to take on 70-75% of the premium subsidy.
 - ✓ Districts having 50% or more irrigated area will be considered as irrigated area/district.
- Further, Central share in premium subsidy for north eastern states, increased to 90% from the existing sharing pattern of 50:50.
- States have been given **flexibility** to implement the schemes with option to select any or many of additional risk covers/features like *prevented sowing, localised calamity, mid-season adversity, and post-harvest losses*. Earlier, these risk covers were mandatory.
- Further, States/UT can offer **specific single peril risk/insurance covers** like hailstorm etc, under PMFBY even with or without opting for base cover.
- The allocation of business to insurance firms through tender process would be done for **three years** as against the current policy of 1-3 years.
- The Cabinet also approved **provisioning of at least 3%** of the total allocation for the scheme to be made by the Centre and implementing state governments for administrative expenses.
- States can also choose how to calculate the sum insured for any crop in any district, opting either for the scale of finance or a value based on notional average yield multiplied by MSP.

- For estimation of crop losses/admissible claims in the PMFBY, **two-step process** will be adopted based on defined deviation matrix using specific triggers like weather indicators, satellite indicators etc, for each area along with normal ranges and deviation ranges. Only areas with deviations will be subject to crop cutting experiments (CCEs) for assessment of yield loss.
- Technology solutions like **Smart Sampling Technique (SST)** and optimization of number of CCEs would be adopted in conducting CCEs. In case of non-provision of yield data beyond cut-off date by the States to implementing insurance firms, claims will be settled based on yield arrived through use of technology solution.
- Also, a separate scheme is being developed to provide financial support and effective risk mitigation tools through crop insurance especially to 151 districts which are highly water stressed including 29 which are doubly stressed because of low income of farmers and drought.

Issues with PMFBY

- Since the beginning, farm leaders have criticised the scheme for various reasons. One of the main arguments against it is that it helps insurance companies more than the farmers. It is claimed that insurance companies have made huge gains at the cost of the public exchequer and farmers.
- Delayed payouts and denial of claims are the most common complaints against insurance companies.
- Insurance companies are also blamed for not conducting enough crop cutting experiments (CCE), which measure the total loss experienced by the farmers.
- Moreover, insurance companies have not established taluka-level offices or call centres, and have also failed to educate farmers on the correct methodology for reporting claims.
- Despite the severity of crop loss due to extreme weather events increasing in recent years, the number of farmers opting for crop insurance has been declining.
- Andhra Pradesh, Jharkhand, Telangana, Bihar, Gujarat, Punjab and West Bengal, all predominantly agriculture states, have already opted out of the scheme. Some of these states have their own insurance schemes.
- However, the insurance companies point out that the nature of insurance allows for payment only when there is a loss. Also, over the last few years, they have said their payouts have been more than the premium collected, making the scheme non-viable for them.
- Several major insurers have opted out of the scheme in 2019-20, reportedly due to losses because of high claims ratios. The scheme mandates that if the farmers do not get their claim within the specified time, the insurance companies must pay a penalty of 12% interest.
- In its August 2021 report, Parliamentary Standing Committee on Agriculture had noted that these states decided to opt out because of low claim ratio and financial constraints.

Parliamentary Standing Committee on Agriculture Findings Regarding PMFBY

- **For Farmers:** Around 72.5 million farmers have benefited from the scheme between April 2016 and December, 2020.
- **Private Companies Profit:** Private enterprises have grown by more than 30% in the last four years. Many businesses profit by 60 to 70%.

Recommendations Made By The Committee

- It called for local public representatives such as Members of Parliament and Legislative Assemblies to be nominated in District Level Grievance Redressal Committees (DGRCs). This would ensure the accountability of concerned stakeholders and enhance the acceptability of PMFBY amongst farmers
- The ministry should also provide a toll-free number of three-four digits for **queries** regarding PMFBY, registration of complaints by farmers and information regarding action taken on their complaints.

- It also urged the popularisation of the number and added that complaints were to be attended in a time-bound manner for effective implementation of PMFBY.
- **Spend profits on CSR:** The companies should spend a set amount on rural development under CSR.

Changes Proposed By Maharashtra

- One of the major changes the state government has proposed is a share in premium collected from insurance companies during a non-payout or normal year.
- Under **Beed model**, called so after the district where it was first experimented, insurance companies provide cover to an extent of 110% of the premium collected.
 - ✓ In case the compensation amount exceeds this, the state government will bridge the amount.
 - ✓ In case the compensation amount is less than the premium collected, the company will refund 80% of the funds to the state government and keep 20% for its administrative expenses
- Maharashtra has also sought more accountability from insurance companies. Farm leaders have asked for necessary infrastructure to be set up while implementing the scheme, and the usage of technology to remove human interference.



National Land Monetization Corporation

- Union Cabinet approved the setting up National Land Monetization Corporation (NLMC).
- NLMC will undertake **monetization of surplus land and building assets** of Central Public Sector Enterprises (CPSEs) and other government agencies.
- Union Budget 2021-22 announced plans to set up a **special purpose vehicle** for this purpose.

Disinvestment

- Disinvestment means sale of assets by the government, usually Central and state public sector enterprises, projects, or other fixed assets.
- The government undertakes disinvestment to reduce its fiscal burden or to raise money for meeting specific needs, such as to address the revenue shortfall from other regular sources.
- In some cases, disinvestment may be done to privatise assets. However, not all disinvestment is privatisation.
 - **Privatisation** occurs when a government-owned business, operation, or property becomes owned by a private, non-government party.

Asset Monetisation

- Asset monetisation is the process of creating new sources of revenue for the government by unlocking the economic value of unutilised or underutilised public assets.
 - For example, if a government asset is earning Rs 50 crore, but has the potential to earn Rs 500 crore, it will be an underutilised asset.
- It is not necessary to sell assets completely for asset monetization. For example, it can also take the form of a long-term lease, known as a **concession agreement**.
- According to experts, globally asset monetisation has been an effective way to generate revenue for the government.

Public Assets

- Examples of public assets include, roads, railways, airports, power transmission lines, shipping terminals, pipelines, mobile towers, land and building and financial assets (e.g. shares, securities and dividend).
- Public assets are controlled by departments of Central Government, Public sector units or the respective State Government where the asset lies geographically.

About NLMC

- NLMC has been set up as a **wholly owned Government of India company** and will function under the administrative jurisdiction of the Finance Ministry.
- NLMC has been announced with an initial **authorized share capital of Rs 5000 crore and paid-up share capital of Rs 150 crore.**
- It will have necessary technical expertise to professionally manage and monetize land assets on behalf of CPSEs and other Government agencies.
- **NLMC board** will comprise senior Government officers and eminent experts, while its chairman and non-Government directors will be appointed through a merit-based selection process.
- NLMC will hire professionals from the private sector as in the case of similar entities like the National Investment and Infrastructure Fund (NIIF) and Invest India.
- This is needed since real estate monetisation requires specialised skills and expertise in areas such as market research, legal due diligence, valuation, master planning, investment banking and land management.
- At the same time, NLMC will be a **lean organization** with minimal full time staff, hired directly from the market on contract basis. Flexibility will be provided to the Board of NLMC to hire, pay and retain experienced professionals from the private sector.

Functions

- At present, CPSEs hold considerable surplus, unused and under used **non-core assets** in the nature of land and buildings.
 - NLMC will own, hold, manage and monetise surplus land and building assets of CPSEs under **closure.**
 - **Surplus non-core land assets** of government-owned CPSEs under **strategic disinvestment.**
- This will speed up the **closure process** of CPSEs and smoothen the **strategic disinvestment** process of government-owned CPSEs.
- In these cases (e.g., on-going CPSEs and listed CPSEs under strategic disinvestment), NLMC will undertake surplus land asset monetization as an agency function.
- It will act as a **repository of best practices** in land monetization, assist and provide technical advice to Government in identifying & implementation of asset monetization programme.

Benefits

- The Government would be able to generate substantial revenues by monetising unused and under-used assets.
- This will also enable productive utilisation of these under-utilized assets to trigger private sector investments, new economic activities, boost local economy and generate financial resources for economic and social infrastructure.
- Monetisation of idle land will help the Centre to work on its strategy to reduce its business presence to a bare minimum and generate resources for future asset creation.

Challenges

- The performance and productivity of NLMC will also depend on government's performance on its disinvestment targets.
- In Budget 2021-22, the government had initially set a disinvestment target of **₹1.75 lakh crore which was later brought down to ₹78,000 crore.**
 - In FY 2021-22, the government has just been able to raise **₹12,423.67 crore** so far through various forms of disinvestment.

- Besides, the process of asset monetisation does not end when the government transfers revenue rights to private players.
- Identifying profitable revenue streams for the monetised land assets, ensuring adequate investment by the private player and setting up a **dispute-resolution mechanism** are also important tasks.
- Another potential challenge would be the use of **Public Private Partnerships (PPPs) as a monetisation model**. For instance, the results of Centre's PPP initiative launched in 2020 for the Railways were not encouraging.
 - It had invited private parties to run 150 trains of the Indian Railways but when bids were thrown open, nine clusters of trains saw no bidders while there were only two interested bidders for three clusters.
- The presence of just a few serious bidders would also give rise to the possibility of a less competitive space, meaning a few private entities might create a monopoly or duopoly in operating surplus government land.



New Order For Deputation Of DIG Level IPS Officers

Central government has issued an order on **central deputation** of Deputy Inspector General-level IPS officers. The Department of Personnel and Training (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**. The new order makes the entire pool of DIG-level officers in every state eligible for central deputation.

What Is The Order?

- According to existing rules, a DIG-ranked IPS officer with a **minimum experience of 14 years** could only be deputed to the Centre if the **Police Establishment Board** empaneled them as DIGs at the Centre.
- The board chooses the panel on the basis of officers' career and vigilance records.
- Till now, only the Superintendent of Police-level officers does not require empanelment at the Centre.
- The new order makes the entire pool of DIG-level officers in a state eligible for central deputation.
- However, this would not automatically allow DIGs to come to the Centre. Officers would still have to be put on the **offer list for central deputation** which is decided by the states and the Centre in consultation.

Rationale Behind This Order

- Large number of vacancies at the level of DIG rank officer - According to MHA report, there exist 47% vacancies against sanctioned strength for the IPS officers of DIG rank
- 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 and 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%, saying more than 50% of posts remain vacant since most states do not spare their officers.
- The unwillingness of state government to give consent for the deputation of All India Service cadre officer including IPS due to multiple reasons. E.g After 2013 Muzaffarnagar riot, the UP government did not give consent for central deputation to any IPS officer citing law and order situation in the state.

Benefits Of This Order

- Filling of vacancies at the level of DIG rank officers expeditiously.

- It will increase the size of the pool of officers available to the Centre.
- Faster and easy process of verification of DIG ranks officers willing for central deputation.

Issues/ Challenges Associated

- Increase in **power asymmetry** in favor of center vis-à-vis to All India Service: If read with the recent proposal on deputation of IAS, IPS and IFoS officers, 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.
- This order may add another point of contention between union and states in the backdrop of recent proposal to amend All India Service Rules that would allow Union to call any All-India Service cadre officer on central deputation without consent of 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.

Cooperative federalism is key to resolve the issue related to All India Services. Police bureaucracy requires reforms at the level of cadre management both union and states. There is a need to develop a consensus between center and states on this issue.

Deputation of All India Services (AIS) Officer and Present Rules

- In normal practice, the Centre asks every year for an "offer list" of officers of the All India Services willing to go on central deputation, after which it selects officers from that list.
- Officers have to get a no-objection clearance from the State government for Central deputation.
- States have to depute the All India Services (AIS) officers, to the Central government offices and at any point it cannot be more than 40% of the total cadre strength.

{For more details on Deputation Of All India Services, refer January 2022 recitals}



Regulation of NGOs

According to World Bank, "Non-government Organizations (NGOs) are private organizations that pursue activities to relieve suffering, promote interests of poor, protect environment, provide basic social services or undertake community development". Modern form of NGO has existed since 18th century. In 1945, UN charter has recognized it through Article 71 of UN's charter.

Constitutional Provisions Related To NGOs

- Article 19(1)(c): Right to form association.
- Article 43: Promotion of cooperatives in rural areas.
- Entry 28 of Concurrent List: Management of charitable and religious institution.

Role of NGOs

- *Operational roles* such as execution of projects related to social sector viz. education, health, human rights etc.

Types of NGOs in India

- Registered charitable trusts
- Registered Societies
- Cooperatives
- Self Help Groups
- Other informal organizations.

- *Advocacy role* on issues such as society, humanity and environment.
- Conflict resolution as mediator and facilitator.

Need To Regulate NGOs

<p>Check misuse of foreign funds</p>	<ul style="list-style-type: none"> • If unchecked, it can hamper the country's sovereignty and foreign money can be used to influence policy and political discourse in India. • For this reason, government banned 14,500 NGOs, registered under FCRA from receiving foreign funds.
<p>Non-compliance</p>	<ul style="list-style-type: none"> • Less than 10% of NGOs have complied with the rules and more than 90% do not submit their balance sheets.
<p>Hampering Development Projects</p>	<ul style="list-style-type: none"> • According to IB report, NGOs such as Greenpeace and Amnesty are serving as tools for foreign policy interests of western governments. They are also accused of organising agitations and hampering development projects in India which cost India's GDP 2-3% per year.
<p>Religious and Cultural Encroachment</p>	<p>NGOs are often seen as encroaching on tradition and culture of the people, push vested interests and promote religious conversion. Government has barred 'Compassion International' from funding Indian NGOs without its permission over allegations of religious conversions.</p> <p>Religious NGOs are involved in conversion which creates problem of law and order.</p>

Structural-Functional Issues with NGOs

- ***Paucity of funds*** as most of NGOs relies on donation and contributions. New stringent rules brought after amendment of FCRA act further constrained fund for NGOs. With new rules, NGOs will have to open an account with a Delhi branch of the State Bank of India, which could be thousand kilometers away for many NGO's and increase the transaction cost.
- Staffs of NGOs are ***not adequately skilled*** and they are paid low.
- The amount NGOs can ***spend on administration*** has been cut from 50% to 20%, which mean many smaller NGOs will not be able to employ enough staff, hire experts.
- ***Political interference*** in the management of NGOs.
- It is very difficult for National Accreditation Council to distinguish whether an organization wants to work for the cause or has been set up only for the purpose of receiving government grants.

Government Initiatives

- ***National Policy on Voluntary Sector 2007***
 - ✓ Enabling environment for voluntary organization/NGOs
 - ✓ legitimate financial resource mobilization
 - ✓ System of partnership and network governance between government and Voluntary Organizations/NGOs.
 - ✓ Transparent, accountable, professional and democratic management of NGOs.
- ***Foreign Exchange Management Act (FEMA)***: FEMA is regulated by the **Ministry of Finance** and was introduced to consolidate and amend the law relating to foreign exchange with the objective of facilitating external trade and payments

- **Foreign Contribution Regulation Act (FCRA):** The FCRA 2010 has been enacted under the **Ministry of Home Affairs** to monitor foreign funds donated to NGO's. It ensures that the recipients adhere to the stated purpose for which such contribution has been obtained.
- **Bombay shops & Establishment Act 1948:** NGO registered under the Bombay shops & establishment Act must pay Minimum Wage to that employee irrespective of the strength of employment.
- **Right to Information Act, 2005:** NGOs receiving substantial financing from the government is bound to give information to the public under the RTI Act.

Foreign Contribution Regulation Amendment Act 2020 and NGOs

- The FCRA regulates foreign funding to ensure that they don't adversely impact security interest of the country. It was first enacted in **1976**. Later on, it was amended in 2010 and subsequently in 2020 where by new measures were introduced each time.
- All such NGOs who intend to receive foreign funding are required to get registered themselves under FCRA. In **2015**, MHA notified a new rule which requires NGOs to mandatorily give an undertaking that the acceptance of foreign funds is not likely to prejudicially affect the sovereignty and integrity of India or impact friendly relations with any foreign state or communal harmony.
- In **2017**, the government through a **finance act** paved the way for political parties to receive foreign funding outside the ambit of FCRA. This action of government was criticized because it is discriminatory and non-transparent in nature.
- **FCRA Amendment 2020**
 - ✓ Expansion of definition of public servant to bar them from foreign funding.
 - ✓ Prohibition of transfer of foreign contribution from NGO to any other person/organization.
 - ✓ Mandatorily having "FCRA account" designated in SBI branches, New Delhi for receiving foreign contribution.
 - ✓ Reduction in use of foreign contribution for administrative expenses from 50% to 20%.
 - ✓ As per FCRA 2010, the government may suspend the registration of a person for 180 days in case of non-compliance of FCRA. However, FCRA amendment 2020 adds that such suspension may be extended up to an additional 180 days.
 - ✓ Making Aadhaar mandatory for registration, while in case of a foreigner, they must provide a copy of the passport or the Overseas Citizen of India card for identification.
 - ✓ Insertion of Rule 9 – which deals with obtaining registration or prior permission to receive foreign funds and stop utilisation of foreign funds through enquiry.
- The Government has come up with new rules **in Nov' 2020**. The new rules made new FCRA registrations more stringent.
 - ✓ Any organisation that wants to register itself under FCRA shall be in existence for three years.
 - ✓ Further, it should have spent a minimum amount of ₹15 lakh on its core activities for the benefit of society during the last three financial years.
 - ✓ However, the rules for declaring an organisation as a "political organisation" have been relaxed, with student, farmer, worker and youth organisations being exempted unless they participate in "active politics or party politics". Political organisations can't receive foreign funds.
 - ✓ Any organisation seeking prior permission for receiving a specific amount from a specific donor for carrying out specific activities or projects will have to submit a specific commitment letter from the donor indicating the amount of foreign contribution & the purpose for which it is proposed to be given.
 - ✓ If the value of foreign contribution is over Rs 1 crore, it may be given in installments. However, the second and subsequent installment shall be released after submission.
- MHA in **January 2021** again laid out a series of guidelines and charter to make NGOs and banks comply with new provisions of the amended FCRA.

- ✓ The charter for banks says that “donations received in Indian rupees” by NGOs from “any foreign source even if that source is located in India at the time of such donation” should be treated as “foreign contribution”.
- ✓ Also, it stated foreign contribution has to be received only through banking channels and any violation by the NGO or by the bank may invite penal provisions of FCRA.

The FCRA should be liberalized with adequate safeguard. There should be multi-stakeholder regulatory bodies for NGOs such as ‘**National Accreditation Council**’ involving academics, bureaucrats, experts of social sector etc. Another important aspect is to rationalize laws with regard to formation of NGOs. E.g In United states formation of NGO is a basic right. The role of NGOs is crucial for the development of backward and vulnerable section of people.



Leveraging Technology For Effective Justice Delivery System

Law Minister has said in parliament that while implementing ‘e Court project’ need was felt to adopt cutting edge technologies such as Machine Learning (ML) and Artificial Intelligence (AI) to increase efficiency of justice delivery system.

Background

- SC of India has constituted **Artificial Intelligence Committee**. Its functions are to identify application of AI technology in translation of judicial documents, process automation and legal research assistance.
- **E-Courts Project**
 - ✓ It was conceptualized by **e-committee of SC** with a vision to **transform** justice delivery system with the help of information and communication technology (ICT). E-committee was constituted in **2004** by the government of India after getting proposal from SC.
 - ✓ It is mission mode pan-India project. It is monitored and funded by the **department of justice** (Government of India).
 - ✓ To deliver, install, and implement decision support system in courts.
 - ✓ Affordable, effective, transparent, predictable, reliable and time bound citizen centric justice delivery system.
- **ICJS (Interoperable Criminal justice System)**
 - ✓ It is a national platform for enabling integration of the ICT for criminal justice system.
 - ✓ It integrates 5 pillars of criminal justice system viz. **police, forensic labs, courts, prosecution and prison**.
 - ✓ Dedicated and secure cloud based digital infrastructure with high-speed connectivity.
 - ✓ **NCRB** with the help of National Informatics Centre (**NIC**) implements the ICJS.

{For more on ICJS, refer The Recitals - August 2021}

Prospects Of Leveraging Technology In Judiciary	Challenges Associated Using Cutting Edge Technology
<ul style="list-style-type: none"> • Seamless exchange of data between various branches of government involved in justice delivery system such as courts, police, prosecution, prison etc. will streamline judicial process. 	<ul style="list-style-type: none"> • Criminal cases require oral evidence and cross examination. Over-reliance of technology is not desirable in such cases. • The extensive data sharing and storage on ICJS may lead to

<ul style="list-style-type: none"> • Reduction in judicial pendency: The high courts and subordinate courts together have conducted 1.65 crore hearings till 30th November 2021. (Law Ministry) • Pro- litigation system: The use of technology has helped in e-filing, virtual hearing and access to information related to cases online. • Several law firms are trying out new technologies for a quick reference on judicial precedents. E.g Riverus is a Mumbai based 'legal tech' firm. It has developed Machine learning (ML) applications for this purpose. This is cost-effective and quicker system. • From the beginning of lockdown in 2020 until Jan' 2022, Supreme Court of India emerged as a global leader by conducting 1,81,909 virtual hearings. 	<p>illicit surveillance of citizens.</p> <ul style="list-style-type: none"> • The data theft is a possibility due to breach in cyber security infrastructure and absence of data protection law. • Profiling of certain section of population can happen. Colonial legacy that is associated with policing and police stations in India contributed in criminalization of certain communities. E.g labeling some communities as 'habitual offenders'. • Maintaining e-courts Record: The paralegal staff is not well equipped and trained to effectively handle document or record evidence, and make them readily accessible to the litigant, to the council as well as to the court. • The existing digital divide may increase class and caste inequalities that characterize the existing criminal justice system. • Lawyers in semi-urban and rural districts find online hearings challenging, mostly due to connectivity issues and an unfamiliarity with this way of working • Litigant's lack of confidence in the process due to lack of proximity.
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Examples of Use of Technology in Judiciary

- **SUVAS (Supreme Court Vidhik Anuvaad Software):** It is an AI system that can assist in the translation of judgments into regional languages.
- **SUPACE (Supreme Court Portal for Assistance in Court Efficiency):** Designed to first understand judicial processes that require automation, it then assists the Court in improving efficiency and reducing pendency by encapsulating judicial processes that have the capability of being automated through AI.

Way forward

- Enactment of **data protection law** as suggested by B. N. Sri Krishna Committee.
- **Bridging digital divide** by creating digital infrastructure for rural and backward areas and for weaker section of population.
- **Information, education and communication** for all stakeholders of justice delivery system.
- Promotion of '**legal tech**' startups.
- **Evidence Based Rational Approach:** We need to study and understand why video conferencing in criminal cases has neither shortened trials nor reduced the number of people awaiting trial.
- **Frequent Performance Audits and sandboxing measures** (isolated test environment) to carefully understand and gauge the potential and risks.

Adoption of new and emerging technologies will be effective in terms of streamline judicial processes, reduce pendency, helping litigants/witnesses and robust contract enforcement for ease of doing business. However, such technologies should function within the constitutional framework of fundamental right upheld in Puttaswamy case.

Demand For inclusion of Bhojpuri In 8th Schedule

Bihar government has said that it would revive its long pending demand for inclusion of Bhojpuri in the 8th schedule of constitution.



Bhojpuri Language

- > Bhojpuri language is Indo-Aryan language native to the Bhojpur-Purvanchal region of India and Terai region of Nepal.
- > It is chiefly spoken in western Bihar, eastern Uttar Pradesh and north western Jharkhand.
- > It is **official language in Fiji as Fiji Hindi**.
- > It is recognized minority language in India.

Eight Schedule

- It lists the official language of the republic of India. **Part XVII** of Indian constitution deals with the official languages in **Articles 343 to 351**.
- **Article 344 (1)** of the constitution says that President will constitute a commission on expiration of five years from the commencement of the constitution.
- **Article 351** provides for the spread of **Hindi language** to develop it so that it may serve as a medium of expression for all the elements of the composite culture of India.
- The 8th schedule consists of **22 official languages**. Of these languages, 14 were initially included in the constitution.
 - ✓ **Bodo, Dogri, Maithili, and Santhali** were added by 92nd Amendment Act of 2003 which came into force in 2004.
 - ✓ **Sindhi** was added by 21st Amendment Act of 1967.
 - ✓ **Konkani, Manipuri, and Nepali** were included by 71st Amendment Act 1992.
- There are six classical languages listed in 8th schedule - Tamil (declared in 2004), Sanskrit (2005), Kannada (2008), Telugu (2008), Malayalam (2013), and Odia (2014).

Ministry of Culture provides guidelines regarding **Classical languages** which are as given below:

- ✓ **High antiquity** of its early texts/recorded history over a period of **1500-2000 years**;
- ✓ A body of ancient literature/texts, which is considered a valuable heritage by generations of speakers.
- ✓ The literary tradition is **original and not borrowed** from another speech community.
- ✓ The classical language and literature being distinct from modern, there may also be a discontinuity between the classical language and its later forms or its offshoots

- However, there is no fixed criteria for any language to be considered for inclusion in 8th Schedule.

Benefits Of Getting Included in 8 th Schedule	Challenges Associated With 8 th Schedule
<ul style="list-style-type: none"> • Languages get inevitable advantage when they get included in 8th schedule. E.g Government will spare no efforts to develop languages of 8th schedule to grow into effective communication medium. • Sathiya Academy will start recognizing the language and the books of the language will be translated in other languages recognised in India. • Candidate will be able to write the competitive exams like civil services Exam conducted in the All-India level in 	<ul style="list-style-type: none"> • India has 30 languages that are spoken by more than a million people but schedule 8th has only 22 languages as of now. • Languages placed outside schedule 8th lose its status in literacy and daily interaction. • The issue of inclusion of languages in schedule eight has become a political issue and it is used to attract votes by

<p>schedule language.</p> <ul style="list-style-type: none"> • It will help to provide opportunities to students and professional of the languages. • Politicians can converse in the languages of 8th schedule in assemblies and parliament. 	<p>different politician.</p> <ul style="list-style-type: none"> • India has witnessed unrest due to linguistic division and there is always concern of linguistic regionalism across nation.
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It is important to understand that India is multi lingual country and every deserving language should be included in 8th schedule. **Yuelu Proclamation**, made by UNESCO at Changsha in 2018, says that protection and promotion of linguistic diversity helps to improve social inclusion and partnership.



Women In Indian Judiciary

Chief Justice of India N V Ramana showed his concern of pending names of women candidates with the central government, recommended by the SC collegium for appointment of high court judges. CJI further added that SC collegium has recently recommended **37 women candidates out of 192 candidates** (19%) for appointment as HC judges. This is an improvement over the percentage of incumbent women judges in high courts, which stands at 11.8%.

Background

- **Justice Anna Chandy** became the first women judge in any court of India in 1939. Later on, in 1959 she became the first women judge of any High court of India.
- **Justice Fatheema Beevi** became the first women judge in SC of India in 1989.
- Supreme Court since independence witnessed the appointment of **only 11 women judges**.
 - ✓ **Presently there are 4 sitting female judges out of the total 33 judges.**
 - ✓ No women Judge has ever held the position of Chief Justice of India.
- In 25 High Courts, only 81 women judges are present out of 1078. The HCs of Manipur, Meghalaya, Patna, Tripura, Telangana, and Uttarakhand do not have any women among the sitting judges.
- There are 28% women judges in lower courts of India.

Onus Of Gender Gap Lies On Collegium System

- After 1993, the *collegium* became the ultimate authority to recommend names to SC.
- This group missed the opportunity to recommend more women judges. Both the *government and collegium system* is hence responsible for such dismal performance because the collegium is responsible for the movement up from the high court to the Supreme Court.
- As per the retired female judges, the most important reason for this disparity was “men, who normally choose the judges, tend to overlook the ability of women. There is an inbuilt bias that way, men wanting to appoint people who are like them.

Significance Of Women In Judiciary

- **Representation of country's demography:** It would raise willingness of women to seek justice and produce judgments that better reflect the diversity of Indian experiences.
- **Public perception:** Perceived as a positive step in the direction of judiciary being as more transparent, inclusive, and representative of the people who seek recourse to justice. By their mere presence, women judges enhance the legitimacy of courts.
- **Different way of decision-making:** Women judges also face all the social and cultural challenges common women face. Women judges bring those experiences to their judicial actions that tend toward a more

comprehensive and empathetic perspective encompassing not only the legal basis for judicial action, but also awareness of consequences on the people affected.

- **Role model:** Any step in this direction will be a benchmark for society with many more young women students coming forward and opting for law as a profession.
- There are 40% vacancies of judges in HC's. Appointment of a greater number of incumbent judges will give an opportunity to fill these vacancies.

Challenges In Bridging Gender Gap	Suggestions
<ul style="list-style-type: none"> • Seniority Principle: Strict adherence to this discourages more women appointments. • Insensitive Attitude: Many judges feel that women judges lack the desired qualities. • Neglect of Academic Community: The collegium or government doesn't appoint any distinguished jurist to Supreme Court. • Strict stance of Collegium: Providing reservations for women might impact the quality of Justice as there might be a chance where a woman Judge is appointed only to fill the reservation. • There is no reservation for women in appointment as judges of SC and HCs. However, some States have reserved the seats for women in lower judiciary. • According to data from Bar Council of India, only 15% of all enrolled advocates in country are women. • Double responsibilities of women judges in lower judiciary inhibit their promotion to higher courts. 	<ul style="list-style-type: none"> • Relaxation to the seniority principle. • Sensitization workshops and gender-sensitive training. An attitudinal change, along with a strong will to attain gender parity is needed amongst the male judges, in order to curb the gender gap in the judiciary. • Bar Council of India has to take adequate steps to encourage more women to take up the Lawyer profession. This will improve the quality of women lawyers in the long run. • Creating a vision document towards bridging the gender gap: SC has to take the plea filed by Supreme Court Women Lawyers Association as an opportunity. • The collegium should diversify the criteria of <i>geographical representation</i> in appointment process as many times there are no women judges in a particular geography. • Reservation to women at all level of judiciary.

Conclusion

CJI has rightly said that the presence of women on the Bench and in the Bar has more than a symbolic importance as they have a more nuanced understanding of the differing impacts that certain laws may have on men and women. There is a need to make judiciary diverse in terms of other identities such as LGBTQ+ and other socio-economic identities for the very reasoning.



Ban On Online Gaming Platform

Karnataka High Court has **strike down** major portions of the **Karnataka Police (Amendment) Act 2021**.

Karnataka Police Amendment Act 2021 is a new law by state government that bans **online gambling and skill-based gaming** platforms like rummy, poker and fantasy sports.

Reason For Ban

- Online games are **susceptible to manipulation** by websites operating such games.
- Some online games like rummy and poker are **addictive** in nature and it leads to mental disturbance when played with monetary stakes.

Reason For Striking Down Amendment Act

- High Court struck down the amendment on three grounds **violating Fundamental Rights of:**

Trade & commerce

Liberty and privacy

Speech and expression

- The law did not distinguish between **game of skill and game of chance**; thus making it arbitrary and irrational.
- **Lack of legislative competence** of state Legislatures to enact laws on online skill-based games.

Other States Where Such Laws Were Struck Down

- Apart from Karnataka, a similar law introduced by the Tamil Nadu government was struck down by the Madras High Court in August 2021.
- In September 2021, the Kerala High Court had also quashed a notification issued by the State government specifically banning the game of online rummy when played for stakes.

SC's Judgment On Lotteries

Recently, the Supreme Court in a judgement held that a state legislature has the **right to impose tax on lotteries conducted by other States within its jurisdiction**. In 2020, the SC held that lottery, gambling and betting are taxable under the Goods and Services Tax (GST) Act, 2017.

- The judgement came on appeals filed by the Karnataka and Kerala governments against the decisions of their respective High Courts to quash laws enacted by their legislatures to tax lotteries organised and promoted by the States of Nagaland, Arunachal Pradesh, Sikkim, Manipur in Kerala and Karnataka.
- High Courts had found the tax laws enacted by the two States invalid and unconstitutional and had even directed Kerala and Karnataka to refund the money collected as tax from lotteries to the north-eastern States.

Supreme Court's Ruling

- The court observed that 'lotteries' is a "species of gambling activity". Betting and gambling is a genus and includes several types or species of activities such as horse racing, wheeling and other local variations/forms of 'betting and gambling' activity.
- 'Betting and gambling' is part of the **State List in the Seventh Schedule** of the Constitution.
- The power to tax is on all activities which are in the nature of 'betting and gambling' including lotteries.
- The court observed that since, there is no dispute that lotteries, irrespective of whether it is organised by the Government of India or the State Government or is authorised by the State or conducted by an agency or instrumentality of State government or Central government or any private player, is 'betting and gambling'. Thus, State legislatures have the power to tax lotteries under **Entry 62** of the State List.
- This is because the taxation contemplated under the said Entry is on 'betting and gambling' activities which also includes lotteries, irrespective of the entity conducting the same

Central Laws Related to Lottery, Gambling and Betting

- **The Lotteries Regulation Act, 1998:** Lottery is considered legal in India. Lottery should be organised by the state government and the place of Draw should be in that particular state.
- **Indian Penal Code, 1860:** The code has provisions for punishing anyone who to the annoyance of others does any obscene act in a public place or sings, recites or utters any obscene song, ballad or words, in or near any public place. These provisions of the IPC may be attracted if any obscene matter is used for the purpose of **advertising betting and gambling activities**.

- **Prize Competitions Act, 1955:** It defines Prize in Competitions.
- **FEMA, 1999:** Remittance of the income generated from lottery winning, racing/riding is prohibited
- **Information Technology Rules, 2011:** Any internet service provider, network service provider or any search engine will not host any such content which directly or indirectly supports Gambling.
- **Income Tax Act, 1961:** Current taxation policy in India covers all types of Gambling industry directly and indirectly. Thus, it can be said that all regulated & legalised Gambling is supported in GDP of India



Ukraine Signs Formal Request To Join EU

Ukrainian President Volodymyr Zelenskyy had signed an **official request for Ukraine to join the European Union**. Becoming a member of the EU is a complex and a time-consuming process. **Croatia** was the last country to join the bloc. Its application process lasted 10 years before it was formally accepted in 2013.

What Does Ukraine's EU Membership Mean for Russia

- Ukraine's EU membership can help the country militarily, as EU members are bound by a **mutual defense clause**. This clause requires other members to help a country if it's a victim of armed aggression on its territory.
- Admission to the bloc would also benefit Ukraine's economy and give it additional benefits such as **free movement throughout the EU** and a **variety of rights granted to EU citizens**.

Usual Procedure Of Joining The Bloc

- The applicant country **must meet the 'Copenhagen criteria'**, which are a set of conditions a country must fulfil to join the bloc.

These include a *free-market economy, a stable democracy, the rule of law, human rights* and the *implementation of all EU rules and regulations in all areas, including the Euro*.

- The application in this regard is **submitted to the European Council**, which asks the **European Commission to assess** the country's ability to meet those criteria.
- Following this, if the Commission agrees that the applicant country meets the 'Copenhagen criteria', the **European Council then agrees upon a negotiating mandate**. Negotiations are then formally opened on a subject-by-subject basis.
- The membership also needs the **acceptance of all the EU member states as well as the EU institutions** such as the European Council, European Commission, and the European Parliament.

European Union (EU)

- EU is a **unique economic and political union** between 27 European countries. It was created by the **Maastricht Treaty**, which entered into force on November 1, 1993.
- EU promotes democratic values and is one of the world's most powerful trade blocs.
- According to World Bank figures, EU's GDP totalled \$15.3 trillion in 2020.
- Administrative Centre: Brussel
- Official Language: 24 Languages.
- Official Script: Latin, Greek, Cyrillic.

Background

- The predecessor of EU was **European Economic Community (EEC)** which was created under the **Treaty of Rome (1957)** in the aftermath of the Second World War
- The EEC was created in 1958 with the initial aim of increasing economic cooperation (including a common market and customs union) between six countries - **Belgium, Germany, France, Italy, Luxembourg and the Netherlands.**
- EEC ceased to exist by **Lisbon Treaty** which came in force in 2009 and its activities were incorporated in EU.
- Since then, 22 more countries joined (and the United Kingdom left the EU in 2020) and a huge single market (also known as the 'internal' market) has been created.
- What began as a purely economic union has evolved into an organisation spanning many different policy areas, from climate, environment and health to external relations and security, justice and migration. A name change from the **European Economic Community to the European Union in 1993** reflected this.

Member States And Institutions

- The unique feature of EU is that, although the Member States all remain sovereign and independent states, they have **decided to pool some of their sovereignty in areas where it makes sense to work together.**
- Several institutions are involved in making decisions at EU level, in particular:

European Parliament	• Represents the EU's citizens and is directly elected by them
European Council	• Consists of the Heads of State or Government of the EU Member States
The Council	• Also called the Council of the European Union, represents the governments of the EU Member States
European Commission	• Represents the interests of the EU as a whole

Euro And Schengen Area

- The euro is the single currency of EU as a whole. However, the **euro area currently comprises only 19 Member States.**
 - ✓ While Denmark has an opt-out and the remaining countries do not yet meet the criteria for joining.
 - ✓ Bulgaria, Croatia, Czech Republic, Hungary, Poland, Romania, Sweden, and the United Kingdom do not use the euro.
- 22 Member States are members of the **Schengen area**, which **enables passport-free movement**, with five maintaining their own border controls. It was effective in 1995.



Bangladesh, India, Nepal To Move Ahead On MVA Pact


India, Bangladesh and Nepal have finalised an enabling MoU for implementing Bangladesh-Bhutan-India-Nepal Motor Vehicles Agreement (**BBIN-MVA**).




Key Highlights

- The enabling MoU was finalised at a meeting held in New Delhi recently. **Bhutan participated in the meeting as an observer.**

- Since Bhutan has not ratified the agreement, the implementing MoU was finalised pending ratification of MVA by Bhutan. The enabling MOU is to be signed by India, Bangladesh and Nepal for implementation of the BBIN MVA.
- The meeting also finalised the wording of **two separate protocols on passenger and cargo movement**.
- Operationalising the MVA by concluding *the Passenger and the Cargo Protocol* will help realise the full potential of trade and people to people connectivity.

Bus Services with Nepal and Bangladesh



-  The proposals to bus services on Kathmandu-Bodhgaya, Janakpur-Patna and Dehradun-Mahendranagar routes are underway.
-  Bus services between Delhi and Kathmandu, Varanasi-Kathmandu, Delhi-Mahendranagar and Delhi-Pokhra have already been started. **India and Nepal Bus Service pact was signed in November 2014.**
-  Between **India and Bangladesh**, bus services on Agartala-Dhaka, Kolkata-Dhaka, Guwahati-Shillong-Dhaka and Kolkata-Agartala via Dhaka are operational.

About BBIN-MVA

- To boost sub-regional connectivity, BBIN-MVA was signed during Transport Ministers' meeting **in Thimpu in 2015**.
- This agreement was signed for seamless transit of passenger and cargo vehicles among the four countries.
- As per the agreement, member countries would allow vehicles registered in the other countries to enter their territory under certain terms and conditions.



Background

- SAARC had been trying to enact a Motor Vehicle Agreement for the Regulation of Passenger and Cargo Vehicular Traffic.
- The proposal to finalise the SAARC MVA was submitted in the 18th SAARC Summit held in Kathmandu, Nepal in November 2014. The framework agreement, however, was not signed because of opposition from Pakistan. Later, this initiative was held hostage to political factors and ultimately lost support.
- In February 2015, **discussion on BBIN-MVA, a parallel to the SAARC-MVA**, was initiated at Kolkata.



Benefits

Efficient Land Transport Connectivity	<ul style="list-style-type: none"> •The agreement will lead to creation of transportation infrastructure, which would permit unhindered movement of passenger and cargo vehicles among the implementing members.
People to People Contact	<ul style="list-style-type: none"> •This will help in increasing people to people contact
Economic Integration	<ul style="list-style-type: none"> •Cargo vehicles do not have to be changed at the border. This will reduce the cost of transportation & will make the goods more competitive. •It is expected that ties will be strengthened between Bhutan with Nepal, Bangladesh and India. Trade ties with Bangladesh will be intensified, with India allowing transit to Bangladesh for trade with Bhutan. •World Bank has estimated that the implementation of MVA will potentially see increase in traffic-regional trade within South Asia by nearly 60%.
Larger Objectives of Act East Initiative	<ul style="list-style-type: none"> •The BBIN MVA would also fulfil the larger objectives of India's 'Act East' initiative, with the northeast becoming the springboard for India's connectivity with Southeast Asia.

Challenges

- **Bhutan has not yet ratified** the agreement.
- At present, the roads connecting the BBIN countries are in a **poor state**. Moreover, there needs to be *multi-modal connectivity*, specifically, the use of rail connectivity in conjunction with road connectivity.
- The **procedural issues** around the MVA include infrastructural facilities, issues related to customs and tariffs, passenger volumes, e-visa and visa-on-arrival schemes.
- There also needs to be **sufficient infrastructural arrangements** such as integrated check-posts.
- **Environmental and social challenges:** In the construction of roads, there are certain costs that will likely be borne by surrounding communities who will need to be relocated.
- **Cross-border connectivity** also poses security challenges. The borders between BBIN countries are porous, especially those that India shares with Bangladesh, Bhutan and Nepal.

Role of Asian Development Bank (ADB)

- ADB has been providing technical, advisory, and financial support to the BBIN MVA.
- This is being done as part of its assistance to the South Asia Sub regional Economic Cooperation (SASEC) program.

Bhutan's Position

- The original BBIN MVA was signed by all four countries in June 2015. Later, it was ratified by Bangladesh, India and Nepal.
- However, after objections in Bhutan over sustainability and environmental concerns, the Bhutanese parliament decided **not to endorse the plan**.

Bhutanese suspicion has been that the pact will overwhelm the smallest country in South Asia with traffic, tourists and pollution.

Bhutan's top priority is to remain a carbon-negative country.

Bhutan's current infrastructure will not be able to sustain the heavy vehicular movement.

- Former PM Tobgay Tshering's government agreed to allow other three countries to go ahead with the project for vehicular movement (BIN-MVA) in 2017.
- Until Bhutan ratifies, it attends BBIN meeting in an observer capacity.

Progress On BBIN-MVA So Far

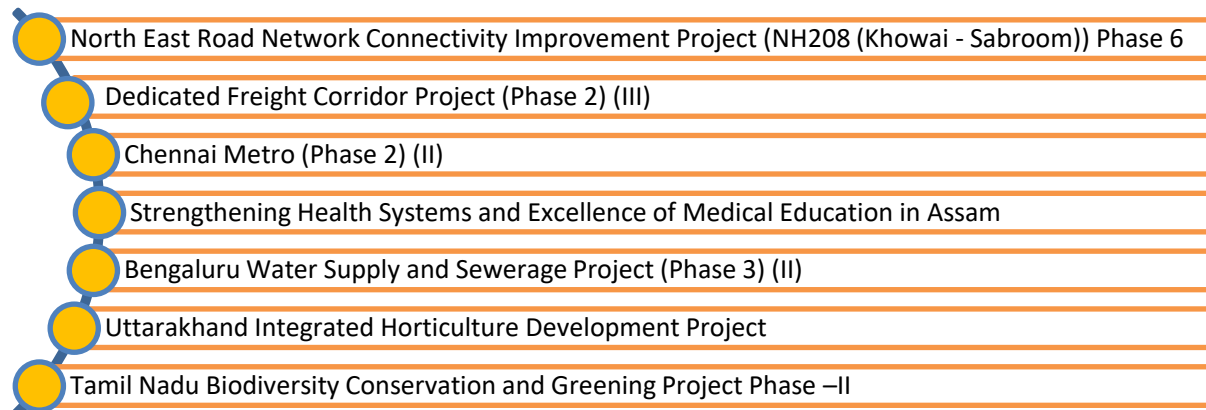
- Several trial runs being held along Bangladesh-India-Nepal road route for passenger buses and cargo trucks.
- However, progress on the 7-year old project has been slow.
- There are still some agreements holding up the final protocols. This includes issues like Insurance and bank guarantees, size and frequency of freight carriers into each country.
- This is expected to be finalised this year before operationalizing bus and truck movements.

India-Japan Annual Summit

Prime Minister of Japan Kishida Fumio paid an official visit to New Delhi for the **14th India-Japan Annual Summit**. The previous India-Japan Annual Summit took place in Tokyo in 2018. The 2019 summit in Guwahati between Modi and Shinzo Abe was cancelled in wake of protests over the amended citizenship law.

List of Agreements/MoUs Signed During The Summit

- Memorandum of Cooperation (MoC) in the field of **Cybersecurity**
- **7 JICA (Japan International Cooperation Agency) Loans (INR 20400 crores) for projects** in connectivity, water supply and sewerage, horticulture, healthcare, and biodiversity conservation in various States. These projects include:



- **MoC on Decentralized Domestic Wastewater Management** – To introduce *Johkasou technology in India* by Japanese companies for decentralized waste water treatment. It is used in areas where sewage infrastructure has not yet been developed.
- **India-Japan Industrial Competitiveness Partnership Roadmap** - To implement the MoC on India-Japan Industrial Competitiveness Partnership that was signed in November 2021.
 - ✓ It seeks to address issues that Japanese companies currently face in India through a fast-track mechanism.
 - ✓ It includes cooperation in MSME sector and supply chain matters.
- **MoC on Sustainable Urban Development** - It Builds on the 2007 MoU on Urban Development to include smart cities development, affordable housing, etc.

Other Announcement During Summit

Clean Energy Partnership

- For cooperation in areas such as *electric vehicles, storage systems including batteries, electric vehicle charging infrastructure, development of solar energy; hydrogen; ammonia; etc.*
- The objective is to encourage manufacturing in India, creation of resilient and trustworthy supply chains in these areas, and fostering collaboration in R&D.
- It will be implemented through existing mechanism of Energy Dialogue. **India-Japan Energy Dialogue**, established in 2007, will act as a platform for this partnership.

5 trillion-yen (\$42 billion) Investment Target

- This follows from the *Investment Promotion Partnership of 2014* when both sides had agreed for JPY (Japanese Yen) 3.5 trillion investment during 2014-19.
- That target has been met, taking into account both ODA and Investments from Japan.
- The new ambitious target would provide a scope for greater involvement of Japanese companies in our economy.

Sustainable Development Initiative for North Eastern Region of India

- It includes both ongoing projects and possible future cooperation in various States in the NER in areas such as: connectivity, healthcare, new and renewable energy, as well as '**Initiative for Strengthening Bamboo Value Chain in the North East**'.
- It should be noted that India and Japan established the **Act East Forum (AEF) in 2017** for the development of NER and to promote connectivity within this region and between this region and Southeast Asia.
- AEF reflects the synergy between India's Act East Policy and Japan's vision for a free and open Indo-Pacific.
- In accordance with this vision, India and Japan have decided to launch a **comprehensive initiative for sustainable development of NER**.

Different Aspects of India – Japan Relations

Economic Relation

- India was the **18th largest trading partner for Japan**, and Japan was the **12th largest trading partner for India** in 2020.
 - ✓ Japan's bilateral trade with India totalled US\$ 16.95 billion in FY 2019-20. Exports from Japan to India during this period were US\$ 12.43 billion and imports were US\$ 4.52 billion.
- Japan was the **4th largest investor for India** in FY2020. Japanese private-sector's interest in India is rising, and, currently, about 1,455 Japanese companies have branches in India.
 - ✓ From 2000 until September 2020, the Japanese investments in India cumulatively stand at around US\$ 34.152 billion.
- India-Japan Comprehensive Economic Partnership Agreement (CEPA) came into force in August 2011.
- In October 2018, India and Japan signed a deal for a **USD 75-billion bilateral swap arrangement**.

Official Development Assistance (ODA)

- Japanese ODA supports India's efforts for accelerated economic development, particularly in priority areas like power, transportation, environment and social sector.
- The Mumbai-Ahmedabad High Speed Rail, Western Dedicated Freight Corridor (WDFC), Delhi-Mumbai Industrial Corridor (DMIC) with 12 industrial townships, Chennai-Bengaluru Industrial Corridor (CBIC) are some mega projects with Japanese cooperation on the anvil.
- Japan's ODA commitment in FY 2019-20 was JPY 374.44 billion, and in FY 2020-21 is JPY 350 billion.

Defence & Security

- In 2008, India and Japan issued "Joint Declaration on Security Cooperation between Japan & India".
- There are also various frameworks of security and defense dialogue between Japan and India including Foreign and Defense Ministerial Meeting ("2+2" meeting), annual Defense Ministerial Dialogue and Coast Guard-to-Coast Guard dialogue.
- In November 2019, the first **"2+2" meeting was held in New Delhi**.
- In September 2020, the Agreement between the Japan and India Concerning **Reciprocal Provision of**

Supplies and Services between the Self-Defense Forces of Japan and the Indian Armed Forces (so-called “**Acquisition and Cross-Servicing Agreement**” or ACSA) was signed.

✓ India is **only the second country after Australia** with which Japan has such an agreement.

- Japan became a permanent member of the **Malabar exercise** in 2015. India and Japan also conduct joint military exercise named “**Dharma Guardian**” since 2018

Cultural Relations

- The year 2022 marks the 70th Anniversary of the Establishment of Diplomatic Relations between Japan and India.
- The year 2017 was declared as the **Year of Japan-India Friendly Exchanges** to further enhance people-to-people exchanges between Japan and India.
- In 2012, various cultural events took place both in Japan and in India to promote mutual understanding between the two countries, under the theme of “Resurgent Japan, Vibrant India: New Perspectives, New Exchanges.

Civil Nuclear Agreement

- In November 2016, India and Japan signed a deal on nuclear energy. This was the first time that Japan signed such deal with a non-signatory of Non-Proliferation Treaty.
- The deal gives Japan the right to supply nuclear reactors, fuel and technology, to India.

India - Japan: Imperatives for Better Ties

Strategic

- **China** remains an unspoken factor in India – Japan relation. Japan has a boundary dispute with China over Senkaku island in East China Sea. India has been at the receiving end of China’s attitude since Independence particularly in Ladakh and Arunachal Pradesh.
- Both countries’ insistence on increased engagement between India’s ‘Act East Policy’ and Japan’s ‘Open Indo-Pacific Strategy’ further makes them a natural partner.

Security

- India and Japan have large Exclusive Economic Zones and maritime interests (including safe passage of Japanese oil tankers plying from the Persian Gulf to Strait of Malacca through Arabian Sea, Indian Ocean and Bay of Bengal under protection from Indian Navy and the Coast Guard).

Economic

- Japan is trying to **jump-start a Japanese economy** which badly needs new sources of exports and revenue for ailing Japan Inc. India, with its 1.2 billion increasingly wealthy consumers and bottomless investment opportunities, can provide just what Japan requires.
- India has **significant reserve of rare earth metal** which is badly needed for the Japanese economy which uses these minerals to manufacture different products.
- **Japanese workforce is ageing**. In this case, it is looking towards India for the supply of young workforce to revive its economy.

Multilateral imperatives

- Both countries need their mutual support on crucial global issues including the issue of climate change, countering terrorism, reform of the United Nations Security Council (UNSC).

Issues in India-Japan Relationship

- While India can emerge as a large market for Japanese infrastructure system exports, there have been incredible delays in the commencement of the projects.
- Japanese companies face considerable logistics challenges and non-availability of uninterrupted power supply constraints their plans for establishing manufacturing plants in India.

- The two-country seems to have **different opinion on the current Ukraine crisis**. While Japan openly criticised Russia for invading Ukraine, India has not done so publicly.

Conclusion

The friendship between India and Japan has a long history rooted in spiritual affinity and strong cultural and civilization ties dating back to the visit of Indian monk Bodhisena in 752 AD. Shared democratic values and commitment to human rights, pluralism, open society, and the rule of law underpin the global partnership between the two countries. The global partnership between India and Japan reflects a broad convergence of their long-term political, economic and strategic interests. Japan and India are partners in peace, with a common interest in and complementary responsibility for promoting the security, stability and prosperity of Asia as well as in advancing international peace and equitable development. A strong, prosperous and dynamic India is, therefore, in the interest of Japan and vice versa.



India-Australia Virtual Summit

- PM Modi and PM of Australia Scott Morrison held the second India-Australia Virtual Summit. The Summit followed the historic first Virtual Summit of June 2020 when the relationship was elevated to a **Comprehensive Strategic Partnership**.
- During the summit, both leaders reviewed the multi-faceted relationship between two countries and exchanged views on regional and global developments.

Key Highlights Of The Summit

1. Returning of 29 Ancient Artefacts to India

- Indian PM thanked his Australian counterpart for the special gesture in returning 29 ancient artefacts to India. Since 2014, a total of 228 antiquities that were stolen or illegally traded have been repatriated to India.
- These artefacts included - 12th century Chola bronzes, 11th-12th century Jain sculptures from Rajasthan, 12th-13th century sandstone Goddess Mahisasura Mardini from Gujarat, 18th-19th century paintings and early gelatin silver photographs.

Comprehensive Strategic Partnership (CSP) 2020

- During a **virtual bilateral summit in June 2020**, India and Australia signed CSP 2020.
- It established **Foreign and Defence Ministers meeting in a '2+2' format** to discuss strategic issues at least **every two years**. Both countries held the **first 2+2 meeting in September 2021**.
- It also expressed its commitment to enhance cooperation under the annual **Australia-India 'Energy Dialogue**.

2. List of Documents Announced/Signed

- Two sides had agreed on a mechanism for annual summits that will *create structural arrangements* to regularly review bilateral relations. India had **annual summits only with Russia and Japan till now**.
- Establishment of General Rawat India-Australia Young Defence Officers' Exchange Programme (Announced)
- MoU on Co-Investment in Australian Critical Minerals Projects
- **Matching funds as Australia** for Pacific Island Countries of the amount of AUD 10 million (approx. INR 56 crores) each under **Infrastructure for Resilient Island States (IRIS)** and **International Solar Alliance (ISA)**.

3. Need To Speedily Conclude A CECA

Both the PMs spoke about the need to speedily conclude a comprehensive economic cooperation agreement (CECA) the two sides are negotiating.

4. Australian Investment in India

- Australia is looking to increase its investments in India by Rs 1500 crore with the fresh agreements.

- It also announced slew of initiatives to enhance cooperation in areas ranging from rare earth minerals to defence.

India-Australia Bilateral Relation

Historical Perspective

- The historical ties between India and Australia started immediately following European settlement in Australia from 1788.
- All trade from the penal colony of New South Wales was controlled by the British East India Company through Kolkata.
- India and Australia established diplomatic relations in the pre-Independence period, with the establishment of India Trade Office in Sydney in 1941.

Strategic Relationship

- In 2009, **India and Australia established a 'Strategic Partnership'**, including a Joint Declaration on Security Cooperation. This security cooperation has been further elevated to **Comprehensive Strategic Partnership in 2020.**
- The Australian foreign policy blueprint released in November 2017 sees India in the front rank of Australia's international partnerships.

High-Level Exchanges

- The first ever visit of the President of India to Australia took place in November 2018.
- The two-way Prime Ministerial visits in 2014 gave significant momentum to the bilateral relationship. During this visit, **PM Modi addressed a joint sitting of both houses** of Parliament, the first by an Indian PM.

Partnerships in Plurilateral Formats

- The two great democracies of the Indo-Pacific region have expanded their bilateral relationship into global partnerships in plurilateral formats, including the Quad with Japan and USA.
- Both countries are also engaged on other plurilateral format such as India-Australia-Japan Trilateral Dialogue, India-Australia-Indonesia Trilateral Dialogue, India-France-Australia Trilateral Dialogue.
- Both India and Australia are members of the Commonwealth, IORA, ASEAN Regional Forum, Asia Pacific Partnership on Climate and Clean Development, and have participated in the East Asia Summits.
- Australia supports India's membership in the APEC. In 2008, Australia became an Observer in SAARC.

Economic and Trade Relationship

- As part of its efforts to develop strong economic relationship with India, the Australian Government commissioned India Economic Strategy 2035 in July 2018. This was done to define a pathway for Australia to unlock opportunities offered by Indian Economic growth.
- **India-Australia Joint Ministerial Commission** - It was established in 1989 to enable interaction at a government and business level on a range of trade and investment related issues.
- **Bilateral Trade** - Two-way goods and services trade with India was A\$24.4 billion in 2020 (in Australian dollar).
 - ✓ India is the 7th largest trade partner of Australia with trade in goods and services at A\$ 26.24 billion representing 3% share of the total Australian trade in FY 2019-20.
 - ✓ Indian exports for the FY 2019-20 stood at A\$ 7.59 billion and imports at A\$ 18.65 billion.
- India Australia Circular Economy (**I-ACE**) **Hackathon 2021** was an effort to strengthen bi-lateral innovations in Circular Economy.

Science and Technology

- An Australia-India Strategic Research Fund (AISRF), which was established in 2006, supports scientists in

India and Australia to collaborate on leading-edge research.

- AISRF consists of India Australia Biotechnology Fund; India-Australia Science & Technology Fund; Grand Challenge Fund and Fellowship Schemes

Civil Nuclear Cooperation

- A Civil Nuclear Cooperation Agreement between the two countries was signed in September 2014 during the visit of then PM Tony Abbott to India.
- The agreement provides the framework for substantial new trade in energy between Australia and India.

Defence Cooperation

- During PM Modi's visit to Australia in November 2014, both sides decided to extend defence cooperation to cover research, development and industry engagement.
- Arrangement concerning **Mutual Logistics Support (MLSA)** and Implementing Arrangement concerning cooperation in Defence Science and Technology were concluded during the Virtual Summit held in June 2020.
- India and Australia conduct their bilateral naval exercise '**AUSINDEX**' since 2015.
- In 2018, Indian Air Force participated for the first time in the **Exercise Pitch Black** in Australia.
- In October-November 2020, the Australian Navy participated in **Malabar Exercises**.

Education, Sports, Art & Culture

- The Australia India Education Council (AIEC) provides a platform for ministerial engagement on policy and operational issues across education. The AIEC is co-chaired by education ministers from both countries.
- Confluence, the Festival of India in Australia was held in 2016 and Confluence 2 was held in 2017.
- **Repatriation of Indian Cultural Artifacts:** A number of artifacts have been successfully repatriated to India in recent years. They include - Bronze Idol of Nataraja from Art Gallery of South Australia (AGSA) (2019), Nagaraja stone sculpture (2020), two Dwarpala stone sculptures (2020).

Indian Community in Australia

- The Indian community in Australia continues to grow in size and importance, with the population of about seven hundred thousand.
- India is one of the top sources of skilled immigrants to Australia.
- The number of Indian students continues to grow with approximately 105,000 students presently studying in Australian universities.
- After England, India is the second largest migrant group in Australia in 2020.

Conclusion

The India-Australia bilateral relationship has undergone evolution in recent years, developing along a positive track, into a strategic partnership. The two nations have much in common, underpinned by shared values of a pluralistic, Westminster-style democracies, Commonwealth traditions, expanding economic engagement and increasing high level interaction. The long-standing people-to-people ties, ever increasing Indian students coming to Australia for higher education, growing tourism and sporting links have played a significant role in further strengthening bilateral relations between the two countries.

Geneva Conventions

Russia's armed invasion of Ukraine starting February 24 has raised serious concerns surrounding the issue of human rights violations. As the casualties among the civilians continue to mount, the **world is looking to the Geneva Conventions for standards to which the invading Russian forces can be held.**

About Geneva Conventions Guidelines During Wartime

- The Geneva Conventions are a **set of four treaties/conventions**, formalised in 1949, and **three additional protocols**.
 - ✓ The first two of these additional protocols were formalised in 1977 and the third in 2005.
 - ✓ **Two Protocols of 1977:** They strengthen the protection of victims of international (Protocol I) and non-international (Protocol II) armed conflicts and place limits on the way wars are fought.
 - ✓ In 2005, a third Additional Protocol was adopted creating an additional emblem, the Red Crystal, which has the same international status as the Red Cross and Red Crescent emblems.
- These conventions codify widely accepted ethical and legal international standards for humanitarian treatment of those impacted by any ongoing war.
- The focus of the Conventions is treatment of non-combatants and prisoners of war.
 - ✓ It is **not concerned with the use of conventional or biological and chemical weapons**. These are governed respectively by Hague Conventions and Geneva Protocol.

Key Highlights of Geneva Conventions

1st Geneva Convention

It protects wounded and sick soldiers on land during war. This convention extends to medical and religious personnel, medical units, and medical transport.

2nd Geneva Convention

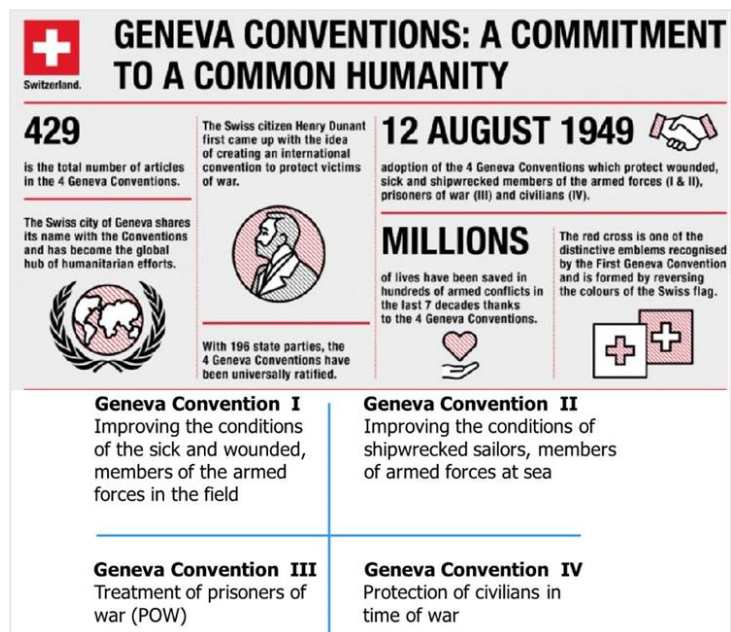
- It protects wounded, sick and shipwrecked military personnel at sea during war.
- This convention also extends to hospital ships and medical transports by sea, with specific commentary on the treatment of and protections for their personnel.

3rd Geneva Convention

- It applies to prisoners of war, including a wide range of general protections such as humane treatment, maintenance and equality across prisoners etc.
- It also talks about hygiene and right to religious, intellectual, and physical activities of prisoners.

4th Geneva Convention

- Comprising 159 articles, it outlines the norms for the protection of civilians in wartime.
- Along with the Additional Protocols of 1977, 4th Convention talks about
 - general protection of populations against certain consequences of war,
 - conduct of hostilities and the status and treatment of protected persons,
 - Distinguishing between the situation of foreigners on the territory of one of the parties to the conflict and that of civilians in occupied territory.



GENEVA CONVENTIONS: A COMMITMENT TO A COMMON HUMANITY

429 is the total number of articles in the 4 Geneva Conventions.

The Swiss citizen Henry Dunant first came up with the idea of creating an international convention to protect victims of war.

12 AUGUST 1949 adoption of the 4 Geneva Conventions which protect wounded, sick and shipwrecked members of the armed forces (I & II), prisoners of war (III) and civilians (IV).

MILLIONS of lives have been saved in hundreds of armed conflicts in the last 7 decades thanks to the 4 Geneva Conventions.

The red cross is one of the distinctive emblems recognised by the First Geneva Convention and is formed by reversing the colours of the Swiss flag.

With 196 state parties, the 4 Geneva Conventions have been universally ratified.

<p>Geneva Convention I Improving the conditions of the sick and wounded, members of the armed forces in the field</p>	<p>Geneva Convention II Improving the conditions of shipwrecked sailors, members of armed forces at sea</p>
<p>Geneva Convention III Treatment of prisoners of war (POW)</p>	<p>Geneva Convention IV Protection of civilians in time of war</p>

- This convention also spells out the obligations of the occupying power vis-à-vis the civilian population and outlines detailed provisions on humanitarian relief for populations in occupied territory.

Signatories

- The Geneva Conventions have been ratified by 196 states, including all UN member states.
- The three Protocols have been ratified by 174, 169 and 79 states respectively.

Where Does Russia Stand On The Conventions?

- In 2019, perhaps anticipating the possibility of its invading Ukraine in the near future, Russia withdrew its declaration under **Article 90 of Protocol 1**.
 - This article empowers the International Fact-Finding Commission to enquire into allegations of violations of Geneva Conventions by such other Party.
 - By withdrawing this declaration, Russia has pre-emptively left itself with the option to refuse access by any international fact-finding missions.
- Further, the four conventions and first two protocols of the Geneva Conventions were ratified by the Soviet Union, not Russia.
- Hence, there is a risk of Russian government of the day disavowing any responsibility under the Conventions.

Steps For Potential Prosecution Under The Conventions

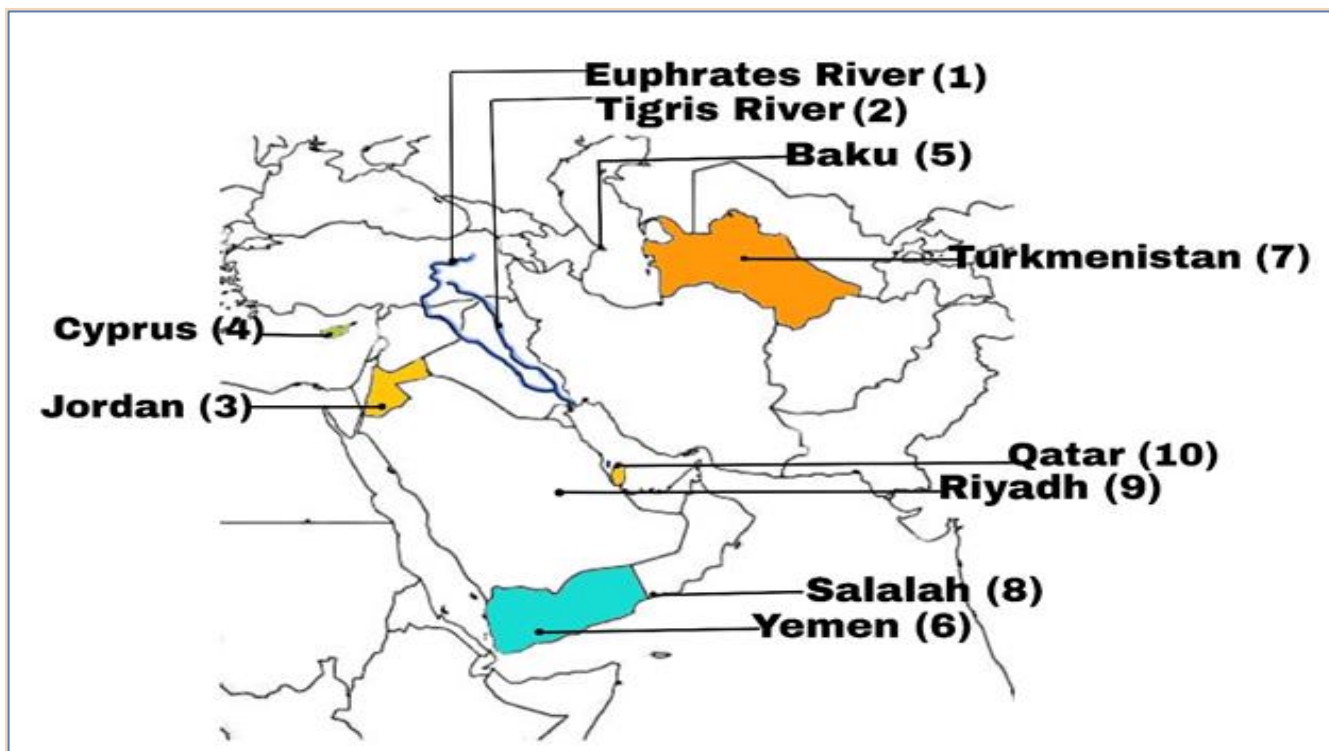
- Under Article 8 of the **Rome Statute of International Criminal Court (ICC)**, it is the ICC that has jurisdiction in respect of war crimes. Under the statute, war crimes refer to grave breaches of Geneva Conventions.
- To examine any such evidence emerging from the ongoing Russia-Ukraine war, on February 28, the ICC opened a war crimes investigation under its prosecutor, Karim Khan.

Performance of Geneva Conventions in the past

- As per Amnesty International, in 2019, there has been a blatant disregard for civilian protection and international humanitarian law in armed conflicts.
 - In these conflicts four of the five permanent members of the UN Security Council are parties — Russia, U.S., U.K. and France.
- Amnesty cited following incidents as an example:
 - U.S.-led coalition's bombing of Raqqa in Syria, which left more than 1,600 civilians dead;
 - Destruction of civilian infrastructure and lives in Aleppo and Idlib by Russian forces, leading to mass displacement of millions; and
 - War in Yemen where the Saudi Arabia and the UAE-led coalition, backed by the West, killed and injured thousands of civilians.
- These cases underscore the grim fact that the Geneva Conventions, even when backed by rulings of the ICC, cannot be enforced by third parties to any conflict.
- However, they have in the past proved effective at raising global awareness of human rights violations across conflict zones.
 - In some cases, these conventions led to sanctions or trade embargoes against the belligerents.

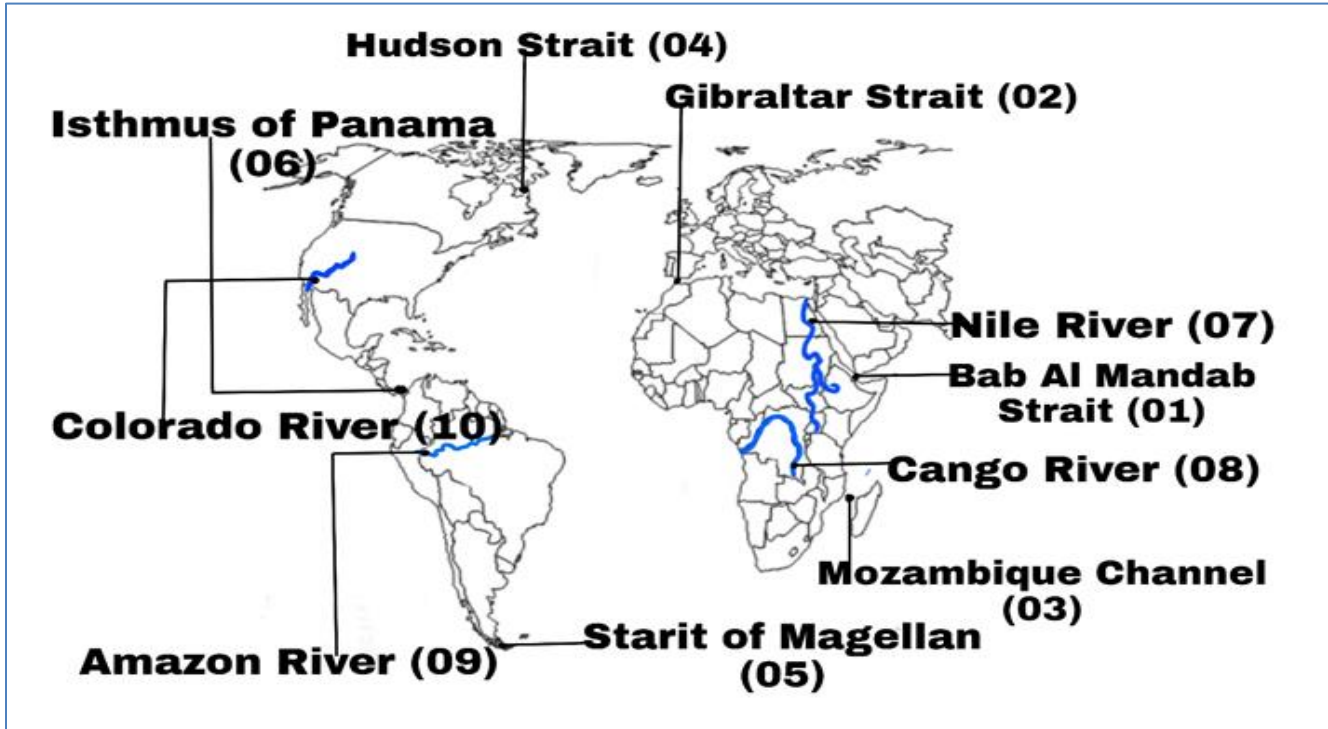
MAPS: PLACES IN NEWS

International Places in the News



01	Euphrates River	It is the longest river in southwest Asia . It originates in Turkey and flows through Syria and Iraq to join the Tigris River in the Shatt al-Arab , which empties into the Persian Gulf.
02	Tigris River	The river flows south from the mountains of the Armenian Highlands through the Syrian and Arabian Deserts, and empties into the Persian Gulf. Together with the Euphrates River, it is one of the two defining rivers of Mesopotamia.
03	Jordan	It is a country in Western Asia. It is situated at the crossroads of Asia, Africa and Europe. It is bordered by Saudi Arabia, Iraq, Syria, and Israel, the Palestinian West Bank, and the Dead Sea.
04	Cyprus	It is an island country in the eastern Mediterranean Sea, south of the Anatolian Peninsula. It is the third-largest island in the Mediterranean after the Sicily and Sardinia , and is located south of Turkey.
05	Baku	Baku is the capital of Azerbaijan. It lies on the western shore of the Caspian Sea and the southern side of the Abseron Peninsula.
06	Yemen	Yemen is a country in Western Asia, on the southern end of the Arabian Peninsula. It borders Saudi Arabia and Oman and shares maritime borders with Eritrea, Djibouti, Somaliland and Somalia.
07	Turkmenistan	Turkmenistan is a landlocked country in Central Asia , bordered by Kazakhstan, Uzbekistan, Afghanistan, Iran and the Caspian Sea.
08	Salalah	Salalah Airport has won two international awards from Airports Council International (ACI). Salalah is the third-largest city in the Sultanate of Oman.
09	Riyadh	Riyadh is the capital of Saudi Arabia. Located in the center of the an-Nafud desert, on

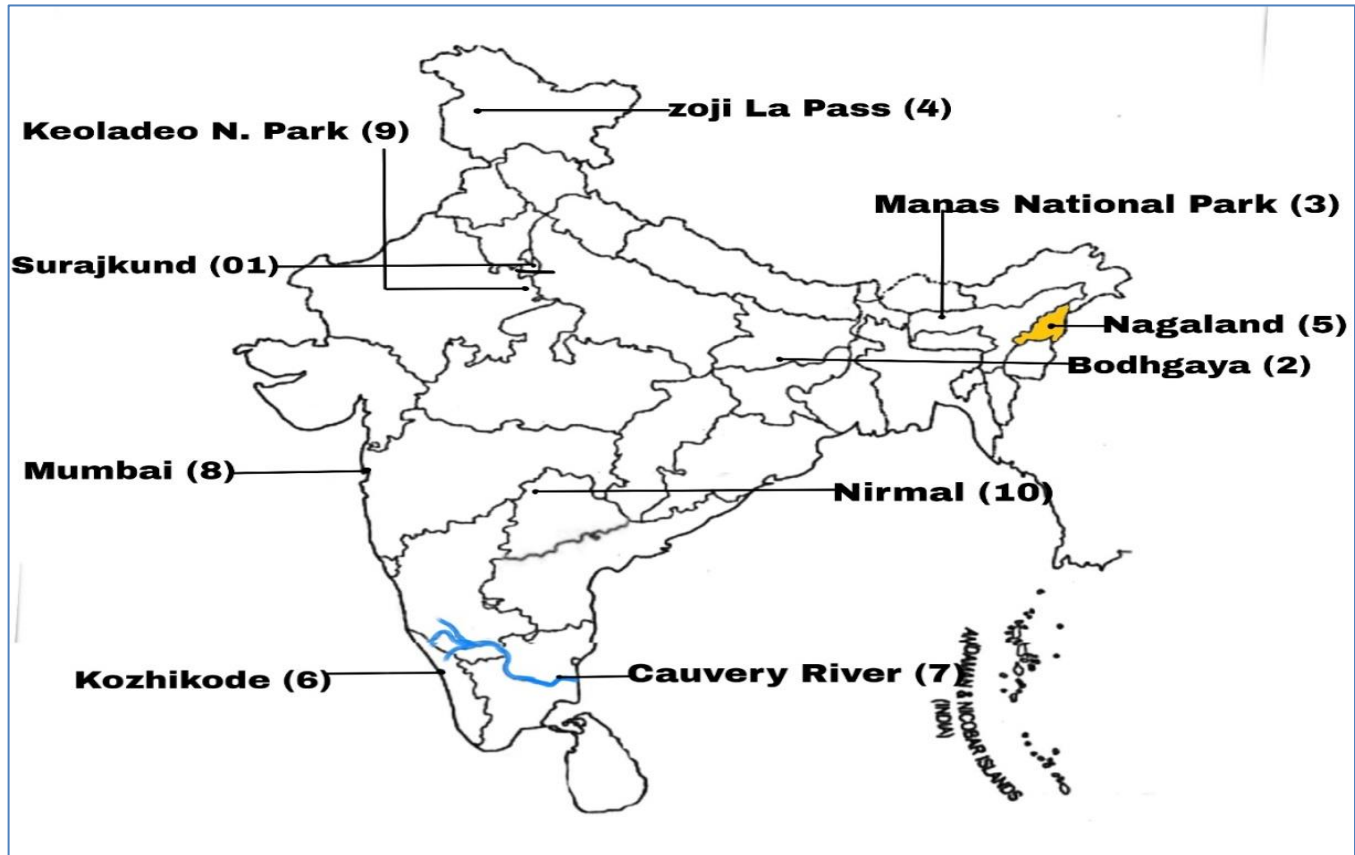
		the eastern part of the Najd plateau.
10	Qatar	It is a country in Western Asia. It shares its land border with Saudi Arabia , with the rest of its territory surrounded by the Persian Gulf. The Gulf of Bahrain, an inlet of the Persian Gulf, separates Qatar from nearby Bahrain.



01	Bab Al Mandab Strait	The Bab-el-Mandeb is a strait between Yemen on the Arabian Peninsula, and Djibouti and Eritrea in the Horn of Africa. It connects the Red Sea to the Gulf of Aden.
02	Gibraltar Strait	The Strait of Gibraltar is a narrow strait that connects the Atlantic Ocean to the Mediterranean Sea and separates the Iberian Peninsula in Europe from Morocco in Africa.
03	Mozambique Strait	The Mozambique Channel is an arm of the Indian Ocean located between the Southeast African countries of Madagascar and Mozambique.
04	Hudson Strait	Hudson Strait lies between Baffin Island and Nunavik . This strait links the Atlantic Ocean and Labrador Sea to Hudson Bay in Canada.
05	Strait of Magellan	The Strait of Magellan is a navigable sea route in southern Chile separating mainland South America to the north and Tierra del Fuego to the south. It is considered the most important natural passage between the Atlantic and Pacific Ocean.
06	Isthmus of Panama	The Isthmus of Panama is the narrow strip of land that lies between the Caribbean Sea and the Pacific Ocean, linking North and South America.
07	Nile River	The Nile is a major north-flowing river in northeastern Africa. It flows into the Mediterranean Sea. The longest river in Africa.
08	Congo River	Formerly also known as the Zaire River, it is the 2nd longest river in Africa, shorter only than the Nile, as well as the second largest river in the world by discharge volume, after only the Amazon.

09	Amazon River	The Amazon River in South America is the largest river in the world by volume of water, and the longest river in the world compared to the Nile.
10	Colorado River	The Colorado River is one of the principal rivers in the Southwestern United States and northern Mexico.

National Places In The News



01	Surajkund	35th Surajkund International Crafts Mela 2022 was organized. Surajkund is an ancient 10th century water reservoir located on Southern Delhi Ridge of Aravalli range in Faridabad city of Haryana state.
02	Bodh Gaya	Buddha's largest reclining statue is being made in Bodh Gaya. It is a religious and pilgrimage site associated with the Mahabodhi temple complex in Gaya district in the state of Bihar.
03	Manas National Park	Manas National Park (Assam) witnesses sharp rise in tiger, rhino population. It is also a UNESCO Natural World Heritage Site, a Tiger Reserve, an Elephant Reserve and a Biosphere Reserve.
04	ZojiLa Pass	It was reopened after being closed for nearly three months due to cold and heavy snowfall. It is a high mountain pass in the Himalayas in the Indian Union Territory of Ladakh.
05	Nagaland	With 69%, Nagaland recorded the highest decadal growth of urban population in the country as compared to the national growth rate of 21%. It is a mountainous state in Northeast India bordering Myanmar.
06	Kozhikode	Kozhikode was proposed by the Kerala Institute of Local Administration (KILA) to be branded as a ' City of Literature ' with the help of UNESCO. Kozhikode is a coastal city in

		the south Indian state of Kerala.
07	Cauvery River	A museum on River Cauvery would soon be established at the historic Kallanai (Grand Anicut). The river flows through the states of Karnataka and Tamil Nadu. It rises at Talakaveri in Brahmagiri range in the Western Ghats, Karnataka, and outfall into the Bay of Bengal.
08	Mumbai	Mumbai has announced details plan to achieve net zero carbon emission by 2050, making it the first city in South Asia to set such a timeline. It is a city of Maharashtra, on India's west coast.
09	Keoladeo National Park	<p>Boma technique adopted for translocating deer from Keoladeo National Park. It is a vast bird sanctuary in the north Indian state of Rajasthan. It was designated as Ramsar site in 1981 and a national park on March, 1982, and UNESCO World Heritage Site in 1985.</p> <ul style="list-style-type: none"> ✓ Boma technique involves luring animals into an enclosure by chasing them through a funnel-like fencing. ✓ The funnel tapers into an animal selection-cum-loading chute, supported with grass mats and green net to make it opaque for animals, which are herded into a large vehicle for their transport to another location.
10	Nirmal	Archaeologists on track of Buddhist origins in Telangana's Nirmal district.

SOCIAL ISSUES

Jan Aushadhi Diwas

Pharmaceuticals & Medical Devices Bureau of India (PMBI), under the aegis of Department of Pharmaceuticals, celebrated **4th Jan Aushadhi Diwas** by organizing week-long (1st March-7th March) celebrations at different locations across the country covering all States/UTs. This will generate awareness about the usages of generic medicines and benefits of **Jan Aushadhi Pariyojana**.

Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP)

- ▶ PMBJP is a campaign launched by Department of Pharmaceuticals in **2008** under the name **Jan Aushadhi Campaign**.
- ▶ The campaign was **revamped** as PMBJP in **2015-16**.
- ▶ **Bureau of Pharma PSUs of India (BPPI)** which works under Ministry of Chemicals & Fertilisers is the implementation agency for PMBJP.
 - BPPI has also developed the **Janaushadhi Sugam Application**.
 - BPPI supports **Janaushadhi Kendras** as a part of PMBJP.
- ▶ A medicine is priced on the principle of maximum 50% of average price of the top 3 branded medicines. Thus, the prices of Jan Aushadhi Medicines are cheaper by at least 50% and in some cases, by 80% to 90% of the market price of the branded medicines.



Objectives of PMBJP

- ▶ To make available quality medicines, consumables and surgical items at affordable prices for all and reduce out of pocket expenditure.
- ▶ To popularise generic medicines and dispel the notion that low priced generic medicines are of inferior quality or are less effective.
- ▶ To ensure easy availability of menstrual health services (Janaushadhi 'Suidha' sanitary napkins).
- ▶ Generate employment by engaging individual entrepreneurs in the opening of PMBJP Kendras.

Performance

- As on 31st January, 2022, the number of stores has increased to 8,675. In the current financial year 2021-22 (till 31st January, 2022), PMBI has made sales of Rs. 751.42 Crore which led to savings of approximately Rs. 4500 Crore to the citizens.
- Under the PMBJP, all 739 districts of the nation have been covered.
- Government has set a target to increase the number of Pradhan Mantri Bhartiya Janaushadhi Kendras (PMBJKs) to 10,500 by the end of March 2025.
- Product basket of PMBJP comprises of **1451 drugs and 240 surgical instruments**.
- Further, new medicines and **nutraceuticals** products like protein powder, malt-based food supplements, protein bar, immunity bar, sanitizer, masks, glucometer, oximeter, etc. have been launched.
- At present three IT enabled warehouses of PMBJP are functional at Gurugram, Chennai & Guwahati and fourth one is ready to start operations at Surat.
- Further, 39 distributors have been appointed across the country to support the supply of medicines to remote and rural areas.

Minimum Assured Return Scheme (MARS)

Pension Fund Regulatory and Development Authority (PFRDA) has proposed a guaranteed return scheme, **Minimum Assured Return Scheme (MARS)**, which will provide savers/ people from the salaried class an option for their investments. This will be the **first scheme** from the pension regulator that will offer a guaranteed return to investors.

Proposal Under MARS

- To have a separate scheme that can offer a **guaranteed minimum rate of return** to NPS (National Pension System) subscribers, especially those who are risk averse.
- The actual returns will depend on the market conditions. **Any shortfall will be made good by the sponsor**, and the surplus will be credited to the subscribers' account.

Options that will be offered

- **Fixed Guarantee Option:** Guaranteed return is fixed along the accumulation phase.
- **Floating Guarantee Option:** Guaranteed rate of return is not fixed along the savings phase. It depends on the development of the 1-year interest rate until retirement.

Limit of Contribution

- Minimum and maximum monetary limits on contributions may be prescribed.

Lock-in- Period

- Lock-in may be applicable on each contribution, and will be applied based on the period since that contribution has been made. It may also consider **multiple lock-in period options** (or staggered guarantee periods) for flexibility.
- Withdrawals are likely to be directly linked to the lock-in period. The subscriber may have the option to withdraw or to stay invested after the lock-in period. However, there won't be any guarantee applied on the investment after lock-in.

National Pension System (NPS)

About

- Central Government introduced NPS from January 2004 for government employees (except for armed forces).
- NPS is implemented and regulated by PFRDA.
- National Pension System Trust (NPST) established by PFRDA is the registered owner of all assets under NPS.
- Opening an account with NPS provides a Permanent Retirement Account Number (**PRAN**)
- NPS provides seamless portability across jobs and across locations, unlike all current pension plans, including that of the EPFO.
- Individuals can switch over from one investment option to another or from one fund manager to another subject, of course, to certain regulatory restrictions. The returns are totally market-related.

Structure

NPS is structured into two tiers:

- **Tier-I account:** This is the non-withdrawable permanent retirement account into which the accumulations are deposited and invested as per the option of the subscriber.
- **Tier-II account:** This is a voluntary withdrawable account which is allowed only when there is an active Tier I account in the name of the subscriber. The withdrawals are permitted from this account as per the needs of the subscriber as and when claimed.

Beneficiaries

- NPS was made available to **all Citizens of India** from **May 2009**.
- Any individual citizen of India (**both resident and Non-resident**) in the age group of **18-65** years can join NPS.
- OCI (Overseas Citizens of India) and PIO (Person of Indian Origin) card holders and Hindu Undivided Family (HUFs) are **not eligible**

Achievements

- NPS has been gradually growing in size and now manages 5.78 lakh crore of savings and 4.24 crore accounts in multiple savings schemes.
- Of these, over 3.02 crore accounts are part of the **Atal Pension Yojana (APY)**, a government-backed scheme for workers in **unorganised sector** that assures a fixed

pension payout after retirement.

- The rest constitute voluntary savings from private sector employees and self-employed individuals

Changes Introduced

- PFRDA has recently announced that NPS will no longer compel investors to convert 40% of their accumulated retirement corpus into an annuity, as poor yields on annuities and high inflation are translating into negative returns.
- It has also announced that the retirees will be able to take out the entire Rs.5 lakh savings in the NPS against Rs. 2 lakh at present.

India's pension **Assets Under Management (AUM)** have already crossed **Rs 7-lakh crore** and are expected to touch **RS 7.5-lakh crore** by end March this fiscal 2021-22. PFRDA is aiming for an AUM of Rs 30-lakh crore by 2030

Other Pension Scheme Related News

Government has approved the continuation of the **Swatantrata Sainik Samman Yojana (SSSY)** and its components beyond 31.03.2021 for the Financial Years 2021-22 to 2025-26, with a total financial outlay of Rs.3,274.87 crore. The proposal for continuation of the SSSY was received from the **Ministry of Home Affairs**. The decision shows the commitment of the Government to remember sacrifices of Freedom Fighters and taking inspiration from them during the year of Azadi Ka Amrit Mahotsav.

Background

- In 1969: Government of India introduced the '**Ex-Andaman Political Prisoners Pension Scheme**' to honor the freedom fighters who had been incarcerated in the Cellular Jail at Port Blair.
- In 1972, to commemorate the 25th Anniversary of Independence, a regular scheme for grant of freedom fighters' pension was introduced.
- Since 1980, a liberalized scheme, namely the 'Swatantrata Sainik Samman Pension Scheme' has been implemented.
- The amount of pension has been revised from time to time and Dearness Relief is also given since August 2016.
- From the financial year 2017-18 onwards, the nomenclature of the Scheme has been changed as 'Swatantrata Sainik Samman Yojana'.

About The Scheme

- It provides for a monthly Samman Pension to freedom fighters, as a token of respect for their contribution in the national freedom struggle.
- On their demise, pension is provided to their eligible dependents viz. spouses and thereafter, unmarried and unemployed daughters and dependent parents, as per prescribed eligibility norms and procedure.
- It is implemented by the Ministry of Home Affairs (Freedom Fighters Division).
- There are 23,566 beneficiaries across the country covered under this scheme.

Kanya Shiksha Pravesh Utsav

- The government launched a nation-wide campaign '**Kanya Shiksha Pravesh Utsav**' on the eve of International Women's Day (**8th March**) by ensuring enrolment of an estimated **four lakh out-of-school adolescent girls in 11-14 years** age group.
- The campaign is being steered by the *Ministry Of Women And Child Development* in partnership with the *Ministry Of Education*.
- **Aim:** The project aims to work on a complete system for out-of-school girls by building on existing schemes and programmes such as Schemes for Adolescent Girls (SAG), BetiBachaoBetiPadhao (BBBP), and National Education Policy (NEP).

- The campaign will be implemented as part of BBBP project. Over 400 districts across all states will be funded under BBBP Scheme for grassroots level outreach and awareness generation to sensitise communities and families to enrol adolescent girls in schools.
- Further, funding from Samagra Shiksha Abhiyan, and Anganwadi workers (AWWs) will be incentivised for counseling and referring out of school adolescent girls
 - The campaign will be largely driven by the Anganwadi system in close partnerships with education officers at district and block levels. The Anganwadis will do a mapping of existing out-of-school girls.
- Data on out-of-school girls are based on their visits to anganwadi centres for nutrition, nutrition education and skilling.
- UNICEF India cited findings of a '**U Report India**' based on inputs from a real-time data collection and communication platform for youth and communities. Drawing from responses of 50,000 children and adolescents in 28 states, the report highlights that nearly one-third of the respondents know a girl who has dropped out of school. Among the dropouts, a significant number were either engaged in domestic work or had got married. A third of them wish to go back to school. On solutions, the respondents sought focus on convincing parents, measures for safety in school and during commute and awareness about government schemes.

The need for the shift has also arisen because the **Scheme For Adolescent Girls (SAG)**, which initially took care of out-of-school girls, was getting less and less traction mainly because of the success of the education system in bringing all these girls in the 11 to 14 age group into the formal school system.

State of World Population Report 2022

Recently, the **United Nations Population Fund's (UNFPA)** flagship State of World Population (SoWP) Report 2022 titled "*Seeing the Unseen: The case for action in the neglected crisis of unintended pregnancy*" was launched.

Key Facts From SoWP 2022

1. Rising Unintended Pregnancies.

- ✓ Between 2015 -2019, there were ~121 million unintended pregnancies globally each year.

2. Lack of Safe, Modern Methods of Contraception

- ✓ Globally, an estimated 257 million women who want to avoid pregnancy are not using safe, modern methods of contraception.
- ✓ In 47 countries, about 40% of sexually active women were not using any contraceptive methods to avoid pregnancy.

3. Rising Rape-Related Pregnancies

- ✓ Nearly a quarter of all women are not able to say no to sex.
- ✓ Contraceptive use is 53% lower among women who have experienced intimate partner violence.
- ✓ Rape-related pregnancies are equally or more likely to occur than pregnancies from consensual sex.

4. Impact of Humanitarian Emergencies

- ✓ In humanitarian emergencies, such as the ongoing war in Ukraine, many women lose access to contraception and / or experience sexual violence.
- ✓ Some studies have shown that over 20% of refugee women and girls will face sexual violence.
- ✓ An estimated 4.8 million unintended pregnancies will occur in Afghanistan by 2025 as a result of health system disruptions and gender inequality.
- ✓ In the first 12 months of the COVID-19 pandemic, the estimated disruption in contraceptive supplies and services lasted an average of 3.6 months, leading to as many as 1.4 million unintended pregnancies.

Factors which contribute to unintended pregnancies

- Lack of sexual and reproductive health care and information
- Contraceptive options that don't suit women's bodies or circumstances
- Harmful norms and stigma surrounding women controlling their own fertility and bodies
- Sexual violence and reproductive coercion
- Judgmental attitudes or shaming in health services
- Poverty and stalled economic development
- Gender inequality

Issues with Unintended Pregnancies

Health Risks	<ul style="list-style-type: none">● Unintended pregnancies can pose certain health risks for both mother and baby.● Women with an unplanned pregnancy, for example, are less likely to receive prenatal care and may have a higher risk for postpartum depression and mental health problems later in life
Higher Rates of Preterm Birth	<ul style="list-style-type: none">● Unintended pregnancies have been associated with higher rates of preterm birth and low birthweight
Impact Future of Children	<ul style="list-style-type: none">● Children born as a result of an unplanned pregnancy may be more likely to fare worse in school achievement, social and emotional development, and later success in the labor market compared to children born as a result of a planned pregnancy
Rising abortions	<ul style="list-style-type: none">● Over 60% of unintended pregnancies, and almost 30% of all pregnancies, end in abortion.● Unsafe abortions hospitalize about 7 million women a year globally and cause 5-13% of all maternal deaths, one of the leading causes of maternal death.● In developing countries, unsafe abortions cost an estimated \$553 million per year in treatment costs alone

New Guidelines On Abortion Care

WHO presented new guidelines on abortion care. These, it claimed, would prevent more than **25 million** unsafe abortions annually.



Status of Abortions

- Globally, between 13,865 -38,940 lives are lost yearly due to the failure to provide safe abortion. Developing countries bear the burden of 97% of unsafe abortions.
- The proportion of abortions that are **unsafe** is also significantly **higher in countries with highly restrictive abortion laws than in those with less restrictive laws.**
- Over half (53.8 %) of all unsafe abortions occur in **Asia**, the majority of those in south and central Asia. A quarter (24.8 %) occurs in Africa, mainly in eastern and western Africa and a fifth (19.5%) in Latin America and the Caribbean.
- Abortion rates were highest in low-income countries with the most legal restrictions to abortion care. There was also an increase of 12% in the number of abortions in countries with legal restrictions on the procedure, while it declined slightly in countries where abortion is broadly legal.

New Guidelines

WHO has released more than 50 recommendations that include clinical practice, health care delivery and law and policy interventions to support quality abortion care. The new guidelines include recommendations on many simple interventions given below at the primary care level that improve the quality of abortion care.

Task Sharing	<ul style="list-style-type: none"> •By a wider range of health workers; ensuring access to medical abortion pills, which mean more women can obtain safe abortion services and making sure that accurate information on care is available to all those who need it.
Use of Telemedicine	<ul style="list-style-type: none"> •Which helped support access to abortion and family planning services during the COVID-19 pandemic
Removing Medically Unnecessary Political Barriers	<ul style="list-style-type: none"> •Such as criminalisation, mandatory waiting periods, third-party authorisation, restrictions on abortion services. •Such barriers can lead to critical delays in accessing treatment and put women and girls at greater risk of unsafe abortion, stigma and health complications, while increasing barriers to education and their ability to work.
Providing Enabling Environment	<ul style="list-style-type: none"> •The three cornerstones of an enabling environment for abortion care are: •Respect for human rights including a supportive framework of law and policy. •Availability and accessibility of information. •Supportive, universally accessible, affordable & well functioning health system.

- While most countries allow abortion under certain circumstances, about 20 countries do not provide any legal basis for abortion.
- More than three out of four countries have legal penalties for abortion, which may include long-term imprisonment or heavy fines for people who perform or assist with the procedure.
- Evidence shows that restricting access to abortions does not reduce the number of abortions that take place. In fact, restrictions are more likely to push women and girls into unsafe practices.
- In countries where abortion is most restricted, only one in four abortions are safe, compared to almost nine out of 10 in countries where the procedure is mostly legal.

Steps Taken by Indian Government for Safe Abortions

Medical Termination of Pregnancy (MTP) Amendment Act, 2021 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

{For more details refer October 2021 recitals}

Comprehensive Abortion Care (CAC) Services For women in health facilities under **RMNCH+A** (Reproductive, Maternal, Newborn, Child and Adolescent Health) program of **National Health Mission**

Capacity Building Of Medical officers in Safe Abortion Techniques and of Auxiliary Nurse Midwife workers, Accredited Social Health Activist (ASHA) and other functionaries

Certification To private and NGOs sector facilities to provide quality CAC services.

Nischay Pregnancy detection kits Supply to sub-centers for early detection of pregnancy

The new guidelines will support interested countries to implement and strengthen national policies and programmes related to contraception, family planning and abortion services, helping them to provide the highest standard of care for women and girls

Bahini Scheme

- Sikkim government is set to announce a scheme to install vending machines to provide 100% access to free sanitary pads in all its **secondary and senior secondary government schools** across the state.

- This is the first time that a state government has taken a decision to cover all girls studying in **Classes 9-12**
- It aims to curb dropout of girls from schools and raise awareness about menstrual hygiene.
- There are about 18,665 adolescent girls studying in government schools in Sikkim.
- The scheme is based on an experiment the state government initiated in 2018, in collaboration with **Sulabh International**, where vending machines were installed in some schools.

Data on Menstrual Health in India

- According to National Family Health Survey (NFHS-4) 2015-16, India has over 355 million menstruating women.
- Only 36% of women were reported as using sanitary napkins, locally or commercially produced.
- The percentage of women using menstrual products did improve significantly across the country, especially in Daman and Diu and Dadra and Nagar Haveli, West Bengal and Bihar, as estimated in the first phase of the recently released **NFHS-5**.
- **Menstrual Hygiene Scheme (2011) and Rashtriya Kishor Swasthya Karyakram (2014)** have been launched to promote menstrual hygiene amongst adolescent girls in the age group of 10 to 19.
- Through Suvidha initiative, government distributed more than 5 crore brand sanitary pads at Rs 1 from 6,000 Jan Aushadhi Kendras

Maternal Mortality

Registrar General of India's Sample Registration System (SRS) released the latest special bulletin on **Maternal Mortality** in India (2017-19).

- **WHO definition:** Maternal death is the death of a woman while pregnant or within 42 days of termination of pregnancy, from any cause related to or aggravated by the pregnancy or its management.
- Maternal Mortality Ratio (MMR) is defined as the number of maternal deaths during a given time per 1,00,000 **live births** during the same time.

India Stat's on MMR

- MMR has declined by **10 points** from 113 in 2016-18 to 103 in 2017-19 (**8.8 % decline**).
- Progressive reduction in the MMR from 130 in 2014-2016, 122 in 2015-17, 113 in 2016-18, and to 103 in 2017-19.

National Health Policy (NHP) target of 100/lakh live births by 2020

United Nations SDG target of 70/ lakh live births by 2030

- India's neighbours — **Nepal (186), Bangladesh (173) and Pakistan (140)** — have a higher MMR. However, China and Sri Lanka are way ahead with MMRs of 18.3 and 36 respectively.
- Top positions: Many developed countries have successfully brought down MMR to single digits. **Italy, Norway, Poland and Belarus** have the lowest MMR of 2, while it is 7 in both Germany and UK, 10 in Canada and 19 in the US.

State Specific Findings

- **States that have achieved the SDG target** has now risen from 5 to 7:



- **Achieved MMR target set by NHP:** 9 States which include above 7 and Karnataka (83) and Haryana (96).
- Kerala has recorded the lowest MMR which puts Kerala way ahead of the national MMR of 103.

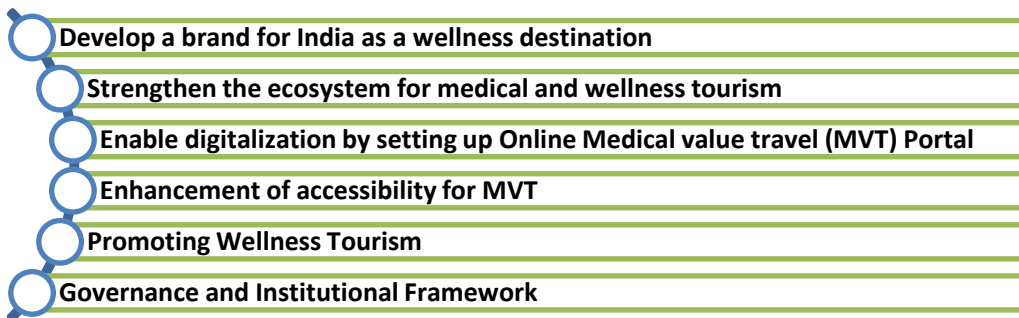
- **MMR in between 100-150:** Uttarakhand (101), West Bengal (109), Punjab (114), Bihar (130), Odisha (136) and Rajasthan (141)
- **MMR above 150:** Chhattisgarh (160), Madhya Pradesh (163), Uttar Pradesh (167) and Assam (205).

National Strategy and Roadmap for Medical and Wellness Tourism

Ministry of Tourism has formulated a **National Strategy and Roadmap for Medical and Wellness Tourism**.

- **Mission:** To create a robust framework and synergy amongst the Central Government Ministries, State Governments and Private Sector for promoting India as a Medical and Wellness Tourism destination.
- For this Ministry of Tourism has constituted a **National Medical and Wellness Tourism Board** with the Minister (Tourism) as its Chairman.

Key Strategic Pillars: The Strategy has identified the following key pillars:



Steps Taken For Promotion

- Ministry of Tourism, releases global print, electronic and online media campaigns in important and potential markets overseas, under the 'Incredible India' brand-line, to promote various tourism destinations and products of the country. Digital promotions are also regularly undertaken through the Social Media accounts of the Ministry on different themes including the theme of Medical Tourism.
- '**Medical Visa**' has been introduced, which can be given for specific purpose to foreign travellers coming to India for medical treatment. 'E- Medical Visa' and 'E-Medical Attendant Visa' have also been introduced for 156 countries.
- Ministry of Tourism provides financial Assistance under **Market Development Assistance Scheme** to Medical Tourism Service Providers accredited by **National Accreditation Board for Hospitals & Healthcare Providers (NABH)** for participation in Medical/ Tourism Fairs, Medical Conferences, Wellness Conferences, Wellness Fairs and allied Road Shows.

Recently, the Government has prepared the **Draft National Tourism Policy** focusing on **Green, and digital tourism** and has been sent to the industry partners, state governments, other allied ministries for feedback.

Key Points of the Draft Policy

Industry Status to Tourism	•The document mentions granting of industry status to the sector to promote investment, along with formally granting infrastructure status to hotels
Relief Measures and Taxation Breaks	•The industry had sent multiple representations to the government for relief measures as well as taxation breaks.
5 Key Areas	•These would be given significant focus in the next 10 years — green tourism, digital tourism, destination management, skilling the hospitality sector and supporting tourism-related to MSMEs.
Offers Framework Conditions	•The draft policy doesn't deal with specific operational issues, but offers framework conditions to help the sector & improve the experience of tourists, foreign as well as local., especially in the wake of the pandemic

Draft Bill For New National Public Health Law

Union Ministry of **Health and Family Welfare** and other Government departments have started the process of finalising various provisions of the draft Bill for a new **National public health law**. Once the draft is ready, it will be placed in the public domain for consultation before being sent to the Union Cabinet.

Background

- In 2017, the Union Health Ministry had released the draft of Public Health (Prevention, Control and Management of Epidemics, Bio-terrorism and Disasters) Act, 2017 and, once enacted, will replace the **125-year-old Epidemic Diseases Act, 1897**.
- In September, 2020, the then Union Health Minister announced in Parliament that the Government would formulate a **National public health law**.

Expected Proposals Of The Draft Bill

4-tier health administration architecture

- With “multisectoral” national, state, district and block-level public health authorities will have “well defined” powers and functions to deal with “public health emergencies”.
- It will be headed by Union Health Ministry, and be chaired by health ministers of states. District Collectors will lead the next tier, and block units will be headed by Block Medical Officers or Medical Superintendents.
- These authorities will have powers to take measures for the prevention of non-communicable diseases and emerging infectious diseases.

Creation of Public Health Cadres

- At national and state levels

Definition of Isolation, Quarantine and Lockdown

- It defines a lockdown as “restriction with certain conditions or complete prohibition of running any form of transport” on roads or inland water.
- The definition of a lockdown covers “restrictions” on the movement or gathering of persons in any place whether public or private.
- It also includes “prohibiting or restricting” the working of factories, plants, mining or construction or offices or Educational institutions or market places.

Declaring Public Health Emergency

- Several situations in which “public health emergency” can be declared:
- Bi terrorism, appearance of a novel or previously controlled or eradicated infectious agent or biological toxin; natural disaster, chemical attack or accidental release of chemicals, nuclear attack or accident**

Legal Aid Clinic

In a move to make legal aid more accessible for women, **National Commission for Women (NCW)** in collaboration with **Delhi State Legal Services Authority (DSLISA)** has launched a **legal aid clinic** which will act as a single-window facility for resolving grievances of women by offering them free legal assistance.

- The legal aid clinic will focus on protecting women’s rights and providing them with a one-stop centre for seeking legal counseling and help.
- Under the new legal aid clinic, counseling will be provided for walk-in complainants, women in distress will be given legal assistance, advice and information on various schemes of the National Legal Services Authority (NALSA)/ DSLISA, assistance in mahila jansunwai, free legal aid, hearings in matrimonial cases and other complaints registered with the Commission
- NCW is also planning to set up similar legal services clinics in other State Commissions for Women.

Darlong community

Lok Sabha has passed the **Constitution (Scheduled Tribes) Order (Amendment) Bill, 2022**.

- It seeks to **amend** the **Constitution (Scheduled Tribes) Order, 1950** for inclusion of certain communities in the list of Scheduled Tribes in relation to the State of **Tripura**.
- It proposes "Darlong" community as a **sub-tribe of "Kuki"** in the list of Scheduled Tribes.

Kuki

- It is a word pronounced by outside people to refer to a group of tribes like **Darlong and Lusai**
- The Lusai of Tripura used to live in Jampui and Shakan Hills of North Tripura.
- They call them Mizos. They never call them Lusai as the word 'LU' means Head and 'SAI' means cutting (Head Hunter). Though once they were treated as headhunters.
- Darlong is another tribe known as Kukis.
- All together Kukis are 11,674 persons in Tripura.
- They live in hill tops and maintain their livelihood through Jhum Cultivation and producing fruits. nowadays they are also accustomed with plain land cultivation and rearing of animals.
- Kukis are fond of music and dance.
- They do not arrange any marriage alliances outside their community.
- Tradition-ally they were not Christian. They had faith in lord Shiva beside different deities and spirits. But for the last fifty years the majority of them have embraced Christianity.
- They have their own customary laws and village council. LAL is a term to denote village chief. This is the reason for which Darlong uses Lal before their name.
- Kukis are presently a small tribe in the state and socio-economically more advanced.
- The community has a high prevalence of education and cultural activities and members of the community serve in senior positions in the local administration.
- For example, a tribal musicologist and Rosem (a tribal instrument) maestro Thanga Darlong was awarded the prestigious Padma Shri a few years ago for his contributions to culture

ECONOMY

Decline in Participatory Notes

Investments in the Indian capital market through Participatory notes (P-notes) dropped to ₹87,989 crore at the end of January and experts believe that foreign investors will continue with their negative stance amid the Ukraine crisis.

Participatory Notes

- P-notes are issued by registered Foreign Portfolio Investors (FPIs) to overseas investors who wish to be a part of the Indian stock market without registering themselves directly. They, however, need to go through a due diligence process.
- Since, they are used outside India for making investments in shares listed in the Indian stock market, they are also called **Offshore Derivative Instruments (ODIs)**. Citigroup and Deutsche Bank are among the biggest issuers of these instruments.
- Thus, P-Notes are ODIs with equity shares or debt securities as underlying assets. However, more than 85% of the investment is in equities.
- FPIs registered with SEBI, buy India-based securities and then issue P-notes to foreign investors. Any dividends or capital gains collected from the underlying securities go back to the investors.
- While the FPIs have to report all such investments each quarter to SEBI, they **need not disclose the identity of the actual investors**.

Advantages

Time and cost saving

• P-notes are popular investment channels as investors do not have to go through complicated regulatory approvals thus saving them time and cost.

Anonymity

• Since the end beneficiary of P-notes is not disclosed, it enables large **hedge funds** to carry out their operations without disclosing their identity.

Tax saving

• Some of the entities route their investment through P-notes to take advantage of the tax laws of certain preferred countries.

Disadvantages

- Indian regulators are concerned about P-notes because they have no way to know who owns the underlying securities.
- It is alleged that a lot of illegal and unaccounted money made its way to the country through this route.
- There have also been reports that Indians were routing their black money by round-tripping and integrating it into the economy.

E-bill System Launched

- The Ministry of Finance recently launched the **electronic bill (e-Bill) processing system**, on the occasion of 46th Civil Accounts Day.
- The e-Bill system has been **developed by the Public Financial Management System (PFMS) Division** in the office of the Controller General of Accounts in the Department of Expenditure, Ministry of Finance.
 - ✓ PFMS is a web-based **online software application** which started during 2009 as a **Central Sector Scheme** of the Planning Commission with the objective of tracking funds released under all Plan schemes of the Government of India, and real time reporting of expenditure at all levels of *Programme implementation*.

- It has been rolled out on a pilot basis in eight ministries and will be implemented in all ministries and departments in a phased manner in 2022-23.

Need For E-bill System

- Currently, the suppliers of various goods and services to the government have to submit physical copies of their bills to the respective ministries/departments/offices of the government.
- Similarly, government employees also need to submit hard copies of their claims. At the backend too, the processing of bills is done through a mixed system of physical and digital modes.
- So, the suppliers/vendors have to visit the offices to deliver bills. Moreover, they are unable to track the status of the processing of their bills.

E-bill System

- Under e-Bill system, vendors/suppliers can upload their bills online from anywhere through digital signature.
- At the backend too, the electronic bill received will be processed digitally at every stage and finally, the payments will be credited digitally to the vendor.
- Moreover, the vendor/supplier would be able to track the status of bill processing online.

Benefits

- It will eliminate the physical interface between suppliers and government officers and stop any possible rent seeking in the clearance of dues.
- Since the bills will be processed by First-In-First-Out (FIFO) method, it will reduce discretion in processing the bills.
- It will enhance transparency, efficiency and faceless-paperless payment system, trackable in a real time basis.
- This end-to-end digitization will strengthen the Digital India ecosystem and facilitate ease of doing business.

Dollar-Rupee Swap

- RBI recently conducted a \$ 5 billion dollar-rupee swap auction as part of its liquidity management initiative, **leading to infusion of dollars and sucking out of the rupee from the financial system**. This tool is being used for the first time by RBI
- RBI sold \$ 5 billion to banks and simultaneously agreed to buy back the dollars at the end of the swap settlement period.

**Dollar–rupee
buy/sell swap**

- RBI buys US dollars (USD) from banks in exchange for Indian Rupees (INR) and immediately gets into an opposite deal with banks promising to sell dollars at a later date.

**Dollar–rupee
sell/buy swap**

- RBI sells USD in exchange for INR and promises to buy dollar from banks after some years.

- These swap operations carry *no exchange rate or other market risks* as transaction terms are set in advance.

Reasons For Conducting The Current Swap

- The RBI normally conducts the sell/buy swap when inflation threatens to rise sharply. With crude oil prices rising sharply due to the Russia-Ukraine war, inflation is expected to rise in the coming days.
- Further, foreign portfolio investors have been pulling out funds from India. They have withdrawn Rs 34,000 crore in March so far, putting severe pressure on the rupee.
- Banks that bid at the lower range of the auction are successful at the auction. Assuming a dollar rate of Rs 76, the system liquidity will shrink by Rs 39,000 crore.

Why Is RBI Resorting To It Now

- Surplus liquidity in the system is pegged at Rs 7.5 lakh crore, which needs to be curbed to keep a tab on inflation.
- Usually, central bank will resort to traditional tools such as increasing the repo rate or increasing the Cash Reserve Ratio (CRR), but this can have a negative implication on the economy. This negative implication can be seen in incomplete transmission of monetary policy.
- Therefore, the RBI used a different toolkit - Variable Rate Reverse Repo Auction (VRRR) last year. However, VRRR auctions were undersubscribed by banks, as the cash market offered instant and better yields, forcing the RBI to consider a longer-term liquidity adjustment tool (2 years tenor) such as forex auctions.
 - VRRR is a sub-type of reverse repo
 - Till December 31, 2021, RBI had planned to remove Rs 7.5 trillion of liquidity by means of 14-day VRRR auction. But in auctions, banks parked only Rs 2.67 trillion.

Impact

- Forex swaps help in liquidity management. Thus, the current move will **reduce the pressure on inflation**.
- When the central bank sells dollars, it removes an equivalent amount in rupees, thus **reducing the rupee liquidity in the system**. The current swap had removed close to Rs 39,000 crore.
- Simultaneously, dollar inflow into the market will **strengthen the rupee** which has already hit the 77 level against the US dollar.

Start-up Village Entrepreneurship Programme

- National Institute of Entrepreneurship and Small Business Development (**NIESBUD**) recently signed an MoU with the Ministry of Rural Development (MoRD).
- The MoU intends to develop a sustainable model for promoting entrepreneurship at the grass roots by initiating the Start-up Village Entrepreneurship Programme (SVEP).
- NIESBUD is an autonomous organisation under Ministry of Skill Development and Entrepreneurship (MSDE).

Significance Of The Partnership

- The partnership will provide knowledge, advisory and financial support to the public and will help create village-level community cadres for promotion of enterprises.
- Rural entrepreneurs will be able to access banking systems for receiving financial support for starting their enterprises, including support from MUDRA bank.
- It will enable rural community by helping them set up their trades and provide complete support till they are stabilised.
- Integrated ICT techniques and tools will also be provided for training and capacity building along with enterprise advisory services to enhance the entrepreneurship ecosystem in India's villages.

SVEP Assessment

- Over the years, SVEP has extended business support services and capital infusion to 153 blocks of 23 states as of August 2020.
- A mid-term review of SVEP conducted in September 2019 by Quality Council of India shows about 82% of the sampled entrepreneurs were from SC, ST and OBC categories which signifies **social inclusion** - one of the pillars of NRLM.
- 75% of the enterprises were owned and managed by women.
- Furthermore, about 57% of the total household income of the entrepreneurs is through SVEP enterprises.

SVEP

Launched in **2016**, SVEP is a sub-component of Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM) under MoRD.

It aims to support entrepreneurs in rural areas to set-up enterprises at the village-level in non-agricultural sectors, to lift rural poor out of poverty.

Partner: Entrepreneurship Development Institute of India (EDII), Ahmedabad is the technical support partner of SVEP. EDII is an autonomous and not-for-profit institute, set up in 1983. It is sponsored by apex financial institutions like the IDBI Bank Ltd., IFCI Ltd., ICICI Bank Ltd. and SBI.

It addresses 3 major pillars of rural start-ups namely - **finances, incubation and skill ecosystems**.

One of the key areas is to develop pool of **community resource persons – enterprise promotion (CRP-EP)** who are local and support entrepreneurs in setting-up rural enterprises.

Another key area is to promote the **block resource center (BRC)** in SVEP blocks, to monitor and manage the CPRs. BRC acts as the repository of enterprise related information in the concerned block.

SVEP established local markets/rural haat which motivated entrepreneurs to take up demand-based production, advertise their enterprise and increase earning opportunities.



Sambhav and Svavlamban

Ministry of MSME recently launched two special initiatives - 'Sambhav' and 'Svavlamban' to **promote entrepreneurship** amongst youth, especially in aspirational districts across the country.

Sambhav

- It is a **National Level Awareness Program (NLAP)** that will be conducted in webinar mode in 1300 colleges across the country through its field offices

Svavlamban

- More than 200 **Nukkad Natak** in 46 Aspirational Districts will be organised under a special drive called **Svavlamban** to promote entrepreneurship amongst youth and spread awareness on schemes of the Ministry.

International Intellectual Property Index

The 10th edition of International Intellectual Property Index compiled by the US Chambers of Commerce was released. The index evaluates intellectual property rights in 55 global economies, across 50 unique indicators.

Key Points From The Index

- Since the inaugural edition of the Index, the average score of economies has increased by 1.50%—from 55.72% in 2012 to 57.22% in 2022.
- The improvement was most significant in patents and international treaties categories, signaling a growing understanding of ways patents drive innovation and the value of global harmonization on IP standards.
- Out of the 53 economies included in both the ninth and tenth editions, 45 economies saw a net improvement in their scores. *UAE, Nigeria, and Peru had the largest improvements in score. United States earned the top score again in the current edition with 95.4%.*
- **Parameters:** It ranks countries based on 50 unique indicators. These indicators are divided across nine categories of protection: 1) Patents 2) copyrights 3) trademarks 4) design rights 5) trade secrets 6) commercialization of IP assets 7) enforcement 8) systemic efficiency and 9) membership and ratification of international treaties.
- Historically, many economies have struggled to provide adequate copyright protection with an increase of online piracy over the last decade. However, new tools to combat IP infringement online helped strengthen protection for IP owners.

- Enforcement against physical IP-infringing goods has failed to keep pace with the increase in the volume of international trade in counterfeits over the last 10 years.

Indian Scenario

- Overall, India is ranked **43** out of 55 countries. India's overall score has increased from 38.40% (19.20 out of 50) in the ninth edition to 38.64% (19.32 out of 50) in the 10th edition.
- In July 2021, the Parliamentary Standing Committee on Commerce released a Review of IPR regime in India.
- According to the report, innovators and creators are constantly competing to create the solutions needed to address critical global challenges, like public health, cultural development, environmental sustainability, and economic disparities.

Way Ahead

- The report shows how intellectual property is a key driver of economic prosperity as the world emerges from the pandemic.
- Weakening IP rights can reduce people's access to the latest technologies, breakthrough medicines and creative works across the world.
- Since the global score remains less than 60%, there is still significant room to improve the IP framework in global markets.
- Thus, governments across the world should devise effective IP systems to encourage innovators and creators to embrace new ideas, take risks and drive change.

UPI123Pay and DigiSaathi Launched

RBI recently launched UPI for feature phones (non-smart phones) called **UPI123Pay**. A 24x7 helpline for digital payments – **DigiSaathi**, has also been launched.

Unified Payment Interface (UPI)

- UPI is a **single-window mobile payment system** developed by the National Payments Corporation of India (NPCI). It is a system that powers *multiple bank accounts into a single mobile application*, merging several banking features, seamless fund routing & merchant payments into one hood.
- It is regulated by RBI and works by instantly transferring funds between two bank accounts on a mobile platform.
- It eliminates the need to enter bank details or other sensitive information each time a customer initiates a transaction.
- UPI is currently the biggest among the NPCI operated systems including National Automated Clearing House (NACH), Immediate Payment Service (IMPS), Aadhaar enabled Payment System (AePS), Bharat Bill Payment System (BBPS), RuPay etc.
- The top UPI apps today include PhonePe, Paytm, Google Pay, Amazon Pay and BHIM, the latter being the Government offering.

Need for UPI123Pay

- RBI had introduced UPI with the aim to lower cash-based transactions in India. However, a large section of population, especially in rural areas, lacks access to smartphones and could not transact using UPI.
- Presently there are an estimated 40 crore mobile phone users who possess feature phones. In order to solve this challenge, the RBI has launched UPI123Pay.

UPI123Pay

- UPI123Pay service is a **three-step** method to initiate and execute services for users. It doesn't need internet connection for transactions.

- The UPI service for feature phones will leverage the **RBI's regulatory Sandbox** on Retail Payments.
 - A regulatory sandbox usually refers to live testing of new products or services in a controlled/test regulatory environment for which regulators may permit certain regulatory relaxations for the limited purpose of the testing.
- Feature phone users will now be able to undertake various transactions based on **four technology alternatives**.
- They include calling an IVR (interactive voice response) number, app functionality in feature phones, missed call-based approach and also proximity sound-based payments.
- Such users can initiate payments to friends and family, pay utility bills, recharge FAST Tags, pay mobile bills and also allow users to check account balances. They will also be able to link bank accounts, set or change UPI PINs.
- It will allow customers to use feature phones for almost all transactions except scan and pay

DigiSaathi

- While digital adoption has grown significantly in India, there has also been a sharp rise in fraudulent transactions and phishing attempts.
- To address this issue, a **24x7 helpline for digital payments** has also been set up by the National Payments Corporation of India (NPCI).
- It uses AI technology (automated response) to answer questions related to digital transactions. Presently it is available in English and Hindi language

Benefits

- These initiatives will further deepen the digital ecosystem and financial inclusion in the country.



NPCI is an umbrella organisation for operating retail payments and settlement systems in India.

It is an initiative of RBI and Indian Banks' Association (IBA) under the provisions of the Payment and Settlement Systems Act, 2007, for creating a robust Payment & Settlement Infrastructure in India.

It has been incorporated as a Not-for-Profit Company with an intention to provide infrastructure to the entire banking system in India for physical as well as electronic payment and settlement systems.

SAMARTH

On the occasion of International Women's Day 2022, the Ministry of Micro, Small and Medium Enterprises (MSME) has launched a Special Entrepreneurship Promotion Drive for Women - "**SAMARTH**".

Benefits Under SAMARTH

- 20% seats in free skill development programmes, organised under skill development schemes of the Ministry, will be allocated for aspiring and existing women entrepreneurs.
- Moreover, 20% of MSME business delegations sent to domestic and international exhibitions under the schemes for marketing assistance will be dedicated to women-owned MSMEs.
- Also, to enhance the participation of women entrepreneurs in public procurement, a special discount of 20% will be offered on annual processing fee on following commercial schemes of the National Small Industries Corporation (NSIC) in 2022-23
 - Single Point Registration Scheme
 - Raw Material Assistance and Bill Discounting

- Tender Marketing
- B2B Portal msmemart.com
- Special Drive for registration of women-owned MSMEs under Udyam Registration.

Impact

- Through this initiative, more than 7500 women candidates from rural and sub-urban areas will be trained in FY 2022-23.
- Besides, thousands of women will be getting marketing opportunities to showcase their products in domestic and international exhibitions.

MSME Innovative Scheme

- Ministry of MSME recently launched MSME Innovative Scheme with the combination of existing sub-schemes around *incubation, design, and intellectual property rights (IPR)* for MSMEs.

- It is a holistic approach to unify, synergize and converge the 3 sub-components with a single purpose. However, the erstwhile three schemes of incubation, design and IPR will also continue to operate as individual programmes.

Definition of MSMEs - Old and New				
	Old Definition		New Definition	
	Manufacturing	Services	Manufacturing	Services
Micro	Investment in Plant and Machinery: Does not exceed Rs. 25 Lakh.	Investment in Equipment: Does not exceed Rs. 10 Lakh.	Investment in Plant and Machinery or Equipment and turnover: The investment in plant and machinery or equipment does not exceed Rs. 1 Crore and turnover does not exceed Rs. 5 crores.	
Small	Investment in Plant and Machinery: More than Rs. 25 lakh but does not exceed Rs. 5 crore	Investment in Equipment: More than Rs. 10 Lakh but does not exceed Rs. 2 crore	Investment in Plant and Machinery or Equipment and turnover :The investment in plant and machinery or equipment does not exceed Rs. 10 crore and turnover does not exceed Rs. 50 crore.	
Medium	Investment in Plant and Machinery: More than Rs. 5 crore but does not exceed Rs. 10 crore	Investment in Equipment: More than Rs. 2 crore but does not Rs. 5 crore.	Investment in Plant and Machinery or Equipment and turnover: The investment in plant and machinery or equipment does not exceed Rs. 50 crore and turnover does not exceed Rs. 250 crore.	

- It will act as a hub for innovation activities facilitating and guiding development of ideas into viable business proposition which benefits society directly.

- It will ensure support through guidance, financial support and technical support, to MSMEs to scale up.

- An **equity support of up to Rs 1 crore** has also been announced for commercialization of ideas, designs and patents across all three sub-schemes and to help MSMEs further scale up to raise subsequent funding.
- For this, a separate corpus will be created and managed by Small Industries Development Bank of India (SIDBI) as the fund manager.

Components

- Incubation**
- It would promote the adoption of the latest technologies among MSMEs that seek validation of their ideas at the proof-of-concept level.
 - The ideas would be incubated at eligible institutions recognised by the government to act as business incubators.
 - Financial assistance up to Rs 15 lakh per idea to host institutes and up to Rs 1 crore for relevant plant and machines for MSMEs
 - Under this component, the government also announced the launch of an MSME Idea **Hackathon** to invite ideas from MSMEs, innovators and students through host institutes.

- Design**
- The objective of this component is to bring Indian manufacturing sector and design expertise/design fraternity on to a common platform.

- It would provide mentoring and financial assistance towards solving design-related problems for new product development as well as improvement in existing products.
- Micro enterprises would have access to 75% of the total project cost while small and medium businesses would be provided with 60% financing or up to a maximum of Rs 40 lakh per project.
- Students participating in the scheme would get the assistance of 75% of the total project cost or up to a maximum of Rs 2.5 lakh.

IPR

- The objective of the scheme is to improve the IP culture in India to enhance the awareness of IPRs amongst MSMEs and to encourage creativity in Indian economy.
- It also aims to take suitable measures for the protection of ideas, technological innovation and knowledge-driven business strategies developed by MSMEs for their commercialization.
- MSMEs would be eligible to get their cost incurred on registration of patent, trademark, geographical indications (GI), and design **reimbursed**.
- The maximum assistance would be Rs 5 lakh in case of a foreign patent, Rs 1 lakh for a domestic patent, Rs 2 lakh for GI registration, Rs 15,000 for design registration, and Rs 10,000 for trademark.

Captive Employer Initiative

- A webinar promoting the ‘Captive Employer’ initiative under Deen Dayal Upadhyaya Grameen Kaushalya Yojana (DDU-GKY) was recently conducted.
- Captive Employer Initiative is a nationwide **placement-linked skill training program** under DDU-GKY, funded by the **Ministry of Rural Development (MoRD)**.
 - **Captive Employer** is any employer or industry who provides employment to candidates in their own organization or one of its subsidiaries and have suitable in-house training facilities. Placements provided by captive employers are called captive placements.
- The initiative aims to address the need for a dynamic and demand-based skilling ecosystem meeting the requirements of industry partners and assuring sustainable placements for rural poor youth.
- According to DDU-GKY Capital Employment guidelines, the training courses can be implemented as per their requirement to train the candidates with a minimum of 576 hours and a maximum of 2304 hours of skilling. For this, the funding of the DDU-GKY will be made available.
- State Skill Development Mission or State Rural Livelihood Mission which is in charge of DDU-GKY implementation in states is responsible for providing the necessary implementation support and overseeing the captive employment initiatives’ implementation.
- It assures post-training placement of candidates for a minimum of 6 months with a minimum CTC of Rs 10,000.



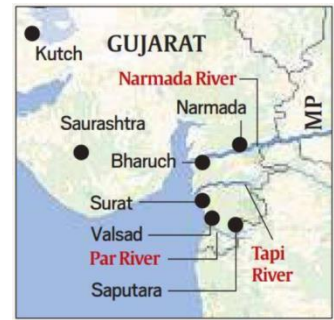
- Launched in 2014, DDU-GKY, is a nationwide placement-linked skill training program funded by the MoRD.
- The DDU-GKY scheme mandates one-third of the total candidates being trained under the scheme to be women.
- It is a part of National Rural Livelihood Mission uniquely aimed at rural poor youth between 15 and 35 years of age, to create income diversity in poor families and help rural youth realize their career aspirations. However, the upper age limit for women candidates is 45 years.
- The programme has an outcome led design with guaranteed placements for at least 70% trained candidates and is moving towards minimum mandatory certification.
- Cumulatively 11.44 lakh youth have been trained and 7.15 lakh youth have been placed till Jan, 2022 under DDU-GKY.

Par Tapi Narmada link project

Tribals in Gujarat have been protesting against the Centre's Par Tapi Narmada river-linking project.

Background

- The Par Tapi Narmada link project was envisioned under the **1980 National Perspective Plan** under the former Union Ministry of Irrigation and Central Water Commission (CWC).
- A **MoU** was signed between Gujarat, Maharashtra and the central government in 2010.
- Recently, the Union Budget 2022-23 shared that draft Detailed Project Reports (DPRs) of 5 river linking projects including the Par Tapi Narmada project have been finalised and consensus among beneficiary states is awaited.
 - The projects are Damanganga-Pinjal, Par-Tapi-Narmada, Godavari-Krishna, Krishna-Pennar and Pennar-Cauveri.
 - The Ken-Betwa is the first project under the government's National Perspective Plan for river inter-linking



Details Of The Project

- The project proposes to transfer river water from the surplus regions of the Western Ghats to the water deficit regions of Saurashtra and Kutch.
- It proposes to link three rivers:
 - ✓ **Par** originating from Nashik in Maharashtra and flowing through Valsad;
 - ✓ **Tapi** from Saputara that flows through Maharashtra and Surat in Gujarat, and
 - ✓ **Narmada** originating in Madhya Pradesh and flowing through Maharashtra and Bharuch and Narmada districts in Gujarat.
- The link mainly includes construction of seven dams, three diversion weirs, two tunnels, the **395-kilometre long canal**, six powerhouses and a number of cross-drainage works.
- The seven dams proposed in the scheme are Jheri, Mohankavchali, Paikhed, Chasmandva, Chikkar, Dabdar and Kelwan



Benefits

- The project will provide **irrigation benefits** to the enroute command and Narmada command.
- The excess water in the interlinked rivers which flow into the sea in the monsoon would be diverted to Saurashtra and Kutch for irrigation.
- During the monsoon season, the water which is supplied to Saurashtra through the state government from Sardar Sarovar dam will be saved and used for other purposes.
- The **estimated annual energy** to be generated from the power houses is around 93 Mkw.
- The total benefit from irrigation works out to Rs 56,301 lakh per year and the annual benefits from power generation are estimated to be Rs 5,523 lakhs.
- The reservoirs will also provide **flood relief** to the people residing in downstream areas.

Concerns

- Around 6065 ha of land will be submerged due to the proposed reservoirs. This will affect a total of 61 villages and around 2500 families.
- The affected families will lose their land or houses or both in the submergence. This will lead to their displacement and affect their livelihood.
- It may also alter the ecology of the rivers, consequently affecting biodiversity in and around it.
- It may also lead to federal issues related to sharing of water between the states.

Russia Cut off From SWIFT

The US and European Union recently decided to cut off a number of Russian banks from the main international payment gateway, SWIFT. The intention of the move is to isolate Russia from the international financial system.



SWIFT

- SWIFT stands for the **Society for Worldwide Interbank Financial Telecommunication**. It is a secure platform for financial institutions to exchange information about global monetary transactions.
- It was founded in **1973** to end reliance on the telex system, an international system used especially in the past for sending written messages. It was discontinued due to a range of issues such as low speed, security concerns, and a free message format
- While SWIFT does not actually hold or move money, it operates as a middleman to verify information of transactions by providing secure financial messaging services to more than 11,000 banks in over 200 countries.
- Each participant on the platform is assigned a unique eight-digit SWIFT code or a bank identification code (BIC).
- SWIFT delivers an average of 40 million messages a day that includes orders and confirmations for payments, trades and currency exchanges.
- Based in Belgium, it is overseen by the central banks from eleven industrial countries: Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom, the United States and Belgium.
- India's financial system has access to the SWIFT

Is SWIFT Bound By Sanctions?

- SWIFT describes itself as politically neutral and has resisted calls to remove countries from the network.
- However, SWIFT, which is **incorporated under Belgian law**, is bound by Belgian and E.U. rules, which would include economic sanctions.
- Although the network is technically independent, the United States enjoys effective sanction powers, as over 40% of payment flows are in U.S. dollars.
- In the past, US banned countries from SWIFT, including as recently as 2018, when Iranian banks were banned after the U.S. withdrew from the Iran nuclear deal.

Impact Of Ban On Russia

- Cutting off a country from SWIFT in the financial world is equivalent to restricting Internet access of a nation.
- It would cause a major disruption to Russia's economy as it would severely restrict the country's access to global financial markets.
- The ban would make it difficult for Russian firms and individuals to pay for imported goods or receive payments for their exports, dealing a major blow to the country's crucial oil and gas sector. It would also restrict Russians' ability to invest or borrow overseas.

- Russian financial institutions could use other channels such as phones, messaging apps or email as alternatives and process payments via banks in countries that have not imposed sanctions.
 - ✓ Russia has worked on alternatives, including the **SPFS (System for Transfer of Financial Messages)** — an equivalent of the SWIFT financial transfer system developed by the Central Bank of Russia.
 - ✓ Russia is reported to be collaborating with the Chinese on a possible venture which will be a potential challenger to SWIFT.
 - ✓ There are plans to integrate it with China's Cross-border Inter-bank Payments System (CIPS).
 - ✓ Cryptocurrencies are another avenue for cross border remittances. Russia has also been working on a '**digital' rouble**, which is still not launched
- But these alternatives would not be as efficient and secure as SWIFT and could lead to higher costs and a fall in transaction volumes.

How Will The Sanctions Impact India?

- Following the collapse of the Soviet Union in 1991, India had entered into a rupee-rouble trade arrangement with Russia to ensure that defence and other imports could continue.
- In 2018, a pilot project was run where Indian importers paid in roubles for diamond imports.
- These payments were made to the Indian branch of Russia's Sberbank. SBI and Canara Bank have a joint venture (The Commercial Indo Bank), which might be able to help Indians there.

Market Infrastructure Institution (MII)

In a recent order, SEBI (Securities and Exchange Board of India) noted that the **National Stock Exchange** is a systemically important Market Infrastructure Institution (MII).

MII's

- **Stock exchanges, depositories and clearing houses** are all Market Infrastructure Institutions and constitute a key part of the nation's vital economic infrastructure.
- The primary purpose of securities /capital market is to enable allocation/reallocation of capital/financial resources. It helps optimal use of money in the economy and stimulates economic development.
- According to a panel set up in 2010, under the chairmanship of former Governor Bimal Jalan:
 - The term 'infrastructure' would mean the basic, underlying framework or features of a system; and
 - The term '**market infrastructure**' denotes such fundamental facilities and systems serving this market.
- Well-functioning MIIs, constitute the nucleus of the capital allocation system, are essential for economic growth and have a net positive effect on society like any other infrastructure institution.

Systemic Importance of MIIs

- MIIs are systemically important in India, due to the significant growth of these institutions in terms of market capitalisation of listed companies, capital raised and the number of investor accounts with brokers and depositories and the value of assets held in the depositories' account.
- Moreover, unlike typical financial institutions, the number of stock exchanges, depositories and clearing corporations in an economy is limited due to the nature of its business, although they serve the entire marketplace.
- Any failure of such an MII could lead to even bigger collapse that may result in an overall economic downfall that could potentially extend beyond the boundaries of the securities market and the country.
- Therefore, governance and oversight are absolutely critical and need to be of the highest standards.

Specific Institutions In India That Qualify As MIIs

- Among stock exchanges, the SEBI lists seven, including **the BSE, the NSE, the Multi Commodity Exchange of India and the Metropolitan Stock Exchange of India**.

- There are **two depositories** — charged with the safekeeping of securities and enabling their trading and transfer — that are tagged MIIs: the **Central Depository Services Ltd. (CDSL)** and the **National Securities Depository Ltd (NSDL)**.
- The regulator also lists **seven clearing houses** including the **Multi Commodity Exchange Clearing Corporation**. Clearing houses, help validate and finalise securities trades and ensure that both buyers and sellers honour their obligations.

Reserve Bank Innovation Hub (RBIH)

RBI has launched the **Reserve Bank Innovation Hub (RBIH)** in Bengaluru which is intended to encourage & nurture financial innovation *in a sustainable manner through an institutional set-up*.

- RBIH is set up under Companies Act 2013, as a wholly owned subsidiary of RBI with an initial capital contribution of **₹100 crore**. The Hub has an independent board and members from industry and academia.
- This initiative puts RBI in an exclusive group of select global central banks that are enterprising enough to change the mode of engagement while dealing with innovation.

Details

- RBIH aims to create an ecosystem that focusses on promoting access to financial services and products for the low-income population in the country.
- This will help to bring world-class innovation to the financial sector in India, coupled with the underlying theme of **financial inclusion**.
- The Hub would bring convergence among stakeholders - Banking, financial services and insurance (BFSI) Sector, Start-up ecosystem, Regulators & Academia - in the financial innovation space.
- It is an investment for future, as it is expected to build an ecosystem for development of prototypes, patents and proofs of concept and promote cross-thinking, across regulatory domains and national boundaries.
- It has plans to identify and mentor start-ups having maximum potential. It will also collaborate with various government Ministries, Departments and academia to identify problem statements in different domains and explore potential solutions.
- RBI Innovation hub hosted **Swanari TechSprint** to create sustainable solutions for women-owned enterprises. TechSprint is aimed at advancing digital financial inclusion for women in India.

Building Digital Skills Report

- Amazon Web Services Inc (AWS), an Amazon.com company, released findings from a new research report titled, '**Building Digital Skills for the changing workforce**'.
- The report is based on a survey of organizations and workers in both technology and non-technology roles, across Australia, India, Japan, New Zealand, Singapore and South Korea.
- **Digital skills** are defined as skills needed to use digital devices, communication applications, and networks to access and manage information, from basic online searching and emailing to specialist programming and development.

Key Findings

- The seven countries will need to train an estimated **86 million** more workers over the next year in digital skills to keep pace with technological advancements – equivalent to 14% of their current total workforce.
- Over the next year, the number of Indian workers requiring digital skills for their jobs is projected to increase by 27.3 million, representing 7% of India's workforce.

- The ability to use cloud-based tools as well as online collaboration, accounting, and customer relationship management (CRM) software would be the most in-demand skill required by the employers by 2025, followed by technical support skills and cybersecurity skills.
- It also highlights the need for more advanced cloud computing skills, including machine learning and cloud architecture design.
- These skills are expected to be in high demand in businesses from healthcare to agriculture, fintech to media and entertainment.
- 95% of workers in India reported that they need more digital skills to cope with changes in their jobs due to the pandemic.
- About 63% of the workers felt they would require training in cloud-related skills by 2025 to progress in their careers.
- Despite this, only 45% of employers in India have a training plan in place, which could affect their competitiveness in areas of productivity, innovation, and employee retention.

Impediments to Digital Skilling

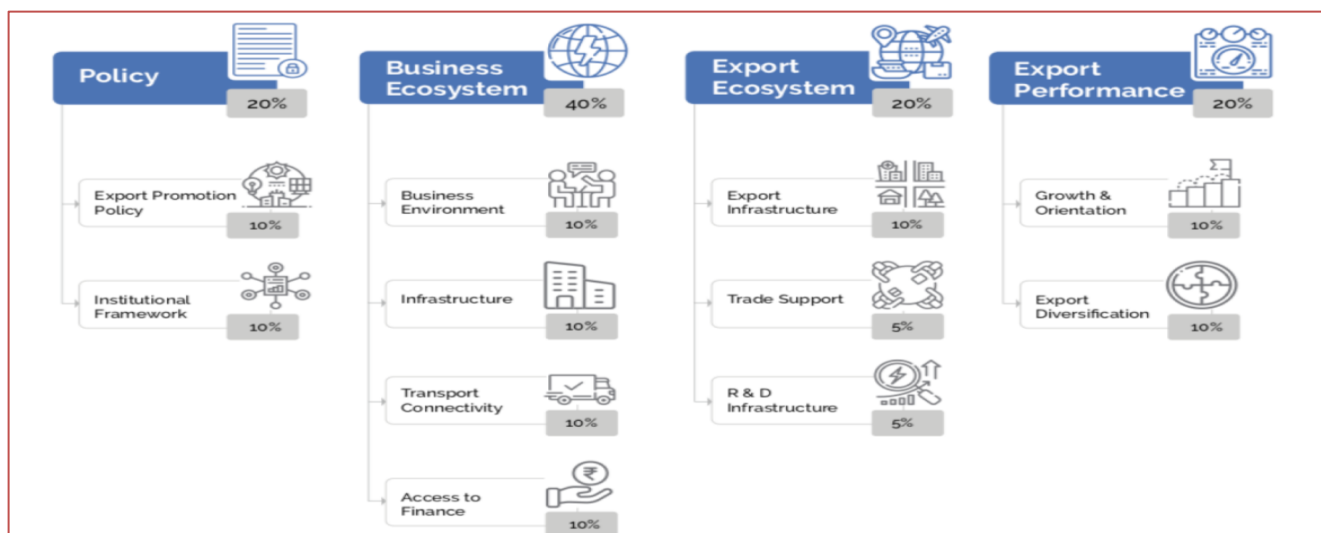
- The report found that lack of time to pursue training was the most commonly faced barrier to digital skilling, with 77% of workers in India citing this.
- To address this barrier, workers can take courses in modular, micro-skills that are available on-demand, such as the Nasscom Future Skills initiative.
- Other impediments include limited awareness of training options, low training quality and high training costs.

Way Ahead

- Transitioning into a digital-first economy will help countries' recovery from COVID-19 and secure a stronger economic future.
- To thrive in a digital future, new formats of skilling programmes on emerging technologies must be built and delivered at a massive scale
- Thus, there is an urgent need for the governments to work together with employers, training providers, and workers to meet these diverse and growing digital learning needs.

Export Preparedness Index 2021

- NITI Aayog, in partnership with the Institute of Competitiveness, recently released the **Export Preparedness Index (EPI) 2021**.
- **Aim:** To assess the readiness of the states, in terms of their export potential and their performance.
- Its primary goal is to generate competition among all Indian states ('Coastal', 'Landlocked', 'Himalayan', and 'UTs/City-States')
- It can be used by states and UTs to benchmark their performance against their peers and analyse potential challenges to promote export-led growth at the subnational level.
- It intends to bring about favourable export-promotion policies, create the necessary infrastructure for exports, and assist in identifying strategic recommendations for improving export competitiveness.
- It ranks states on **four key pillars – Policy, Business Ecosystem, Export Ecosystem and Export Performance** and **11 sub-pillars**



Key Findings

- In India, export is an inalienable component of India's economic growth as exports have been contributing roughly 20% on average to the GDP of India for the past decade.
- Despite the challenges associated with the pandemic, India has shown great resilience in exports.
- India has been showing positive statistics in exports since the beginning of FY 2021-22 and in December 2021 India achieved the highest ever export of 37 billion USD a 37% jump over December 2020.

Rankings

- **Gujarat**, for the second consecutive year, has topped the EPI, followed by Maharashtra, Karnataka, Tamil Nadu and Haryana in the top five. Most of the coastal states are top performers.
- UTs and states like Lakshadweep, Arunachal Pradesh, Mizoram, Ladakh and Meghalaya were placed at the bottom.

Challenges

- EPI 2021 brings out three major challenges to India's export promotion. These are:



Way Ahead

- Though states like Gujarat and Maharashtra are performing greatly, there is a need to push exports from regions like Bihar and Uttar Pradesh.
- The EXIM (export-import) policy of the country should cater to different categories of states and bring them at par with other states. Furthermore, all the states should have **district export plans and promotion committees** to boost exports.
- The government should work towards creating an enabling framework, establishing the required institutions, removing bottlenecks, and incentivizing exports.
- There is also a need to facilitate strong industry-academia-government linkages to build trade-support networks, along with a strong focus on designs and standards for local products.

Changes in Bhakra Beas Management Rules

Union Ministry of Power has made an amendment to the **Bhakra Beas Management Rules, 1974** that govern the appointment of **Member (Power) and Member (Irrigation)** on **Bhakra Beas Management Board (BBMB)** from **Punjab and Haryana**, respectively. Therefore, the amendment has **done away with the specification** that the above mentioned two appointments need to be filled from the two states only.

Bhakra Beas Management Board (BBMB)

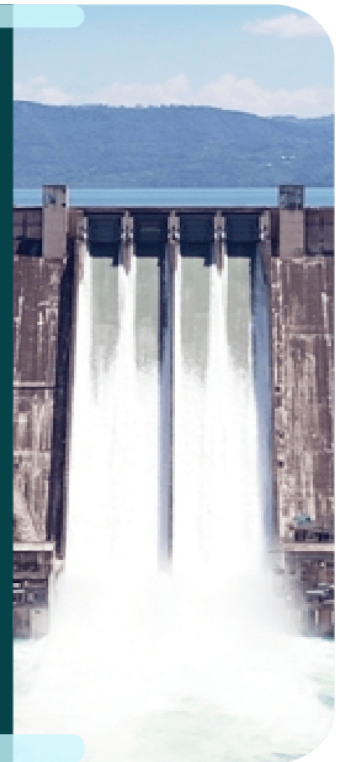
- As per the **Indus Waters Treaty of 1960**, the waters of Ravi, Beas and Sutlej are allocated to India and are available to be utilized for irrigation purposes within the country. Bhakra Dehar and Beas power projects were constructed on the river of Satluj and Beas. The genesis of BBMB lies in this treaty.
- **Bhakra Management Board (BMB)** was constituted under **section 79 of Punjab reorganization act 1966** after Bi-furcation of erstwhile state of Punjab into Punjab and Haryana. Thus, it is a statutory body.
 - It is administering, maintaining and operating Bhakra Nangal project since **1967**.
- On completion of Beas project works, they were transferred to BMB and in 1976 BMB was renamed as BBMB.
- BBMB functions according to **Bhakra Beas Management Rules, 1974**.
- BBMB Management: It includes a chairperson and two whole time members who are from the partner states of Punjab and Haryana. They are designated as Member (Power) and Member (Irrigation) from Punjab and Haryana, respectively.
 - ✓ There is representation from each member state including Rajasthan and Himachal Pradesh as nominated by the respective state governments.

Bhakra Dam

- It is built on Sutlej River.
- It is Asia's second tallest dam with a height of around 207.26 meters after the Tehri dam, which has a height of around 261 meters.
- The Gobind Sagar reservoir of the dam has a capacity to store water up to 9.34 billion cubic meters. It is one of the earliest river valley development schemes undertaken post-independence.
- The project was signed by then Punjab Revenue Minister Sir Chhotu Ram in November 1944 with the king of Bilaspur and was finalized in January, 1945.
- The chief Architect of the project was Rai Bahadur Kunwar Sen Gupta.
- The dam was completed in 1963, and it was dedicated to the nation by Prime Minister Jawaharlal Nehru. He famously said it the 'Temple of modern India'.
- Nangal dam is another dam downstream of Bhakra dam. Sometimes both the dams together are called Bhakra-Nangal dam though they are two separate dams

Beas Project

- The Beas-Satluj link scheme consists of a 76.2 m high rockfill diversion dam at Pondoh on Beas River in Mandi district (HP).
- Pong is a multipurpose earth & rockfill dam on Beas River. It is located in the Himalayan foot-hills downstream of Pandoh dam. BBMB commissioned the project in 1978-83.



Change In Bhakra Beas Management Rules, 1974

- It specifies technical qualification for the appointments. It also paved the way for appointment of the experts as member of BBMB from all over India.

- **Rationale for the change:** In pursuance to a judgement of the Punjab and Haryana High Court in the case of **Jagmohan Singh Vs Union of India**.

Opposition To The Change

- By engineer's fraternity as they find that the laid down criteria for the members are unrealistic and impractical. The engineers have pointed out that hardly any engineer would qualify for appointment as per the new specifications, which appear to be tailor-made for some personnel to be appointed from outside Punjab and Haryana.
- By political parties in Punjab and Haryana as they consider it against federal principles.

There is a need to honor the spirit of Punjab reorganization Act, precedents and prevailing practices while making a decision on BBMB. The rights of all riparian states should be respected in equitable and sustainable manner. The spirit of cooperative federalism is needed for efficient and professional functioning of BBMB.

Extra Mile

The 117th Meeting of Permanent Indus Commission (PIC) between India and Pakistan was held.

Highlights of The Meeting

- Both sides discussed the exchange of hydrological and flood data during which Indian side underscored that all its projects are fully compliant with the provisions of Indus Waters Treaty.
- The issue of **Fazilka drain** was also discussed and Pakistan assured that all necessary action will continue to be taken to ensure the free flow of Fazilka drain into the river Sutlej.
 - ✓ Fazilka drain is one of 22 drains and water bodies, where untreated water of Malwa district (Punjab, India) is discharged.
 - ✓ The drain is closed at the borderline of countries, leading to stagnation in the shape of ponds and deterioration of quality of groundwater in the border area.
- Technical discussions were held regarding ongoing projects **Pakal Dul, Kiru and Lower Kalnai**.
 - ✓ Pakal Dul Hydro Electric Project (1000 MW) is proposed on river Marusudar, a tributary of Chenab river in the UT of Jammu & Kashmir.
 - ✓ Kiru Hydro Electric Project (624 MW) is proposed on River Chenab, located in Kishtwar district of Jammu & Kashmir.
 - ✓ Lower Kalnai project is a hydroelectric power project in the Doda and Kishtwar districts of Jammu and Kashmir.

{For more details on "India to Use Excess Water Under Indus Treaty" refer The Recitals - July 2021}

Representative of Rajya Sabha From UT of Chandigarh

Chandigarh Municipal Corporation has approved the proposal that its councilor should be allowed to send a representative to Rajya Sabha by amending the **Article 80 of the Constitution**.

- An amendment has also been sought to Fourth Schedule of the Constitution with 'Entry 32' - Chandigarh.
 - The fourth Schedule contains provisions as to the allocation of seats in the Council of States.
 - It contains the number of seats represented in Council of states from each State and Union Territory.
- Chandigarh is a Union Territory (UT) without any legislative assembly. Chandigarh has a seat of Member of Parliament (MP) in the lower house (Lok Sabha) and the residents of the UT elect an MP every five years through direct voting.

UTs And Its Representation In Rajya Sabha

- UT's of Puducherry, Jammu and Kashmir and Delhi have representation in the Rajya Sabha. These are UTs with legislative assembly.

- Ladakh, Chandigarh, Dadra & Nagar Haveli, Daman and Diu, Andaman and Nicobar Islands and Lakshadweep are unrepresented.

The Demand

- **Article 80** of the Constitution of India deals with the composition of the Rajya Sabha.
- The demand in the bill (Private Member Bill) sought adding of a provision “provided that the ‘representative of the Union Territory of Chandigarh in the council of states shall be elected by an electoral college consisting of **elected members of Municipal Corporation** of Chandigarh constituted under the Punjab Municipal Corporation (Extension to Chandigarh) Act, 1994” in Article 80 of the Constitution in **clause (5)**.

Concerns

- As per the legal opinion, ***elected Municipal Corporation Councillors do not form the Electoral College*** for selecting a member for Rajya Sabha because it is beyond the powers of Municipal Corporation which is a civic body.
- Between 1966 and 1990, MPs for Rajya Sabha in Delhi were selected by the members of the **Metropolitan Council** of Delhi.
 - ✓ There is a difference between the Metropolitan Council and Municipal Corporation.
 - ✓ There is also a distinction between electoral-college of legislatures & electoral-college of MC councillors.
- As the civic body house gave its assent to the amendment, UT Administration will send it to the Ministry of Home Affairs for further consideration. It will then be forwarded to the Parliament.

The amendment, if approved, will enhance the powers of elected councilors in the absence of legislative assembly in UT as they represent the people of Chandigarh in the true sense.

The Private Member Bill is a bill introduced by a Member of Parliament (MP), who is not a minister.

Lokpal And Challenges In Functioning

Lokpal is yet to get a director of inquiry. CVC (Central Vigilance Commission), in an answer to a RTI query, has revealed that though Director of Inquiry has not been appointed by Government of India, cases are being received in the commission for conducting preliminary inquiries.

{For details on The Lokpal and Lokayuktas Act, 2013 refer February 2022 recitals}. Few additional pointers are mentioned below -

Power & Jurisdiction of Lokpal

- Its jurisdiction includes Prime Minister (with some exceptions), Ministers, MPs, Group A, B, C and D officers and officers of central government.
- It has powers to superintendent and give direction to Central Bureau of Investigation. If it has referred a case to the CBI, the investigating officer in such a case cannot be transferred without approval of Lokpal.
- Powers to authorize CBI for search and seizure operations connected to such cases.
- Lokpal has powers of confiscation of assets, proceeds, receipts and benefits arisen or procured by means of corruption in special circumstances
- It has power to recommend transfer or suspension of public servants connected with allegations of corruption.
- Lokpal has power to give directions to prevent destruction of records during preliminary inquiry

Director of Inquiry

- According to section 10(2) of Lokpal Act – “There shall be a **Director of Inquiry** and a **Director of Prosecution** not below the rank of Joint Secretary to the Government of India or equivalent, who shall be appointed by the Chairperson from a panel of names sent by the Central Government”.

- As per provisions contained under Section 20 (1) (b) of Lokpal and Lokayuktas Act, 2013, complaints in respect of public servants belonging to groups A, B, C or D are referred by the Lokpal to CVC for a preliminary inquiry.
- The director of inquiry shall conduct preliminary inquiry into graft complaints referred to CVC.
- The Inquiry wing of the Lokpal has been vested with powers of a civil court.

Concerns Within The Lokpal

- Lokpal is not free from political influence as the **appointing committee** itself consists of members from political parties. The appointment of Lokpal can be manipulated in a way as there is no criterion to decide who is an 'eminent jurist' or 'a person of integrity'.
- The biggest lacunae is the exclusion of the judiciary from the ambit of the Lokpal.
- Lokpal is not given any constitutional backing & there is no adequate provision for appeal against the Lokpal.
- The complaint against corruption cannot be registered after a period of 7 years from the date on which the offence mentioned in such a complaint is alleged to have been committed.
- 110 complaints were received by the Lokpal during 2020-21 which was a decline of over 92% from 1,427 complaints received in 2019-20.
- **Lack of workforce** in Lokpal that inhibits the functioning of Lokpal. At present, there is vacancy of two judicial members.
- **Lack of political will** has been responsible for vacancies at the top level in Lokpal such as members and directors.
- Lokpal act does not provide complete **protection to whistleblowers**. The provision of counter, in case of accused found innocent discourages people from making complaints.
- India's ranking is 85 out of 180 countries in the corruption perception index of Transparency international (TI) in 2022.

Way Forward

- There should be functional autonomy and availability of manpower to the institution of Lokpal. The political will is needed to ensure this.
- There should be multiple and decentralized accountability framework to address the issue of graft and corruption to avoid the concentration of power in one authority.

Lokpal is an important institution to deal with the corruption and mal administration. Its effective functioning will not only safeguard the erosion of very foundation of nation and constitutional commitment of the state to its people but will also strengthen the faith of citizens in the government.

Democracy Report 2022

India ranked **93 in Liberal Democratic Index (LDI)** out of 179 countries. It is an annual report published by **V-Dem Institute** at Sweden's University of Gothenburg. The report is titled as Democracy Report 2022: Autocratisation Changing Nature?

Key Points Of The Report

- The level of democracy enjoyed by the average global citizen in 2021 is down to 1989 levels.
- The report classified countries into **four regime** types based on their score in the liberal Democratic Index.



- India is on the top ten autocratiser in the world and is classified as **electoral autocracy**

- **Sweden** has topped the LDI index, other Scandinavian countries such as Denmark and Norway, along with Costa Rica and New Zealand are on top five in liberal democracy.
- Autocratisation is spreading rapidly, with a record of 33 countries autocratising.
- Signalling a sharp break from an average of 1.2 coups per year, 2021 saw a record 6 coups, resulting in 4 new autocracies: Chad, Guinea, Mali and Myanmar.
- The number of liberal democracies shrunk to 34 from 42 in 2012.
- Closed autocracies or dictatorship has rose from 25 to 30 in 2021.
- Repression of civil society organisations worsened in 44 countries over past ten years.

Reason For Changing Nature Of Autocratisation

- The largest driver of Autocratisation is toxic **polarisation**, a dominant trend in **40 countries** as opposed to **5 countries** in **2011**.
- Misinformation as key tool used by autocratising government to sharpen polarisation.
- Repression of civil society and censorship of media.
- Decisive autonomy for the electoral management body (EMB) deteriorated in 25 countries.

Decay of democracy is one of major setback for our country. It is important for government to ensure that every citizen enjoys rights entitled in Constitution of India.

Guardianship of Minors

A Public Interest Litigation (PIL) in Madras High Court sought that all documents must also require mother's name to be mentioned along with father.

Background

- 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 father's.
 - ✓ Applicants can also choose whether they want their father's name or mother's name on PAN card.
- But school certificates and lot of other documents insists father's name as guardian.

Concerns Regarding Guardianship In India

- It is problematic and hurdle for single parent or more specifically for single mothers.
- Mothers are considered as caregiver but not decision maker in traditional setup. This is simply against Article 14 of Indian constitution.

Judicial Precedents

Supreme Court's landmark judgement in **Githa Hari haran v The Reserve Bank of India in 1999** challenged Hindu Minority Guardianship act for violating right to equality of sexes under Article 14 of the constitution.

- Under the **Hindu Minority and Guardianship Act, (HMGA) 1956**, the natural guardian of a Hindu minor in respect of the minor's person or property "is the father, and **after** him, the mother. Provided the custody of a minor who has not completed the age of five years shall ordinarily be with the mother."

- 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 judgement failed to recognise both parents as equal guardians, subordinating a mother’s role to that of the father.
- The judgement sets a precedent for courts but it has not led to an amendment to HMGA. Though courts may tend to grant custody of a child following marital dispute to the mother, guardianship rests primarily with the father in the law and this contradiction highlights that mothers are perceived as caregivers, but not as decision makers for children.

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 the father is the natural guardian, but custody vests with the mother until the son reaches the age of 7 and the daughter reaches puberty though the father’s right to general supervision and control exists.

Law Commission of India in its **257th report on Reforms in Guardianship and Custody Laws in India** in May 2015 said that the superiority of one parent over the other should be removed. It also emphasised for amendment of Hindu Minority and Guardianship Act. With changing structure of society it is important that various Govt department must amend their rules to ensure equality to every citizen with regard to guardianship of minor.

Reorganization Of A Party As National Or State Party

- Aam Aadmi party has recently won the assembly election of Punjab. AAP is the only regional party to be in power in two states/UTs. There is emerging question of the party being considered as national party.
- The classifications of political parties are mentioned in **section 6 of the Election Symbols (Reservation and allotment) order, 1968** of election commission of India. This order was brought in exercise of power conferred to ECI by **Article 324** of Indian Constitution and **Section 29A of RPA 1951**.

Types Of Political Parties



Can AAP Claim To Be A National Party?

Not yet. For a party to be recognised as a ‘national party’ it needs to meet one of the three criteria – and the AAP doesn’t meet any of those.

National Party Status For a party to be recognised as national party, it needs to fulfil one of the three criteria mentioned below

It needs to win at least 2% of total seats (11 seats) in Lok Sabha from at least 3 different states .	Get at least 6% of vote share in four states in addition to 4 Lok Sabha seats .	Be recognised as a state party in 4 or more states .
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State Party Status For a party to be recognised as state party, it needs to fulfil one of the following criteria mentioned below

It needs to get at least 6% of vote share in addition of 2 seats in last assembly election of that state.	It needs to get 6% of vote share in addition to 1 seat in the last Lok Sabha from that state.	It needs to get 3% of the total assembly seats or 3 seats , whichever is higher.
It needs to win one of every 25 Lok Sabha seats (or an equivalent fraction of seats) from that state.	It needs to get 8% of state-wide vote share either in last Lok Sabha or in last assembly polls.	

Perks Of Being A National Party	Perks Of Being A State Party
<ul style="list-style-type: none"> • Reserved election symbol across the India. • Gets land/buildings for party offices. • They can have 40-star campaigners during election campaign. • Free air time on Door-Darshan and All India radio. Free of cost supply of electoral rolls. 	<ul style="list-style-type: none"> • Reserved election symbol across that state. • Gets subsidies land/buildings for party offices. • They can have 20-star campaigners during election campaign. • Free air time on Doordarshan and All India radio. Free of cost supply of electoral rolls.

{For more details on Election Expenditure & Deregistration Of Parties refer January 2022 Recitals}

Fundamental Rights To Foreigner

Government of India appealed to Supreme Court to help lay down a law with a long lasting implication for the country on the subject of Foreigner's Right to approach local courts for relief after violating their visa condition.

Requirement of Law

- There is no remedy for visa violation as it is sovereign function. **Article 19** of Indian constitution is not applicable to foreigners and in case of visa violation, foreigners cannot go to Court.
- India relies on **Registration of Foreigners Act, 1939, and the Foreigners Act, 1946** to govern the entry, stay and exit of foreigners in India. The majority of these laws are archaic in nature and do not stand the test of principles of natural justice. Moreover, these laws grants the central government unfettered and arbitrary powers.
- **Section 3, subsection 2, clause (e)** of the Foreigner's Act (1946), contains a list of **nine orders** embodying government regulations from imposing restriction on movement, prohibiting from association with persons of a prescribed/specified description to requiring foreigners to reside in a particular place. (**Article 19-FR not available to Foreigners**)
 - There also provisions of, Powers of house arrest, detention, solitary confinement and summary removal from India under these Acts, which clearly infringe upon the fundamental rights of life and personal liberty guaranteed (**Article 21-FR available to foreigners**)
- The Passport (Entry into India) Act, 1920 and the Foreigners Act, 1946 Acts permit the removal or the deportation of a person from India without providing any forum or procedure for the determination of the question of the nationality of the foreigner or giving any statutory rights in this process. This is a violation of the principle of natural justice
- Under Indian Law, all persons who are not citizens have deemed foreigners including refugees, international migrants, tourists, etc. Currently, Section 2 of The Foreigners Act (1946) and the Registration of Foreigners Act (1939) provides the definition of "foreigner". But this definition has proven to be insufficient in distinguishing between various non-citizens such as refugees or even illegal immigrants.

Fundamental Rights Available Only To Citizens And Not To The Foreigners

- ✓ **Article 15:** Prohibition of discrimination on grounds of religion, race, caste, sex or place of birth.
- ✓ **Article 16:** Equality of opportunity in matters of public employment.
- ✓ **Article 19:** Protection of six rights regarding freedom of (speech and expression, (ii) assembly (iii) association, (iv) movement (v) residence and profession
- ✓ **Article 29:** Protection of language, script and culture of minorities
- ✓ **Article 30:** Right of minorities to establish and administer educational institutions.

The law with regard to violation of visa regulations should be just, fair and reasonable. The law and process should be in line with constitutional spirit to protect fundamental human rights under article 21 as well as civilizational value of Vasudevakutumbakam.

Sealed Cover Jurisprudence

Chief Justice of India while hearing a criminal appeal against Bihar Government said that the Court will not accept sealed cover file reports submitted by Government and its agencies.

Background

Sealed cover jurisprudence has been frequently employed by court in the recent past. For example Rafale Fighter Jet Deal 2018, Bhima Koregaon case 2018, BCCI Reforms Case 2014 etc.

Sealed Cover Jurisprudence

- It is practice used by SC and lower courts of accepting information from government entities in sealed envelopes that only judges can access.
- SC draws its authority to apply it from **Rule 7 of Order xiii** of the SC Rules and **section 123 of the Indian Evidence Act of 1872**.

Issues With Sealed Cover Jurisprudence

- It is not encouraging to the principles of **transparency & accountability** of Indian justice system.
- **Right to know:** It creates obstruction to fair trial and adjudication. In the process of adjudication, especially one that involves Fundamental rights, evidence must be shared with both parties to the dispute.
- Makes the practice **ad-hoc and arbitrary:** Sealed cover is dependent on individual judges looking to substantiate a point in particular case rather than common practice.
- **Reduce the Scope of Reasoning:** judges are supposed to lay down reasoning for their decisions, but this cannot be done when they are based upon information submitted confidentially.
- **Sufficient protection available:** What is further contested is whether the state should be granted such a privilege to submit information in secrecy, when existing provisions like in-camera hearings already provide sufficient protection to sensitive information.

Reasons for Sealed Covers

- ✓ Matter pertained to Official Secrets Act.
- ✓ To maintain public confidence in the Government agency.
- ✓ Delicate international negotiations or those relate to sensitive aspects of security,
- ✓ Details about survivors of sexual assaults or child abuse which may affect their future life and bring unnecessary shame affecting the Right to Live with Dignity.
- ✓ Disclosure sometimes affects the ongoing investigation.

Supreme Court Outlook on Sealed Cover Jurisprudence

- In 2019 judgement in the case of **P. Gopalakrishnan vs The State of Kerala**, the SC has said that disclosure of documents to the accused is constitutionally mandated, even if the investigation is ongoing and documents may lead to a breakthrough in the investigation.
- In the **INX Media case 2019**, the SC had criticised Delhi High Court for basing its decision to deny bail to the former union minister on documents submitted by the Enforcement Directorate (ED) in a sealed cover.
- In **Modern Dental College vs State of Madhya Pradesh (2016)**, the apex court adopted the proportionality test proposed by former Chief Justice, Supreme Court of Israel, "a limitation of a constitutional right will be constitutionally permissible if:
 - ✓ It is designated for a proper purpose.
 - ✓ The measures undertaken to effectuate such a limitation are rationally connected to the fulfilment of that purpose.
 - ✓ There are no alternative measures that may similarly achieve that same purpose with a lesser degree of limitation.
 - ✓ There needs to be a proper relation (balancing) between the importance of achieving the proper purpose & the social importance of preventing the limitation on constitutional right

It is important to balance between achieving the proper purpose and preventing the limitation on the constitutional right while dealing with sealed cover jurisdiction.

Rule 7 of Order XIII of the Supreme Court Rules

If the chief Justice or court directs certain information to be kept under seal cover, no party would be allowed access to the content of such information, except if the chief justice himself allowed accessing it. Information can be kept confidential if its publication is not considered to be in the interest of the public.

Section 123 of Indian Evidence Act of 1872

Official unpublished documents relating to state affair are protected and a public officer cannot be compelled to disclose such documents.

- Other instances where information may be sought in secrecy or confidence are when its publication impedes an ongoing investigation, such as details which are part of a police case diary.

NPPA And Its Role

The pharmaceutical companies are seeking a **10% increase** in price for schedule drugs listed under **National List of Essential Medicine (NLEM)**. The consumers may have to pay more for medicines and medical devices if NPPA allows a price hike of over 10% in the drugs and devices listed.

Pricing Mechanism in India

- **Scheduled Drugs or Drugs listed under NLEM** are under price regulation. According to the **Drugs (Prices) Control Order 2013**, scheduled drugs (about 15% of pharma market) are allowed an increase in price by the government as per **WPI (Wholesale Price Index)**. The annual change is controlled and rarely crosses 5%. The ceiling price is fixed or revised by the NPPA as notified in the gazette of India from time to time.
- Non-schedule Drugs are about 85% of pharma markets and allowed an automatic increase of 10% annually.

National Pharmaceutical Pricing Authority (NPPA)

- It was setup in **1997** to fix or revise the prices of controlled bulk drugs and formulations.
- It also enforces price and availability of medicines in the country under the **Drugs (Prices) Control order, 1995-2013**.
- It monitors the availability of drugs, identify shortages and take remedial measures.
- It is also mandated to collect and maintain data on production, export, import, market share of individual companies etc. for bulk drugs and formulations.
- It also undertakes or sponsor relevant studies with regard to pricing of drugs and devices.

Considerations For Fixing Or Revising The Prices For Scheduled Drugs	Reasons For The Demand By Pharma Companies
<ul style="list-style-type: none">• Rise in price of bulk drugs and other raw materials• Rise in transportation cost• Rise in freight rates• Rise in price of utilities such as fuel price• Changes in taxes and duties• Change in exchange rates• WPI	<ul style="list-style-type: none">• Rise in Input Costs• Import dependency on china especially for bulk drugs (60-70 %)• WPI basket is not directly linked with items that go into the cost of medicine.• Simple average method of calculating ceiling price is unrealistic (It should be replaced with Cost-plus mechanism)

The NPPA needs to act as a balancing wheel citing the sustainability of pharmaceutical market as well as larger public interest. The need of hour is to focus on building manufacturing capabilities in Active Pharmaceutical Ingredient (API)/bulk drugs and formulations for being self-reliant in pharma sector.

Strengthening of Pharmaceutical Industry Scheme

- Department of Pharmaceuticals, Ministry of Chemicals and Fertilizers released guidelines for **Strengthening of Pharmaceutical Industry (SPI)** scheme, with an outlay of Rs 500 crore, from FY 21-22 to FY 25-26.
- Its objective is to strengthen the existing infrastructure facilities in order to make India a global leader in the pharma sector.

Components: The Scheme has 3 components /sub-schemes:

Assistance to Pharmaceutical Industry for Common Facilities (APICF)

It aims to strengthen the existing pharmaceutical clusters' capacity for their sustained growth by providing financial assistance to create common facilities with focus on R&D Lab, Testing Laboratories, Effluent Treatment Plants, Logistic Centers & Training Centres in this order of priority with an outlay of 178 Cr is proposed.

Pharmaceutical Technology Upgradation Assistance Scheme (PTUAS)

- It will facilitate MSMEs of proven track record to meet national and international regulatory standards (WHO-GMP or Schedule-M).
- It will provide support through a maximum of 5% per annum (6% in case of units owned and managed by SC/STs) of **interest subvention** or through **credit linked capital subsidy** of 10%. In both cases, the loan supported is up to a limit of 10 crores.
- An outlay of 300 Cr has been earmarked for sub scheme for the scheme period of five years.
- **Good Manufacturing Practices (GMP)** is the aspect of **quality assurance** which ensures that medicinal products are produced consistently under appropriate quality standards. The first WHO draft text on GMP was adopted in 1968.
- More than 100 countries have incorporated the WHO-GMP provisions into their national medicine laws.
- Schedule M of drugs and cosmetics rules define the GMP requirements for pharmaceutical industry in India.

Pharmaceutical & Medical Devices Promotion and Development Scheme (PMPDS)

- It will facilitate growth and development of pharmaceutical and medical devices sectors through study/survey reports, creation of database, and promotion of industry.
- Further, knowledge and awareness about the pharma and MedTech industry will be promoted.

Benefits

- It will address the rising demand in terms of support required to existing pharma clusters and MSMEs across the country to improve their productivity, quality and sustainability.
- This will not only improve the quality but also ensure the sustainable growth of clusters and the growth in volumes.

Bonafide Plea of Juvenility

Supreme Court observed that Truthfulness is an important ingredient to raise "plea of juvenility" thereby dismissing an appeal challenging an order passed by the Punjab and Haryana High Court.

- The Court said that if a document of dubious nature is relied on to seek juvenility, the accused cannot be treated to be juvenile keeping in view that the law is a beneficial legislation.
- Under Section 7 A of the JJ Act, an accused person can raise the 'claim of juvenility' before "any court, at any stage, even after the final disposal of the case".

Evolution of Juvenile Justice

- Juvenile justice system concerns children who have conflicted with the law and need care and protection. Person below 18 years of age is considered juvenile. In India, any child below the age of 7 years cannot be convicted of any crime because of the doctrine of **Doli incapax** which means incapable of forming intent to commit a crime.
- **Under Children Act 1960** imprisonment of children in any circumstances is prohibited. It encourages for rehabilitation of children & provides care, welfare, training, education, maintenance and protection.
- **Juvenile Justice Act 1986** provided uniformity of the children Act and set the standard for protection of juvenile as per the **1959 United Nations declaration of the child**.
- **Juvenile justice Act 2000** defined terminology such as ‘conflict with the law’ and ‘need care and protection’.
 - Juveniles who have a conflict with law are handled by the **juvenile justice board** and juveniles who need care and protection are handled by the **child welfare committee**.
 - In 2006 Amendment was made in the Juvenile Act to make clear that juvenility is considered from the date when a crime is committed
- **Juvenile Justice (care and protection of children) Act 2015**: It replaced the Juvenile Act 2000. It allowed juveniles involved in the heinous crimes age group between 16-18 are treated as adults.
 - The Act gives a clear definition of orphaned, abandoned, surrendered children and provides an organized system for them.
- **Juvenile Justice (care and Protection) Amendment Act 2021** strengthened the provision of protection and adoption of children

New Media Accreditation

Government released new media Accreditation Guidelines-2022. Provision under guidelines are -

- Actions of a journalist in a manner prejudicial to the country’s security, sovereignty and integrity will lead to suspension of Accreditation.
- If actions are prejudicial to decency, or morality, or in relation to contempt of court, defamation or incitement to an offence.
- Accredited media persons have been prohibited from using the words “Accredited to the government of India on public/social media profile, visiting cards”.

Eligibility for Granting Accreditation

Accreditation is only available for journalists living in the Delhi NCR region. There are multiple categories.

- Full time Journalist or camera person with experience of **five years** in news organisation.
- Freelancer journalist with experience **of 15 years** is eligible
- Veteran journalist with over 30 years of experience and who are older than 65 years of age are also eligible
- A newspaper or a periodical needs to have a minimum daily circulation of 10,000, and news agencies must have at least 100 subscribers. Similar rules apply for foreign news organisations and foreign journalists.
- No accreditation will be granted to freelance journalists working for foreign news media organisations.
- Journalists working with Digital news platform are also eligible provided the website has a minimum of **10 lakh unique visitors per month**.

Central Media Accreditation Committee (CMAC)

- Government shall constitute a Committee called the Central Media Accreditation Committee.
- Committee will be chaired by the Principal Director General, PIB and composed of up to 25 members

nominated by government to discharge the functions laid down under these guidelines.

- CMAC would function for a period of two years from the date of its first meeting and shall meet once in a quarter or more frequently, if necessary

Concerns Associated with Guidelines	Benefits of Accreditation
<ul style="list-style-type: none">• The guidelines leave it to the discretion of government nominated officials to access what is defamatory or prejudicial to the sovereignty or integrity of India.• It can hamper the work of journalist as journalists often report on government policies.	<ul style="list-style-type: none">• It will give access to big events where VVIPs or dignitaries such as president, vice president or Prime Minister are present.• It will help journalist to protect identity of his/her sources.• It will give benefits like Central Government Health scheme and some concessions on railway tickets.

Voting Rights to Overseas Electors

Union Minister for Law and Justice stated that the government is exploring the possibility of allowing **online voting for NRIs**.

Current Process

- The representation of people (Amendment) Act 2010 provided right to vote to NRIs (Non Resident Indians) who had stayed abroad beyond 6 months but only in person at the polling station where they have been enrolled as an **overseas electors**.
 - Prior to 2010, an Indian citizen who is an eligible voter and was residing abroad for more than six months, would not have been able to vote in elections. This was because the NRI's name was deleted from electoral rolls if he or she stayed outside the country for more than six months at a stretch.
- An NRI can vote in the constituency in his/her place of residence, as mentioned in the passport
- He/She can only vote in person and will have to produce her passport in original at the polling station for establishing identity

Background

- In 2020, the Election Commission of India (ECI) in a proposal to the Law Ministry proposed to extend the facility of postal ballots to eligible NRIs for the various State Assembly elections to be held in 2021.
- The postal ballots were to be sent to NRIs electronically after which they will send the ballots back, after choosing their candidate, via post.

Concern With The Initiative

Very low proportion of overseas residents have actually registered and turned up for voting under the current provision.

Measures

- ETPBS for overseas electors as proposed by ECI.
- Right to overseas voters to cast vote with the help of proxy on their behalf in their respective constituencies.

Electronic Transmitted Postal Ballot System(ETPBS)

- The service voters in India can use online voting system through ETPBS (**Electronic Transmitted Postal Ballot System**) from 2016.
- The conduct of election rules, 1961 was amended to allow service voters to vote through ETPBS.

- Under this system, postal ballots are sent electronically to registered service voters. The service voters can then mark their mandate on the postal ballot by taking a print out of it and send it back via ordinary mail.

There is a need to devise a proper authentication mechanism involving embassies/consulates abroad while adopting ETPBS for overseas electors and addressing the logistic gaps.

{For more details on Postal voting refer January 2022 recitals}

Article 355 of Indian Constitution

Due to chain of unfortunate incidences of political violence in West Bengal, several opposition leaders have called for invoking Article 355 of the Indian constitution.

- The Article 355 of Indian constitution can be compared with ‘**guarantee clause**’ of US constitution where by Federal government is duty bound to protect states in case of invasion and domestic violence.

Important points about Article 355 of the Constitution

- Article 355 merely justifies action under **Article 352 and 356**
- Article 355 is mentioned in the **Part XVIII** of the constitution which deals with the ‘**Emergency Provisions**’. It imposes a duty on the union government to protect states from ‘external aggression’ and ‘internal disturbances’, as well as the duty to ensure that the Governments of the states are carried on ‘in accordance with constitution’.
- In **S.R. Bomai** case it was held that Article 355 is **not an independent source** of power of interference with the functioning of state government, but dependent upon Article 352 and Article 356.
- It was also noted that the expression internal disturbance has broader connotation than armed rebellion. Thus a proclamation of emergency under Article 352 can be made only if a situation of armed rebellion arises and not in the case of internal disturbance caused by any other situation.
- Additionally it was observed that a proclamation of emergency under Article 356 can be issued only if it disables or prevents the carrying on of state governments in accordance with constitution.

Article 352 -Proclamation of Emergency.-If the President is satisfied that a grave emergency exists whereby the **security of India or of any part of the territory** thereof is threatened, whether by **war or external aggression or [armed rebellion]**, he may, by Proclamation, make a declaration to that effect [in respect of the whole of India or of such part of the territory thereof as may be specified in the Proclamation.]

Article 356 empowers the President to issue a proclamation if he is satisfied that a situation has arisen in which the government of a state cannot be carried on in accordance with the provisions of the constitution. This is popularly known as ‘**President’s Rule**’.

- **Scope of judicial review:** The 38th Amendment act of 1975 made the satisfaction of the President in invoking Article 356 final and conclusive which would not be challenged in any court on any ground.
- But, this provision was subsequently deleted by the **44th Amendment Act of 1978** implying that the satisfaction of the President is not beyond judicial review.

States’ Power To Identify Minorities

- Union government has told the Supreme Court (SC) that state governments can now grant minority status to any religious or linguistic community, including Hindus.
- The SC had sought the Union government’s response in a plea that sought directions for **framing of guidelines** identifying minorities at the state level.
- The expression “minorities” appears in some Articles of the Constitution, but is not defined anywhere

Background

- A petition was filed in Supreme Court that Central government has uncontrolled power to declare a community as minority under National Commission for Minorities Act 1992.
- The plea contended that Hindus are in a 'minority' in six states and three UT's of India but was allegedly not able to avail themselves of the benefits of schemes meant for minorities.
- Plea Showed as per **2011 census** Hindus have become a minority in Lakshadweep (2.5%), Mizoram (2.75%), Nagaland (8.75%), Meghalaya (11.53%), J&K (28.44%), Arunachal Pradesh (29%), Manipur (31.39%), and Punjab (38.40%).
- They should be given minority status in these states in accordance with the principle laid down by the SC in its **TMA Pai Foundation (2002)** and **Bal Patil Case ruling (2005)**.
- The petition claimed that NCMEI (National Commission for Minority Educational Institutions) Act 2004 gives unbridled power to the Centre and is "manifestly arbitrary, irrational, and offending

TMA Pai Case

- The SC had said that for the purposes of Article 30 that deals with the rights of minorities to establish and administer educational institutions, religious and linguistic minorities have to be considered state-wise.

Bal Patil Case

- SC in its judgement in 'Bal Patil' referred to the TMA Pai ruling.
- The legal position clarifies that henceforth the unit for determining status of both linguistic and religious minorities would be 'state'

Key Points Of Submission Of Union Government

- **Religious and linguistic minorities** are spread all over the country and are not related or restricted to any single State or UT. A religious group that is in majority in one State may be in minority in another State.
- The concerned state governments are competent to issue guidelines for identification of religious and linguistic minorities at state level and ensuring protection of their religious and cultural rights under **Article 25-30** of Indian constitution. Ex. Maharashtra recognises 'Jews' as religious minority group within the state.
 - Karnataka had notified Urdu, Telugu, Tamil, Malayalam, Marathi, Tulu, Lamani, Hindi, Konkani and Gujarati as minority languages.
- The Parliament and the state legislatures have **concurrent powers** to enact law to provide for the protection of minorities and their interests.
- The **Article 246** of the constitution read with **Entry 20**, 'Economic planning and social planning', of the **concurrent list of 7th schedule** to enact laws to promote and protect the interests of minorities.
- The central government has defended the **Section 2(c)** of the National Commission for Minorities Act of 1992 and **Section 2(f)** of the National Commission for Minority Educational Institutions Act 2004 and submitted that both Acts came into existence out of Parliament's intentions to safeguard minority interests as per entry 20 of concurrent list of 7th schedule.

Power Of Central Government To Notify Minority Group

- The Central government notified **six** communities, namely Muslims, Christians, Sikhs, Buddhists, Parsis and Jains, as minorities under **Section 2(c)** of the **National Commission for Minorities Act of 1992**.
 - Jains were also notified as a minority community in 2014
- Under **Section 2(f)** of the National Commission for Minority Educational Institutions Act, 2004 'minority' means a **community notified as such by the Central government**
- **Article 350-B:** The 7th Constitutional (Amendment) Act 1956 inserted this article which provides for a Special Officer for Linguistic Minorities appointed by the President of India. It would be the duty of the Special Officer to investigate all matters relating to the safeguards provided for linguistic minorities under the Constitution.

No-fly Zone

President Volodymyr Zelensky of Ukraine criticized NATO over its rejection of a no-fly zone.

Why Western Countries Are Against No-Fly Zone?

- The demand for no-fly zone has been repeatedly rejected by western leaders as they are concerned about triggering a wider war in Europe.
- Creating a no-fly zone over Ukraine would require deploying NATO fighter planes and possibly shooting down Russian planes.
- This could lead to a full-fledged war in Europe, involving many more countries and causing much more human suffering.
- In addition to fighter planes, NATO would have to deploy refuelling tankers and electronic-surveillance aircraft to support the mission.
- To protect these planes, NATO would have to destroy surface-to-air missile batteries in Russia and Belarus, again risking a broader conflict.

About No-fly Zone

- A no-fly zone refers to any region of airspace where it has been established that certain aircraft cannot fly.
- It can be used to protect sensitive areas, such as royal residences, or brought in temporarily over sporting events and large gatherings.
- In a military context, a no-fly zone is designed to stop aircraft from entering banned airspace, usually to prevent attacks or surveillance.

What Would A No-Fly Zone Achieve In Ukraine?

- Those who are demanding a no-fly zone in Ukraine say that it would protect civilians — and now nuclear power stations — from Russian air strikes.
- They actually want a broader intervention like the one that occurred in Libya in 2011, when NATO forces launched attacks on government positions.

No-fly Zones Been Used Before

- After the first Gulf War in 1991 the US and coalition partners established two no-fly zones in Iraq to prevent attacks against some ethnic and religious groups. This was done **without United Nations backing**.
- In 1992 during the Balkans conflict, the UN passed a resolution which banned unauthorized military flights in Bosnian airspace.
- The UN Security Council also approved a no-fly zone as part of the 2011 military intervention in Libya. The Bosnian and Libya zones were enforced by NATO forces.

Neutral Status for Ukraine

Russia is demanding a neutral status for Ukraine.

What Is Neutral Status

- According to international law, neutrality refers to an obligation of a state to not interfere in military conflicts of other states. This includes avoiding entering into military alliances such as NATO or Collective Security Treaty Organization (CSTO).
- As a type of non-combatant status, nationals of neutral countries enjoy protection under the law of war from belligerent actions.

Neutral Countries

- Examples of neutral countries include Switzerland, Sweden, Ireland, Finland and Austria.
- However, the status of neutrality is interpreted differently by respective countries.
 - For example, Costa Rica is a neutral country, however, it has demilitarised.
 - On the other hand, Switzerland has adapted to "armed neutrality" and has barred itself from foreign deployment.
 - Sweden officially is militarily non-aligned in peacetime and neutral in times of war, having ended its policy of neutrality in 1992 at the end of the Cold War.
- It is not a member of NATO, but it has been a partner to the alliance for nearly 30 years.

Ukraine's Stand On Adopting Neutral Status Like Austria or Sweden

- Ukraine rejected Russia's proposals to adopt neutral status like Austria or Sweden as it continued negotiations on a peace deal with Moscow's delegation.
- As per the Ukrainian officials, Ukraine is now in a direct state of war with Russia.
 - As a result, the model can only be 'Ukrainian' and only on legally verified security guarantees.
- Instead, Ukraine is pressing Russia for a legally binding security agreement, signed by international partners.
 - As per Ukraine, this legally binding security agreement would not stand aside in the event of an attack on Ukraine.
- However, according to experts, adopting a neutrality status is the easy way forward for Ukraine to end the violence.

India, Maldives Ink Pacts

India's External Affairs Minister (EAM) Dr. S Jaishankar was on a two-day official visit to the Maldives. During the visit several pacts were signed to increase the cooperation between the two countries.

Key Highlights Of The Visit

Inauguration Of Various Projects

- During the visit, EAM inaugurated the **National College of Policing and Law Enforcement (NCPL)** in Addu City. NCPL was established under Indian grant assistance.
- The establishment of the police academy had, till recently, been India's largest grant-funded project. This was **prior to the Greater Male Connectivity Project** for which India extended a \$400 million line of credit in 2020.
- Several other projects being undertaken with Indian assistance in Addu City were also inaugurated. This included - ground breaking of road development project, inauguration of tourism zone, and a drug detox facility

Various Agreement Signed

- Two countries signed agreements for **cooperation in education, health and capacity-building**.
- An MoU was also signed between the Sardar Vallabhbhai Patel National Police Academy (SVPNPA) and the Maldives Police Service. This will enable NCPL to grow its capacities through training and the development of its curriculum.

- EAM also **handed over India's expanded coastal radar system**, comprising 10 radar systems, to Maldives for strengthening security in the region.
- This radar system is a product of MEA-Navy partnership for regional security and a fine example of India's 'SAGAR' and 'Neighbourhood First' policies.

Anti-India Campaign In Maldives

- Recently, the Maldivian Parliament accepted an emergency motion disallowing a planned opposition rally in the capital Male.
- It had been called by former president Abdulla Yameen and his Progressive Party, and its ally, the People's National Congress.
- The theme of this rally was India Out, a slogan coined two years ago by protesters.

About The Campaign

- Opposition parties and a section of the media in the Maldives have been engaged in renewed efforts to **whip up anti-India sentiments**.
- In this regard, the **"India Out" slogan** was first used on social media platforms last year.
- This campaign alleged that the cooperation between the governments of the two countries is undermining the national security and sovereignty of the Maldives.

Background

- This began as a general protest at the Solih government's perceived India-friendly policies.
- However, it has now turned into an allegation that New Delhi has sent a large military contingent to the Maldives.
- Attention has focused particularly on the **co-operation between the two sides to develop a harbour** on the Uthuru Thilafalhu (UTF) atoll for the Maldivian coast Guard.
- The Solih government has repeatedly denied this allegation.
 - The government has said that maintenance and flight crew personnel are there.
 - This crew is here to operate three Dornier aircraft used for surveillance, and for rescue and air ambulance operations.
 - Other than this, there are no Indian military personnel in the Maldives.

Domestic Politics Behind This Campaign

- Former President Yameen hopes to use Maldivian nationalism to come back to power on an anti-India plank.
- However, the current government has countered this by underlining that the country is dependent on India for its security, including food security.
- The current govt. of Maldives has begun its own **India First campaign**, and even drafted a legislation to criminalise anti-India protests as anti-national.

Radicalisation in Maldives: A Cause Of Worry For India

- 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.
- In December 2019, the Maldives Commissioner of Police disclosed that:
 - There could be close to 1,400 Islamist extremists in the Maldives who adhere to ISIS ideology and
 - Some 423 citizens had attempted to travel to war zones in Iraq and Syria of which 173 had succeeded.

- India, as a neighbouring country, is worried about this development.

CEPA Between India and UAE Unveiled

India announced the unveiling of the Comprehensive Economic Partnership Agreement (CEPA) with the United Arab Emirates (UAE).

Background

- In September 2021, both the sides started formal negotiations for a mutually-beneficial comprehensive economic partnership agreement (CEPA).
 - At that time, it was decided to wrap up negotiations by as early as December 2021 and sign a deal by March 2022.
- India-UAE CEPA was signed on 18 February 2022 in New Delhi during the India-UAE Virtual Summit.

Key Highlights of CEPA

Coverage

- The Agreement is a comprehensive agreement, which will cover
 - Trade in Goods, Rules of Origin, Trade in Services, Technical Barriers to Trade (TBT), Sanitary and Phytosanitary (SPS) measures
 - Dispute Settlement, Movement of Natural Persons, Telecom, Customs Procedures, Pharmaceutical products, Government Procurement, IPR
 - Investment, Digital Trade and Cooperation in other Areas.
- It covers almost all the tariff lines dealt in by India (11,908 tariff lines) and the UAE (7581 tariff lines) respectively.

Preferential Access To Goods

- CEPA provides for an **institutional mechanism** to encourage and improve trade between the two countries.
- India will benefit from preferential market access provided by the UAE on over 97 % of its tariff lines which account for 99% of Indian exports to the UAE in value terms.
- India will also be offering preferential access to the UAE on over 90% of its tariff lines, including lines of export interest to the UAE.

Trade in Services

- India has offered market access to the UAE in around 100 sub-sectors.
- On the other hand, Indian service providers will have access to around 111 sub-sectors from the 11 broad service sectors such as:
 - business services, communication services, construction and related engineering services, distribution services, educational services,
 - environmental services, financial services, health related and social services, tourism and travel related services,
 - Recreational, cultural and sporting services and transport services.
- Both sides have also agreed to a separate Annex on Pharmaceuticals to facilitate access of Indian pharmaceuticals products.

India To Reduce Import Duty On Metals, Dates, Oil

- India is set to lower import duty on dates, metals, cement, cooking gas and crude oil from the UAE as part of the agreement.
- India will lower tariffs on all but 1,157 items, or 9.7% of the products, while UAE will exclude 0.7% of the goods from the trade agreement.

Timelines

- The negotiations for India-UAE CEPA were concluded in a record span of 88 days.
- The Agreement is expected to enter into force on 01 May 2022.

Benefits

- CEPA provides for an institutional mechanism to encourage and improve trade between the two countries.
- This agreement is likely to benefit about \$26 billion worth of Indian products that are subjected to 5% import duty by the UAE.
- So far, the focus has been on manufacturing, but a key gain is seen to be on the services front, including movement of Indian professionals.
- The UAE is becoming a base for Indian companies and professionals to cater to the requirements in other parts of West Asia as well as Africa.
- Also, India is planning to enhance its engagement with West Asia through a trade deal with the Gulf Cooperation Council.
- Hence, the agreement with UAE could be the basis for negotiations for similar opening up.

*[For detailed discussion on India-UAE bilateral relation, please refer the topic “**India-UAE negotiations for CEPA**” from September 2021 Recitals. Also refer the topic “**India, UAE ink Comprehensive Trade Pact**” from February 2022 Recitals.]*

SUMMITS AND ORGANISATIONS

Ukraine Approaches ICJ Against Russia

Ukraine approached the **International Court of Justice** against Russia to hold Russia accountable for its actions against Ukraine.

Charge Against Russia

- Ukraine has accused Russia:
 - ✓ Of falsely claiming that acts of genocide have occurred in the *Luhansk and Donetsk* oblasts of Ukraine, and
 - ✓ Of using that as a pretext to recognise the independence of these regions and of going to war against Ukraine.
- Ukraine seeks to find Court's jurisdiction on **Article 36 of the Statute of Court** and on **Article IX of the Genocide Convention**, to which both States are parties.
 - ✓ The 1948 Convention on the Prevention and Punishment of the Crime of Genocide is famously known as Genocide Convention. It codified for the first time the crime of genocide. It was the first human rights treaty adopted by General Assembly of UN on 9 December 1948.

About International Court of Justice

Please refer The Recitals – Nov' 2021 for details. Few more additional information are given here -

Judges

- The ICJ has 15 judges who are elected to nine-year terms by the UN General Assembly and Security Council, which vote simultaneously but separately.
- To be elected, a candidate must receive a majority of the votes in both bodies, a requirement that sometimes necessitates multiple rounds of voting.
- A third of the court is elected every three years and elections are held at the UNHQ in New York during the annual UNGA meeting.
- The judges elected at the **triennial election** commence their term of office on February 6 of the following year.
- No two judges can have the same nationality in the ICJ.
- The members of the ICJ do not represent their governments but are independent magistrates.
- The judges must possess the qualifications required in their respective countries for appointment to the highest judicial offices, or be jurists of recognized competence in international law.
- The judges are distributed as per the regions:

3 from Africa

2 from Latin America and the Caribbean

3 from Asia

5 from Western Europe and other states

2 from Eastern Europe

- Among the 15 judges, there is a President, a Vice President and a Registrar.
- The president and vice-president of the court are elected for three-year terms by secret ballot. Judges are eligible for re-election.
- Every State government party to the Charter designates a group that proposes candidates for the office of ICJ judges.

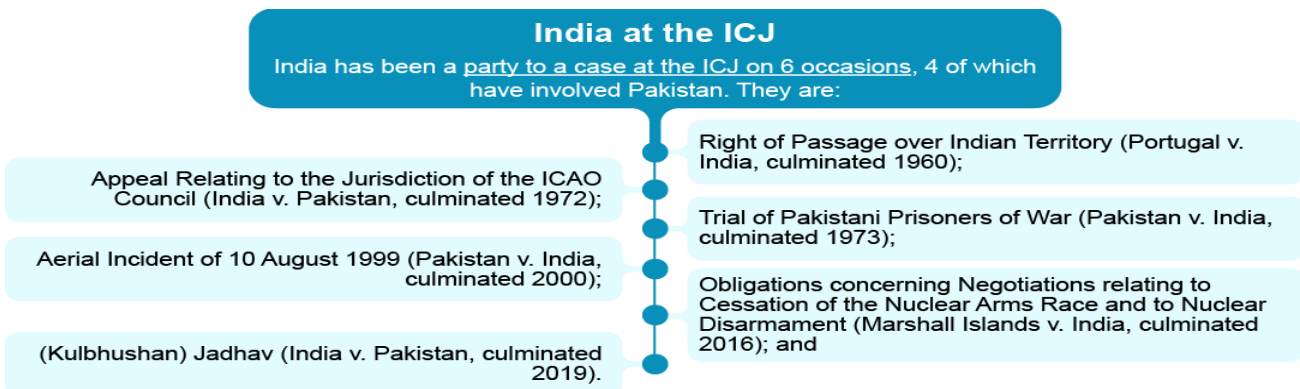
Indian Judges At ICJ

Four Indians have been members of the ICJ so far.

- **Justice Dalveer Bhandari**, former judge of Supreme Court was first elected to the ICJ in 2012 for the remainder term of a judge who quit prematurely. In November 2017, India's Dalveer Bhandari has been re-elected to ICJ for full term of nine years after Britain pulled out its candidate Christopher Greenwood before the 12th round of voting. Bhandari's term ends in 2027. This is the first time that one of the five permanent members of the UNSC lost out to an ordinary member in a race. This is the first time in the 70-year history of the UN that the United Kingdom will not be on the ICJ.
- Former Chief Justice of India R S Pathak served from 1989-91,
- Former Chief Election Commissioner of India Nagendra Singh from 1973-88.
- Sir Benegal Rau, advisor to Constituent Assembly, was a member of ICJ from 1952-53.

Members and Jurisdiction

- All members of the UN are automatically parties to the ICJ statute. However, this does not automatically give the ICJ jurisdiction over disputes involving them.
 - ✓ The **ICJ gets jurisdiction only if both parties consent to it**. The ICJ cannot suo moto take up a case.
- The judgment of the **ICJ is final and technically binding** on the parties to a case.
 - ✓ There is no provision of appeal. It can at the most, be subject to interpretation or, upon the discovery of a new fact, revision.
- The ICJ has no way to ensure compliance of its orders, and its authority is derived from the willingness of countries to abide by them.
- It has no jurisdiction to try individuals accused of war crimes or crimes against humanity. As it is not a criminal court, it does not have a prosecutor able to initiate proceedings.
- The ICJ is not an apex court to which national courts can turn to. It is also not a court of last resort for people.
- It does not enjoy a full separation of powers, with permanent members of Security Council being able to veto enforcement of cases, even those to which they consented to be bound.



{For more details on Kulbhushan Jadhav case refer The Recitals - November 2021}

[For detailed discussion about Ukraine issue, refer the topics **“Russia-Ukraine conflict”** and **“Russia Goes To War With Ukraine”** from The Recitals - January 2022 and The Recitals - February 2022]

Montreux Convention

Stating that the situation in Ukraine has turned into a ‘war’, Turkey activated the **Montreux Convention** and banned Russian war vessels from entering the Black Sea.

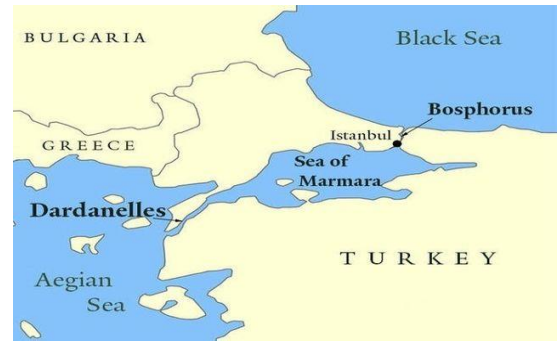
Steps Announced By Turkey

- While exercising Ankara's right under Article 19 of 1936 Montreux Convention, Turkey closed **Bosporus and Dardanelles Straits** to Russian warships.

- The straits have become a strategic factor in war between Russia and Ukraine.
- Before Russia's recent invasion of Ukraine, Russian warships sailed into the Black Sea to conduct military exercises.

Montreux Convention, 1936

- It is an international agreement signed by Australia, Bulgaria, France, Greece, Japan, Romania, Yugoslavia, United Kingdom, Soviet Union and Turkey and has been in effect since November 1936.
- It sets limits on the passage of *civilian vessels and military warships* through the Dardanelles and the Bosphorus straits.
 - **Bosphorus and Dardanelles** are together known as the **Turkish Straits**.
 - Turkish straits connect the **Aegean Sea and the Black Sea** via the Sea of Marmara.
 - It is the only passage through which Black Sea ports can access Mediterranean and beyond.
 - Over three million barrels of oil, about 3% of the daily global supply, mostly produced in Russia, Azerbaijan, and Kazakhstan, pass through this waterway every day.
 - The route also ships large amounts of iron, steel, and agricultural products from the Black Sea coast to Europe and the rest of the world.
- Turkey has used the convention's powers before as well. During World War II. Turkey prevented the Axis powers from sending their warships to attack the Soviet Union – and blocked the Soviet navy from participating in combat in the Mediterranean.



Key Provisions Of The Convention

- Under **Article 24** of the convention, **Turkey is charged with supervising** the execution of all the provisions relating to the passage of vessels of war through the Straits.
- Under normal, peacetime rules, the convention regime **guarantees the general right of warships of all states to transit the straits**, but with a *bias toward the six Black Sea riparian states* (Georgia, Turkey, Bulgaria, Romania, Ukraine and Russia).
 - To transit, warships of all other states must not have a displacement greater than 15,000 tons and may not stay in the Black Sea longer than 21 days.
 - **Black Sea states are exempt from those restrictions.**
 - Any country with coastline on the Black Sea must notify Turkey **eight days** in advance of its intention to send vessels of war through the straits.
 - Other countries, the ones that don't border the Black Sea, must give Turkey **15 days' advance notice**.

However, during wartime, three articles of the convention modify the peacetime rules. **These are:**

Article 19	•Applies when a war exists and Turkey is not party to the conflict.
Article 20	•Applies when Turkey itself is party to a war.
Article 21	•Applies a limited version of Article 20 powers when Turkey considers itself to be threatened with imminent danger of war.

- In the event of a war, the pact gives Turkey the right to regulate the transit of naval warships and to **block the straits** to warships belonging to the countries involved in the conflict.

Legal Authority Of Turkey In Closing The Straits

- Article 19 applies when a war exists and Turkey is not party to the conflict. At such times, warships shall enjoy complete freedom of transit through the Straits under the normal peacetime rules.
- However, warships of belligerent states shall not pass through the Straits except if

• One of the belligerents is acting under lawful collective defense rights obligations or

• Any belligerent warship must pass through the straits to return to its base

- Since, **Turkey is charged with supervising** the execution of this treaty, it is within its right to take such steps. However, these steps must be transparent and in accordance with the provisions of this convention.

Can This Step Be Effective In Preventing The Movement Of Russian Warships?

- Under Article 19, **Turkey cannot close the straits to all warships**. Also, under the same article, warships can return to their original bases through the passage and Turkey cannot prevent it.
- E.g., a **Russian fleet registered in the Black Sea** but currently located in the Mediterranean Sea, is **allowed to pass through these straits and return to its base**.
- The condition also applies to Russian fleets currently in the Black Sea that belong to a base in the Mediterranean or Baltic Sea. Russia is free to take them out of the Black Sea.
- The official assignment of a ship to a port determines whether it has the right to pass through the Straits or not. The official assignment, according to the International Maritime Organisation (IMO) **falls under the authority of the state that owns the ships**.
- Therefore, another possible way for Russia to exploit the Montreux Convention would be to reassign some of its vessels to the Black Sea.
- Hence, experts believe that closing the Straits might never have a military impact in the Russo-Ukrainian War. However, it is Turkey's unique way of punishing Russia for its crime of aggression and showing commitment to international law.

WHO's Pandemic Treaty

Members of the WHO held the first round of negotiations towards the pandemic treaty.

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**.

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 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.

Why Is This Treaty Not A Sufficient Step To Fight Present Or Future Pandemics?

- Treaty only provides **recommendations** for tackling a particular issue.
- No focus on bridging **deficiencies or capacity inequities**. That rich countries have given out far more booster shots in four months than poor countries have given out doses all year
- Any global effort must ensure **distributed capacities** so that countries and regions in the south have sovereignty over essential medicines, materials, manufacturing and supply chains.

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.
- It is funded by a combination of members' fees based on wealth and population and voluntary contributions.



India & WHO

- India became a party to the WHO constitution in January 1948. India is a **member state of the South East Asia Region** at the WHO.
- The **first regional director for South East Asia** was an Indian, Dr Chandra Mani, who served between 1948-1968. Currently, the post has again been occupied by an **Indian appointee, Dr Poonam Khetrapal Singh**, who has been in office since 2014.
- **Dr Soumya Swaminathan** has been serving as **WHO's chief scientist since 2019**.

India Signs Host Country Agreement with ITU


- India signed the **Host Country Agreement (HCA)** with the International Telecommunication Union (ITU) for the establishment of an Area Office & Innovation Centre of ITU in New Delhi.
- The **Host Country Agreement** provides the legal and financial framework for establishment and operations of the Area Office.

Key Details

- The Area Office and Innovation Centre of ITU at New Delhi is expected to serve South Asian countries namely Afghanistan, Bangladesh, Bhutan, Iran, Maldives, Nepal, Sri Lanka and India.
- The Area Office shall also have an Innovation Centre, which is expected to give impetus to R&D in telecommunication technologies in South Asia.
- The Innovation Centre will provide opportunities to academics, start-ups and SMEs to showcase their innovation at a global stage.

India And Development Of Telecom Standards

- The **5Gi standards developed within India** have now been recognised by ITU as one of the three technologies for 5G.
 - 5Gi is a locally designed telecommunication network that has been designed by IIT Hyderabad.
- With more than 1.2 billion telecom subscribers, a robust ecosystem of start-ups and innovation hubs, India is poised to contribute meaningfully in developing telecom standards further.



About International Telecommunication Union (ITU)

- ITU is the United Nations specialized agency for information and communication technologies – ICTs. The purpose of ITU is to coordinate telecommunication operations and services throughout the world.
- Originally founded in 1865, as the International Telegraph Union, the ITU is the oldest existing international organization.
- ITU headquarters are in Geneva, Switzerland.
- ITU currently has a membership of 193 countries and over 900 private-sector entities and academic institutions.
- India got elected as a member of ITU Council for another 4-year term - from 2019 to 2022. India has remained a regular member since 1952.
- Important publication of the ITU is the Global Cybersecurity Index (GCI). India ranked 10th in the 2020 index
- The ITU consists of three sectors:

Radiocommunication (ITU-R)
ensures optimal, fair and rational use of the radio frequency (RF) spectrum.

Telecommunication Standardization (ITU-T)
formulates recommendations for standardizing telecommunication operations worldwide.

Telecommunication Development (ITU-D)
assists countries in developing and maintaining internal communication operations.

International Election Visitors Programme 2022

- Election Commission of India (ECI) hosted the virtual **International Election Visitors Programme (IEVP) 2022**.
- Election Management Bodies from nearly 32 Countries and four international organizations attended the programme.
- India has been hosting the IEVP since 2012 elections where international delegates are invited to visit the Polling stations and observe the electoral processes.

Bucharest Nine

Recently, the envoys to India of **nine Eastern European countries** jointly wrote an article in a leading newspaper about unjustified Russian aggression in Ukraine. These nine Eastern European countries are commonly known as Bucharest Nine.

About: Bucharest Nine

- The Bucharest Nine or Bucharest Format, often abbreviated as the B9, was founded on November 4, 2015 and takes its name from Bucharest, the capital of Romania.
- It is a group of nine NATO countries in Eastern Europe that became part of the US-led military alliance after the end of the Cold War.
- B9 offers a platform for deepening the dialogue and consultation among the participant allied states.
 - ✓ Members articulate their specific contribution to the ongoing processes across the North-Atlantic Alliance.



- ✓ This is in total compliance with the principles of solidarity and indivisibility of the security of the NATO Member States.
- All members of the B9 are part of the European Union (EU) and North Atlantic Treaty Organisation (NATO).
- B9 is also regarded as the voice of the Eastern Flank in the NATO alliance.

Composition

- Member of B9 include – Romania, Poland, Hungary, Bulgaria, the Czech Republic, Slovakia, and the three Baltic republics of Estonia, Latvia, and Lithuania.
- All nine countries were once closely associated with the now dissolved Soviet Union, but later chose the path of democracy.
 - ✓ **Romania, Poland, Hungary, and Bulgaria** are former signatories of the now dissolved Warsaw Pact military alliance led by the Soviet Union.
 - ✓ **Estonia, Latvia, and Lithuania** were part of the former Union of Soviet Socialist Republics (USSR).

Three Seas Initiative

- B9 should not be confused with Three Seas Initiative (3SI).
- 3SI is a regional effort in Europe to expand cross-border energy, transportation, and digital infrastructure and boost economic development in the area between the **Adriatic Sea, Baltic Sea, and Black Sea**.
- Twelve countries (**Austria**, Bulgaria, **Croatia**, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and **Slovenia**), all of which are members of the EU, participate in the 3SI.

5th BIMSTEC Summit

The 5th BIMSTEC Summit was hosted in virtual mode by Sri Lanka, the current chair of BIMSTEC.

- Theme: "Towards a Resilient Region, Prosperous Economies, Healthy People".

Key Highlights of Summit

Adoption And Signing Of BIMSTEC Charter

- The Charter formalizes the grouping into an organization made up of member states that are littoral to, and dependent upon, the Bay of Bengal.
- The charter would provide rules, a framework and long-term goals.
- This, in turn, will streamline the operations of BIMSTEC & allow the organisation to finally deliver on its potential.

BIMSTEC Master Plan For Transport Connectivity

- The BIMSTEC master plan for transport connectivity is a vision for implementing **multimodal connectivity** projects for greater regional integration.
- It will seek to combine shipping routes with road transport for the movement of people and cargo.

Other BIMSTEC Agreements Signed

- The participating leaders witnessed the signing of three BIMSTEC agreements:

- BIMSTEC Convention on Mutual Legal Assistance in Criminal Matters
- BIMSTEC MOU on Mutual Cooperation in the field of Diplomatic Training
- Memorandum of Association on Establishment of BIMSTEC Technology Transfer Facility

India's Stand At The Summit

1. Prioritise regional security and cooperation

- PM Modi called for prioritising regional security and cooperation. He said developments in Europe have raised questions about the stability of the global order.

2. Highlighted importance of Myanmar

- India stressed that the ASEAN nation is important for successful cooperation among the member-states.
- As per India, Myanmar is an important constituent member of the BIMSTEC and it has a very important geography.

3. India to lead the security pillar of BIMSTEC

- The leaders of the BIMSTEC member countries also approved a complete reorganisation of the grouping's cooperation activities.
- Henceforth, the BIMSTEC cooperation activities will take place in **seven pillars** and each of the member countries will lead one pillar.
- ***India will lead the security pillar of the BIMSTEC.***

4. Pushes for BIMSTEC trade pact, vows \$1m aid

- Indian PM pushed for early progress on the proposal of BIMSTEC free trade agreement (FTA) to enhance mutual trade among member states.
- He also announced that **India will provide \$1 million** in financial aid to augment the operational budget of the BIMSTEC secretariat.

[For detailed discussion about BIMSTEC, please refer the topic "8th Meeting of Agricultural Experts of BIMSTEC" from September 2021 edition of CA magazine.]

India Accidentally Fires Missile Into Pakistan

India admitted the supersonic missile that landed in Pakistan was accidentally fired from one of its bases.

What Had Happened

- As per Pakistan, a **high-speed flying object** originating from the northern Indian city of Sirsa (Haryana) had crashed in eastern Pakistan.
- The object, flying at 40,000 feet and three times the speed of sound, had flown 124 km (77 miles) in Pakistani airspace.
- The **missile was unarmed** and had crashed near the country's eastern city of Mian Channu, about 500 km from capital Islamabad.

Missile Used

- Neither country has spelt this out; Pakistan has only called it a "supersonic" missile.
- Some experts have speculated that it was a test of one of India's top missiles, BrahMos, jointly developed with Russia.
 - ✓ BrahMos has a top speed of Mach 3, a range of around 290 km, and a cruising altitude of 15 km (around 50,000 feet).
 - ✓ BrahMos can be fired from anywhere, is nuclear-capable, and can carry warheads of 200-300 kg.
- Other experts have wondered if the missile was a variant of the nuclear-capable Prithvi. However, India never tests Prithvi around this region, and only does so from Balasore.

Protocol for Missile tests

Between India and Pakistan

- Each country must provide the other an advance notification on flight test it intends to take for any land or sea launched surface-to-surface ballistic missile.
- This is under the pre-notification of flight testing of ballistic missiles **agreement signed in 2005**.



General protocol to be followed for such tests

- Before the test, the country must issue Notice to Air Missions (NOTAM) or Navigational Warning (NAVAREA) to alert aviation pilots and seafarers, respectively.
- Also, the testing country must ensure that the launch site is not within 40 km, and the planned impact area is not within 75 km of either the International Boundary (IB) or the Line of Control (LoC).
- The planned trajectory should not cross the IB or the LoC and must maintain a horizontal distance of at least 40 km from the border.
- The testing country must notify the other nation no less than three days in advance of the commencement of a five-day launch window.
- The pre-notification has to be conveyed through the respective Foreign Offices and the High Commissions.

Extremely Alarming Incident

- This event is being widely seen as an extremely alarming incident that could have triggered a conflagration between the two nuclear-armed neighbours. The two nuclear-armed neighbours have fought wars in the past and they do not trust each other.

- It has also raised questions about safety mechanisms and the technical prowess of very dangerous weapon. The missile has several in-built locks and such accidental firing raises questions about safety protocols.
- Security analysts wondered if the incident meant that India had missiles in ready-to-launch positions and pointed at Pakistan. Hence, it will further raise suspicions about the intentions of India.
- The flight path of missile endangered many passenger flights both in Indian and Pakistani airspace as well as human life and property on ground.

53rd Raising Day Celebrations of CISF

- The Central Industrial Security Force (CISF) celebrated its 53rd Raising Day in Ghaziabad.
- While speaking at this occasion, Union Home Minister Amit Shah pitched for a hybrid security model.

Hybrid Security Model Pitched By Home Minister

- In this model, the CISF would train and certify private security agencies.
- These private agencies can, then, take over the task of efficiently guarding various kinds of industrial and manufacturing units in the country.
- Under this model of security, the CISF will prepare the strategy and both private and the CISF personnel would work in synergy.
- The proposed hybrid security model will give space to the private security agencies.

About Central Industrial Security Force (CISF)

- CISF is one of the Central Armed Police Forces (CAPFs) established under an Act of Parliament, "Central Industrial Security Force Act, 1968.
- CISF was established in 1969 to provide integrated security cover to certain sensitive public sector undertakings with a strength of only three battalions. The force has since grown into a premier multi-skilled organization with a present strength of 1,63,590 personnel.
- Eventually, it was made an armed force of the Republic of India by another Act of Parliament passed in June 1983. It works under the administrative control of Ministry of Home Affairs and its headquarter is located at New Delhi.
- It secured the private manufacturing production units as India rode on to become a \$2.5 trillion-strong economy. CISF has to play an important role in country's journey from a \$2.5 trillion economy to becoming a \$5 trillion economy.

Operations

Critical Infrastructure	<ul style="list-style-type: none"> • CISF is currently providing security cover to 354 establishments through the length and breadth of the country. • Some of which includes Atomic Power Plants, Space Installations, Defence Production Units, Mines, Oil Fields and Refineries etc.
VIP Security	<ul style="list-style-type: none"> • CISF has also been mandated to provide protection to the VIP protectees of Z+, Z, Y and X category across the country.
Fire Protection	<ul style="list-style-type: none"> • The CISF also has its own Fire Wing which provides services to 104 of the above establishments.
Airports	<ul style="list-style-type: none"> • The specialized task of airport security was assigned to CISF in the year 2000 in the wake of hijacking of Indian Airlines Flight IC-814 to Kandahar.

Private sector

- The CISF Act was amended to enable the Force to provide security, on payment basis, to private / joint venture industrial undertakings, which are vital for the security and economy of the country.
- E.g. - The Infosys campuses in Mysuru, Bengaluru and Pune, the Patanjali Food and Herbal Park in Haridwar and the Reliance refinery in Gujarat's Jamnagar
- The CISF is the only Central Armed Police Force with a daily public interface; in the airports, in the Delhi Metro and in the iconic monuments.
- It is working in domains such as oil, power, information technology, aerospace and nuclear, among others.

Overseas Deployment

- CISF has contingents deployed at United Nations Stabilizations Mission in Haiti (MINUSTAH).

Need To Remain Prepared For The Future Challenges

- CISF been asked to **prepare a 25-year road map** so that it can emerge as a result-oriented security agency by the time India enters the 100th year of its independence.
- In the past, there has been increase in the drone threats to industrial units along sea ports and the land border.
- Hence, the CISF needs to effectively collaborate with agencies like DRDO and the BSF to prepare an effective counter-technology against this menace.
- The CISF needs to explore ways so that the **representation of women personnel** in the force could be enhanced from the present 6% to 20%.

Colombo Security Conclave

The **fifth meeting** of national security advisers of the Colombo Security Conclave (CSC) was held in the Maldives. India was represented by NSA Doval.

Key Highlights of the meeting

1. Participating Members

The conclave was attended by the Maldives, India and Sri Lanka, and the newest member of the Conclave, Mauritius.

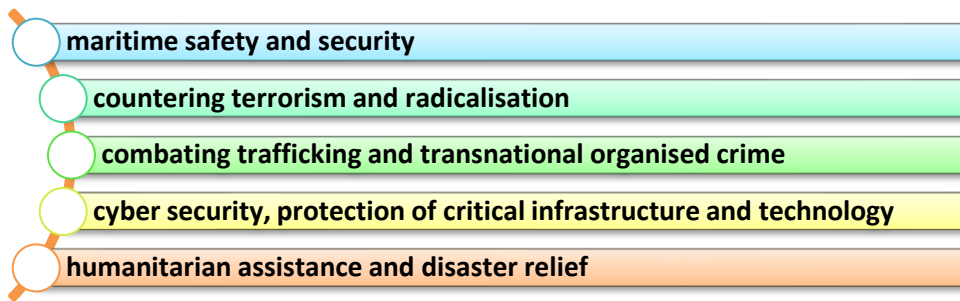
- At this meeting, Mauritius was included as the fourth member.
- Delegations from Bangladesh and Seychelles participated as Observers.

2. Road Map For Cooperation Adopted

- The meeting adopted a road map for cooperation and collaboration in areas such as maritime security, counterterrorism and drug trafficking.
- The roadmap will facilitate robust mechanisms for coordinated responses, capacity building and strengthening information flow.

3. Five Broad Areas Of Cooperation Identified

Conclave identified 5 broad areas of cooperation to strengthen regional security. These are:



4. Commitment To Achieve Regional Peace And Security

As maritime neighbours, facing similar threats, the Conclave reaffirmed their commitment to engage in consistent joint efforts to achieving regional peace and security.

5. India's Stand At The Conclave

- NSA Doval said the conclave should institutionalise its cooperation with a road map.
- It should also form joint working groups to tackle drug trafficking and cybersecurity challenges.
- ✓ Members of the grouping remain vulnerable to trafficking, organised crime and maritime terrorism, particularly in the light of the developments in Afghanistan.
- He called for strengthening cooperation amongst maritime neighbours to address shared security challenges, and as first responders.
- India also proposed a meeting of the Heads of respective Coast Guards this year.

About: Colombo Security Conclave (CSC)

- The CSC was formed in 2011 as a **trilateral maritime security grouping of India, Sri Lanka and the Maldives**.
- The conclave aims to increase the security cooperation, covering marine safety and security, human trafficking, counter-terrorism, and cyber security.
- A **permanent Secretariat** was established in **Colombo**. This Secretariat coordinates all activities of the conclave and is also responsible for the implementation of decisions take at NSA level.

Background

- At the 4th NSA-level meeting, India, Sri Lanka and the Maldives agreed to expand the scope and membership of the group and rename it as the Colombo Security Conclave.
- This meeting was held in trilateral format. It was held in Colombo in November 2020.

CSC Focused Operation

- In November 2021, India, Maldives and Sri Lanka had conducted a two-day maritime operation in the Indian Ocean region.
- The CSC Focused Operation was aimed at keeping the vital part of the Indian Ocean safe and secure for commercial shipping and international trade.

Significance

- This India-driven mini-lateral grouping is being seen as India's outreach to the Indian Ocean to underline regional co-operation and shared security objectives.
- CSC hopes to restrict China's influence in an area of strategic importance, and to reduce the Chinese footprint in the member countries.
- Country's national security is deeply intertwined with the collective security aspirations in the Indian Ocean Region.
- Geographical proximity of the member countries allows them to be first responders for each other in crisis situations.
 - E.g., Indian Coast Guard helped douse the MT New Diamond and X-press Pearl ship fires in Sri Lankan waters

- In this context, **CSC is being described as the region's 911** (the number "911" is the universal emergency number in the United States).

Joint Declaration On Privacy and Protection of Personal Data

- European Union along with 9 other countries, including India, has called for **international cooperation** with the aim to **promote data protection and the standards of privacy**.
- The other countries are - Australia, Comoros, Japan, Mauritius, New Zealand, Republic of Korea, Singapore, Sri Lanka.

Key Highlights

- International cooperation to promote high data protection & privacy standards would be based on:
 - Comprehensive legal frameworks and policies covering both the private and public sectors;
 - Core principles such as lawfulness, fairness, transparency, purpose limitation, data minimisation, limited data retention, data security and accountability;
 - Enforceable rights of individuals, such as access, rectification, deletion, and safeguards with respect to automated decision-making such as transparency and the possibility to challenge the outcome;
 - Safeguards for international transfers to enable cross-border data flows by ensuring that the protection travels with the data;
 - Independent oversight by a dedicated supervisory authority and effective redress.
- The aim is to create a world where data moves easily between jurisdictions, in compliance with the relevant applicable legal frameworks, among supervisory authorities across borders.

Different Exercises

EX-DUSTLIK	<ul style="list-style-type: none"> • The 3rd edition of joint training exercise, EX-DUSTLIK was conducted at Yangiariq, Uzbekistan. • It is a joint training exercise that is conducted between the armies of India and Uzbekistan.
Suraksha Kavach 2	<ul style="list-style-type: none"> • It was a joint exercise between Indian Army and Maharashtra Police, organised at Pune. • The aim of the exercise was to harmonize the drills and procedures undertaken by Army and Police to counter any likely terrorist actions in Pune.
Lamitiye 2022	<ul style="list-style-type: none"> • The 9th edition of the Joint Military Exercise Lamitiye 2022 was held at Seychelles. • It is a joint military exercise between the Indian Army and Seychelles Defence Forces (SDF). • Lamitiye, which in Creole means friendship, is a biennial training event being conducted in Seychelles since 2001.
Dharma Guardian-2022	<ul style="list-style-type: none"> • Ex. DHARMA GUARDIAN-2022 is an annual exercise between Indian Army and Japanese Ground Self Defence Force. It is conducted in India since 2018. • This edition of exercise was conducted at foreign training node, Belagavi (Belgaum, Karnataka). • Other Military Exercises between India and Japan <ul style="list-style-type: none"> ✓ JIMEX (naval exercise) ✓ SHINYUU Maitri (involves Air Force of both the countries)

	✓ Malabar (India, Japan, Australia, USA)
SLINEX	<ul style="list-style-type: none"> • The 9th edition of Sri Lanka-India Naval Exercise SLINEX was conducted at Visakhapatnam. • The exercise aims to enhance inter-operability, improve mutual understanding and exchange best practices and procedures for multi-faceted maritime operations between both navies.

Assam-Meghalaya Border Pact

Assam and Meghalaya have *partially* resolved a 50-year-old border **dispute in six of the 12 sectors along their 885-km boundary.**

What Has Been Agreed Upon

- Out of the disputed 36.79 sq. km land, Assam will get 18.51 sq. km of the disputed areas and Meghalaya will get the remaining 18.28 sq.km.
- About 70% of the inter-State boundary has now become dispute-free with the signing of the agreement.
- The problem in the six other areas will be resolved in the near future.

Remaining Six-Disputed Sectors Between These Two States

- o Tarabari, Gizang, Hahim, Boklapara, Khanapara-Pillangkata and Ratacherra under the Kamrup, Kamrup (Metro) and Cachar districts of Assam and
- o West Khasi Hills, Ri-Bhoi and East Jaintia Hills districts of Meghalaya.

What Lies Ahead

- The freshly demarcated border will have to be passed by Parliament by amending the North Eastern Region (reorganisation) Act, 1971.
- This will then have to be ratified by the legislative assemblies of both the states.

Background

- Meghalaya was carved out of Assam under the Assam Reorganisation Act, 1971. This act has been challenged by both the parties which led to the boundary dispute.
- There were 12 points of dispute along their borders. These include the areas of:
 - o Upper Tarabari, Gazang reserve forest, Hahim, Langpih, Borduar, Boklapara, Nongwah, Matamur, Khanapara-Pilangkata, Deshdemoreah Block I and Block II, Khanduli and Retacherra.
- The two States had in June 2021 adopted a give-and-take policy to start the process of resolving the boundary dispute. For this, they constituted three regional committees each.
- The current draft resolution was prepared on the basis of recommendations of these regional panels.
 - o It had proposed dividing the disputed 36.79 sq. km land in the six areas of difference between the two States.

2nd Part of Sixth Assessment Report (AR6)

The Intergovernmental Panel on Climate Change (IPCC) released the second part of 6th assessment report.

Important Finding of The Report

- The report states that the impacts of climate change were greater, more persistent and widely more disruptive than ever before.
- More than 3.5 billion people (45% of the global population), were living in areas most vulnerable to climate change.
- If the temperature rise crossed the threshold of 1.5°C from pre-industrial times, then many changes could be irreversible.
- Global sea levels will likely rise 44-76 cm this century if governments meet their current emission-cutting pledges.
- Vector-borne and water-borne diseases such as malaria or dengue are increasing due to climate change, especially in subtropical regions of Asia.
- Communicable, respiratory, diabetic and infectious diseases as well as infant mortality rates are likely to increase with the rise in temperature.

India Specific Findings

- The report identifies India as one of the vulnerable hotspots, with many regions and important cities facing a very high risk of climate disasters such as floods, sea level rise and heat waves.
- Urban India is at greater risk than other areas with a projected population of 877 million by 2050, nearly double of 480 million in 2020.
- Mumbai is at high risk of sea-level rise and flooding, Ahmedabad faces serious danger of heat-waves. Several cities, including Chennai, Bhubaneshwar, Patna and Lucknow, are approaching dangerous levels of heat and humidity.

Significance

- The latest report assesses for the first time the regional and sectoral impacts of climate change. It covers the *risks and vulnerabilities* of mega-cities around the world.
- It has warned of several climate change-induced disasters over the next two decades, even if strong action is taken to reduce emissions of greenhouse gas emissions.
- Also for the first time, the IPCC report has looked at the health impacts of climate change.

About The Report

- The first part of report was released in August 2021.
- The third and final part of the report is expected to come out in April 2022.
- The Assessment Reports, the first of which had come out in 1990.
- It is the most comprehensive evaluations of the state of the earth's climate.
- The four subsequent assessment reports came out in 1995, 2001, 2007 and 2015.
- Each assessment report has built on the work of the previous ones, adding more evidence, information and data, so that most of the conclusions about climate change and its impacts have far greater clarity, certainty and wealth of new evidence now, than earlier.
- These reports, on their own, are not **policy prescriptive**. They do not tell countries or governments what to do. They are only meant to present factual situations with as much scientific evidence as is possible.

About (IPCC)

- It is an intergovernmental body of the United Nations established in 1988 by World Meteorological Organization (WMO) and United Nations Environment Programme (UNEP).
- Headquarter is at Geneva (Switzerland), it serves to provide policy makers with a regular assessment of the scientific basis of climate change, its impacts and future risks, and adaptation and mitigation options.

{For more details on first part of AR6 refer August Recitals}

Wet Bulb Temperature

Part 2 of the sixth assessment report of IPCC, emphasised on the trend in the 'Wet Bulb' Temperature in South Asia.

About Wet Bulb Temperature

- It is the lowest temperature that can be cooled by the evaporation of water in the air at constant pressure. It can be measured by using a thermometer with the bulb wrapped in wet muslin.
- It is a threshold that considers heat and humidity beyond which humans cannot tolerate high temperatures.
- It is the temperature of adiabatic saturation indicated by a moistened thermometer bulb exposed to the air flow.
- A wet-bulb temperature of 31 degrees Celsius is extremely dangerous for humans, while a value of 35 degrees is un-survivable for more than about six hours, even for fit and healthy adults
- At present, wet-bulb temperatures in India rarely exceed 31 degrees C, with most of the country experiencing maximum wet-bulb temperatures of 25-30 degrees C, according to IPCC.
- It notes that if emissions are cut, but only by the levels currently promised, many parts of northern and coastal India would reach extremely dangerous wet-bulb temperatures of over 31 degrees C towards the end of the century.

UN Resolution To End Plastic Pollution

175 countries supported a landmark resolution at the **United Nations Environment Assembly** to end plastic pollution and reach an internationally legally binding agreement by 2024.

About The Treaty

- This historic resolution, entitled "End Plastic Pollution: Towards an internationally legally binding instrument".
- The decision was made at a meeting of the UN Environment Assembly in Nairobi.
- The resolution, based on three preliminary draft resolutions from different countries, establishes an **Intergovernmental Negotiating Committee (INC)** that aims to complete a draft of a legally binding agreement by the end of 2024.
- It is expected to introduce a legally binding tool, which will reflect the diverse options for addressing the full life cycle of plastics, the design of reusable and recyclable products.

Why Need for The Treaty?

- Plastic production soared from two million tonnes in 1950, to 367 million tonnes in 2020, becoming a global industry valued at \$522.6 billion. It is expected to double in capacity, by 2040.
- The impacts of plastic production and pollution on the triple planetary crisis of climate change, nature loss and pollution are a catastrophe in the making.

- Exposure to plastics harms human health, and potentially affecting fertility, hormonal, metabolic and neurological activity. Open burning of plastics contributes to air pollution.
- By 2050 greenhouse gas emissions associated with plastic production, use and disposal would account for 15% of allowed emissions, under the goal of limiting global warming to 1.5°C in line with the Paris Agreement on climate change.
- More than 800 marine and coastal species are affected by this pollution through ingestion, entanglement, and other dangers.
- About 11 million tons of plastic waste flows into the oceans annually. This could triple by 2040.

A Shift To A Circular Economy Can

- reduce the volume of plastics entering oceans by over 80% by 2040
- Reduce virgin plastic production by 55%
- Save governments US\$70 billion by 2040;
- Reduce greenhouse gas emissions by 25%; and create 700,000 additional jobs – mainly in the global south.


United Nations Environment Assembly (UNEA)








- It was created in June 2012, when world leaders called for the UN Environment to be strengthened and upgraded during the United Nations Conference on Sustainable Development, also referred to as RIO+20.
- It is the world’s highest-level decision-making body on the environment.
- It meets biennially to set priorities for global environmental policies and develop international environmental law.




World Wildlife Day

- World Wildlife Day on March 3rd annually dedicates a celebration to all life on our planet.
- On 20 December 2013, at 68th session, the United Nations General Assembly (UNGA) proclaimed 3 March as world wildlife day.
- The date chosen coincides with the day of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) which was signed in 1973.

Species In News

<p>Dugong</p> 	<ul style="list-style-type: none"> • The Tamil Nadu government has decided to go ahead with the establishment of India's first conservation reserve for dugong in the Gulf of Mannar, the Palk Bay. • It is also known as Sea Cow, which is a herbivorous marine mammal. • They are found in over 30 countries and in India are seen in the Gulf of Mannar, Gulf of Kutch, Palk Bay, and the Andaman and Nicobar Islands. • It is listed as Vulnerable in the IUCN Red List and Schedule I in the Wild life protection act 1972. • Threats: 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. Dugong meat is consumed under the wrong impression that it cools down human body temperature
<p>Maxillaria anacatalina-portillae</p>	<ul style="list-style-type: none"> • Scientists have described a new species of the Neotropical orchid from cloud rainforests of northern Ecuador.

	<ul style="list-style-type: none"> • This plant is unique with its showy, intense yellow flowers. • Based on the small number of known populations and restricted area of distribution, it should be classified as Critically Endangered in the IUCN Red list.
<p>Glycosmis albicarpa</p> 	<ul style="list-style-type: none"> • Scientists from the Botanical Survey of India (BSI) have discovered a new gin berry species from the Kanyakumari Wildlife Sanctuary in Tamil Nadu. • The species has a distinct large white fruit. • It is endemic to the southern Western Ghats. • The species belongs to the orange family, Rutaceae. • Many of the related plants of these taxonomic groups are being utilised for their medicinal values and food.
<p>Indian Grey Hornbill</p> 	<ul style="list-style-type: none"> • The forest department has released 20 Indian grey hornbills in three batches. • It is a common hornbill found on the Indian subcontinent. • It is mostly arboreal and has grey feathers all over the body. • It is listed as Least Concern in the IUCN red list. • They are threatened primarily by habitat loss in the city and the cutting down of large trees.
<p>Syllipsimopodi bideni</p> 	<ul style="list-style-type: none"> • Scientists said a fossil named Syllipsimopodi bideni represents the oldest known relative of today's octopuses and boasts 10 arms. • Syllipsimopodi represents the only member of the octopus lineage with 10 arms, meaning two were lost in later evolution. • It is about 12 cm long, had a torpedo shaped body and squid like appearance though it was not closely related to squids.
<p>Halari donkey</p> 	<ul style="list-style-type: none"> • It is native to Saurashtra region in Gujarat. • Currently it is an endangered species. A 2015 survey found that 1200 individuals of the breed were present. However, in a recent survey conducted in 2021-22, this number has come down to 439 people.
<p>Sawfish</p> 	<ul style="list-style-type: none"> • Also known as carpenter sharks, they have a long-flattened head and body and an elongated snout, much like that of the saw shark. • The species can grow more than seven metre in length. • Their long-flattened snouts (or saws) with tooth-like edges make them vulnerable to fishing nets. • According to IUCN, all 7 species of sawfish are listed as Critically Endangered.
<p>Himalayan Griffon Vulture</p> 	<ul style="list-style-type: none"> • The Himalayan vulture or Himalayan griffon vulture is an Old World vulture native to the Himalayas and the adjacent Tibetan Plateau. • It is listed as Near Threatened on IUCN Red List. • They are susceptible to poisoning induced by diclofenac, a drug whose residues are in carcasses of domestic animals.
<p>Spotted Deer</p>	<ul style="list-style-type: none"> • Also known as chital, chital deer, and axis deer. • It is sexually dimorphic, males are larger than females, and antlers are present only on males. • The upper parts are golden to rufous, completely covered in white spots.

	<ul style="list-style-type: none"> It is listed as least concern on the IUCN Red List and under Schedule III of the Indian Wildlife Protection Act (1972).
<p>Drosophila Melanogaster</p> 	<ul style="list-style-type: none"> It is a species of fly, which is a common pest in homes, restaurants, and other places where food is served. The species is often referred to as the fruit fly, or less commonly the vinegar fly or pomace fly. Its geographic range includes all continents, including islands.
<p>Rough-toothed Dolphin</p> 	<ul style="list-style-type: none"> It is a species of dolphin that can be found in deep warm and tropical waters around the world. Their common name was based on the ridges found on their teeth, which are unique to this species. These small members of the dolphin family usually travel in small, tight-knit groups of two to 20 individuals. It is listed as Least Concern on the IUCN Red List.

Density of Tigers in Sunderbans

Preliminary findings of a study by the Wildlife Institute of India (WII) suggest that the density of tigers in the Sunderbans may have reached the carrying capacity.

About Carrying Capacity

- The carrying capacity of an environment is the maximum population size of a biological species that can be sustained by that specific environment, given the food, habitat, water, mates and other resources available. It can be defined as the average population size of a species in a particular habitat.
- If these needs are not met, the population will decrease until resources are replenished.

Findings

- The correlation between prey availability and tiger density is fairly established.
- Availability of food and space is the primary factor that determines how many tigers a forest can hold.
- There is even a simple linear regression explaining the relationship in the 2018 All-India Tiger report that put the carrying capacity in the Sunderbans at around 4 tigers per 100 sq km
- A joint India-Bangladesh study in 2015 estimated tiger density at 2.85 per 100 sq km after surveying eight blocks spread over 2,913 sq km across international borders in the Sundarbans.
- The ongoing WII study indicates a density of 3-5 tigers per 100 sq km in the Sunderbans.
- 88 tigers were estimated in 2,313 sq km of the Sundarbans in 2018.

- In the Terai and Shivalik hills habitat — eg. Corbett tiger reserve— 10-16 tigers can survive in 100 sq km.
- This slides to 7-11 tigers per 100 sq km in the reserves of north-central Western Ghats such as Bandipur, and to 6-10 tigers per 100 sq km in the dry deciduous forests, such as Kanha, of central India.

Yilan Crater

- Geologists have discovered a crater named Yilan Crater.
- Prior to 2020, only one impact crater “Xiuyan Crater” was discovered in Liaoning province.

- Then, in 2021, Yilan crater was discovered in heavily forested Lesser Xing'an mountain range. The local residents knew it as "Quanshan," or "circular mountain ridge."
- Yilan crater is slightly larger than Xiuyan. It is 1.85 km in diameter and is located in the northeast of China's Heilongjiang Province.
- Its southern rim has eroded, but its northern rim is visible on the surface as a crescent-shaped ridge.
- Carbon dating sediments suggest that this crater was formed between 46,000- 53,000 years ago. Thus, it is the largest crater on Earth under 100,000 years old.

Karewas

The highly fertile alluvial soil of Kashmir called Karewas is being destroyed in the name of development.

About Karewas

- These are lacustrine deposits (deposits in lake) in the Valley of Kashmir and in Bhadarwah Valley of the Jammu Division.
- Karewas are the thick deposits of glacial clay and other materials embedded with moraines. These are **unconsolidated to semi-consolidated** lacustrine deposits.
- "Vudr" is the local name for Karewas in Kashmiri language.
- These are the **flat-topped mounds** that border the Kashmir Valley on all sides.
- Karewas were formed during the **Pleistocene Period**, when the entire Valley of Kashmir was under water.
- Due to the rise of Pirpanjal, the drainage was impounded and a lake of about 5000 sq. km area was developed and thus a basin was formed.
- Subsequently, the lake was drained through Bramulla gorge. The deposits left in the process are known as karewas.
- Karewa deposits have different soil and sediments such as sand, clay, silt, shale, mud, lignite and losses. Hence, these are very useful for agricultural and horticulture activities.
- Karewas are most suitable for the cultivation of saffron, almonds, apples, and other cash crops.

Effect of Destruction of Karewas

- The government is using such fertile soil for filling at construction sites.
- Dust from the mining of karewas settles in low-lying areas where people live.
- Also, constant movement of diesel-guzzling trucks causes pollution. Almost every household has people suffering from respiratory problems.
- Destruction of karewas has also led to the enormous accumulation of silt in the Jhelum River.

Degradation of Coral Reefs

IPCC's AR6 report on Impact, Adaption and Vulnerability talks about the degradation and loss of coral reefs.

Major Findings of This Report

- The coral occupies only 0.1% of the global sea surface. But more than 25% of marine biodiversity is supported by them.
- The report talks about the effects of global warming and anthropogenic activities on Asia's coral reefs.
- The oceans absorb more than 93% of the excessive heat from global warming and lot of this heat is going to the Indian Ocean and surrounding seas.

- The loss and degradation of coral reefs can affect the livelihood of about 4.5 million people in southeast Asia and the Indian Ocean.
- In the coral reef fisheries sector, there are about 3.35 million fishers in southeast Asia and 1.5 million fishers in the Indian Ocean.
- Some 571 coral species have been severely impacted in the South China Sea by global climate changes and anthropogenic activities.
- The risk of **coral diseases** has been found to be high in Indonesia's Papua province, the Philippines, Japan, India, northern Maldives, Persian Gulf and Red Sea.
- Coral growth was predicted to decline by the end of this century and human activities were one such factor that had contributed to the reduction in growth.

Cause Of Degradation

- The reefs are being bleached and are dying due to changes in the beneficial microorganisms of coral, caused by environmental stress.
- Each coral reef is made up of colonies of tiny animals called polyps. Each polyp produces calcium carbonate, which makes up their skeleton and protects corals internal bodies. The coral polyps live in an endosymbiotic relationship with algae. Algae provides up to 90% of the coral's energy.
- **Increased seawater temperature** has been found to affect the functioning of *symbiotic algae* of corals and its bacterial consortia, leading to coral bleaching and mortality.
- Increase in pathogen abundance and increase in susceptibility of the host reef, has led to a rise in the severity of coral diseases.

Way Forward

- Improve water quality in coral reefs, which will increase its resilience to climate change.
- Reduce our carbon footprint.
- Do not litter the beach or in the ocean, as leaving behind things like fishing nets or general trash on the beach can damage coral reefs.
- Avoid near shore development and construction.

Amazon Rainforest Close to Tipping Point

A new study is published in Nature Climate Change that warned about the Amazon rainforest which is closed to its tipping point. In this study, researchers analyzed 30 years of satellite data to understand the resilience of the rainforest and how it has changed over the years.

Major Findings

- According to a new study, more than **75%** of the Amazon rainforest has been likely heading towards a tipping point since the early 2000s.
- Amazon may be losing its ability to bounce back from extreme events such as drought or fire, threatening to become a dry savanna-like ecosystem.
- A vicious cycle of damage could trigger "dieback" which is a condition in which a tree or shrub begins to die from the tip of its leaves or roots backwards, owing to disease or an unfavourable environment
- According to findings **deforestation** is on the rise, it totalled 430 square kilometres in January 2022, five times higher than the same month last year. Around a fifth of the rainforest has already been lost, compared to pre-industrial levels.
- This loss will affect the amount of rainfall. Trees take up water through the roots, releasing it into the atmosphere, influencing precipitation over South America.

- The analysis showed that the indicators of tipping points go up faster in areas with less rainfall and closer to human land use.

Significance of Amazon

- The Amazon's rainforest is home to 30% of the world's species, comprising 40,000 plant species, 16,000 tree species, 1,300 birds and more than 430 species of mammals.
- The rainforest is also a **carbon sink**, a place that absorbs more carbon dioxide than it leaves.

Savanna Ecosystem

- The savanna ecosystem is a tropical grassland with warm temperatures year-round.
- Savannas are also characterised by seasonal water availability, with the majority of rainfall confined to one season, in the summer.
- The savanna is characterized by grasses and small or dispersed trees that do not form a closed canopy, allowing sunlight to reach the ground.

Chilika Lake

Odisha government has proposed to ban movement of mechanised fishing boats in Mangalajodi area on the banks of Chilika lake.

- Mangalajodi is an oldest village under Tangi block in Khordha district of Odisha at the northern edge of Chilika Lake.
- Mangalajodi is recognised as globally important for the conservation of birds. Migratory birds arrive there for roosting.
- However, no statutory rules and regulations are there for protecting the 8.3-sq.km marshland with emergent vegetation.
- Many occasions and festivals are celebrated in Mangalajodi. Danda Yatra is one of the oldest ritual occasions celebrated in the month of Chaitra. Paika Akhada is another dance performed by some villager

About Chilika Lake

- Chilika lake is Asia's largest and world's second-largest brackish water lagoon after The New Caledonian barrier reef. It is the biggest lake of India after Vembanad Lake.
- It has been listed as a tentative UNESCO World Heritage site.
- Chilika lake hosts many migrating birds like White bellied sea eagles, Graylag geese, purple moorhen, flamingo jacana and herons.
- It is also a habitat of one of biggest breeding places of flamingos in the world.

{For more about Chilika lake refer January recitals}

Flood Plain Zoning

The states of Manipur, Rajasthan, Uttarakhand and erstwhile State of Jammu & Kashmir had enacted flood plain zoning approach.

About Flood Plain Zoning

- It has been recognized as an effective **non-structural** measure for flood management.
- Flood-plain zoning measures are intended to demarcate areas likely to be affected by floods of varying magnitude or frequencies and probability levels.
- It also aims to specify the types of permissible developments in these zones, so that whenever floods actually occur, the damage can be minimised.

India's Status of Vulnerability to Floods

- The assessment of flood prone area of the country has been carried out by different expert committees.
- The Rashtriya Barh Ayog (RBA) had, in the year 1980, estimated the total area liable to floods in the country as 40 Mha.
- The extent of maximum area affected by floods as per the Working Group (WG) Report on Flood Management and Region-Specific Issues in 2011 is 49.815 Mha.
- On an average 7.5 million hectares of land are affected every year, 1,600 people lose their lives and crops, homes and public utilities are damaged due to floods.

Project Dolphin

Ministry of Jal Shakti expressed his displeasure over the slow pace of the approval process for Project Dolphin at a meeting of the Empowered Task Force (ETF) on Ganga

About Project Dolphin

- It is an ambitious inter-ministerial initiative of the government, which was approved at the first meeting of the **National Ganga Council (NGC)** under the chairmanship of the PM in 2019.
- Project Dolphin is one of the activities planned under Arth Ganga.
- It aims at the conservation and protection of the Dolphins in rivers and oceans of the country.
- It is expected to be implemented by the Ministry of Environment, Forest and Climate Change.
- The National Mission for Clean Ganga (NMCG), which implements the government's flagship scheme Namami Gange, has been taking some initiatives for saving dolphins.
- Project Dolphin will be on the lines of Project Tiger, which has helped increase the tiger population

National Dolphin Day

- Union Environment Ministry has designated October 5 as National Dolphin Day, to be observed annually starting this year.
- National Board for Wildlife's (NBWL) standing committee took this decision to designate this day.
- The day will also focus on people's participation for the conservation of dolphins.
- The focus will also be on improving the water quality and flow of Ganga and its tributaries so that the Ganges dolphins can survive.

{For more about dolphins refer November 2021 recitals}

Permafrost Peatlands

A new study warns that the expansion of frozen permafrost peatlands, carbon-storing lands in Europe and western Siberia, may be happening faster than expected.

Efforts Lost

- By 2040, northern Europe might become too wet and warm to support permafrost peatlands.
- By 2060, these areas could lose 75% under moderate efforts to mitigate climate change. The figure could go as high as 81% and 93% if the world does little to address the issue.

About Permafrost Peatland

- Some peatlands are buried under frozen ground or permafrost and exist as permafrost peatlands.
- They are found in the northern parts of Alaska, Canada, Russia and parts of northern Europe.
- Frozen wetlands in Europe and western Siberia store up to 39 billion tonnes of carbon.

- This is equivalent to twice that is held by the whole of European forests.

About Peatlands

- Peatlands are a class of wetlands, which are ecosystems flooded with water.
- Waterlogged conditions limit microbial decay of dead plant materials rich in carbon dioxide.
- This prevents the reintroduction of the gas into the atmosphere
- They are a type of wetland which occur in almost every country and are known to cover at least 3% of global land surface.

Why Peatlands Are Important?

- They are critical for preventing and mitigating the effects of climate change, preserving biodiversity, minimising flood risk, and ensuring safe drinking water.
- They are the largest natural terrestrial carbon store. They store more carbon than all other vegetation types in the world combined.
- Damaged peatlands are a major source of greenhouse gas emissions, responsible for almost 5% of global anthropogenic CO2 emissions.

{For more on thawing permafrost refer September 2021 Recitals}

Zoji La

- Zoji La is a high mountain pass in the Himalayas in the Indian UT of Ladakh.
- It provides a vital link between Ladakh and Kashmir Valley.
- It is **the second highest pass** after Fotu La on the Srinagar-Leh National Highway.
- During the Indo-Pakistani War of 1947–1948, Zoji La was confiscated by the Pakistanis. The pass was captured by the Indian Army in an attack called Operation Bison on 1 November.
- Since heavy snowfall stops vehicular flow every year during winters, the all-weather Zoji-La Tunnel has now been constructed to reduce it.

Deep Ocean Mission (DOM)

The Ministry of Earth Sciences has launched the Deep Ocean Mission (DOM).

About DOM

- Deep Ocean Mission will be a mission mode project to support the Blue Economy Initiatives of the Government of India.
- Ministry of Earth Sciences (MoES) will be the nodal Ministry implementing this multi-institutional ambitious mission.
- ISRO is one of the collaborators for implementation of this Mission.
- The mission is expected to explore the deep ocean for resources and at the same time, develop deep sea technologies that can be used for sustainable use of ocean resources.

DEEP OCEAN MISSION	
<ul style="list-style-type: none"> ➤ Deep Sea Mining through 'Underwater Vehicles' and 'Underwater Robotics' ➤ Asserting exclusive rights to explore polymetallic nodules from seabed over 75,000 sq km of areas in international water ➤ Estimated polymetallic nodules resource potential: 380 million tonnes (MT) 	<p>THESE POLYMETALLIC NODULES CONTAIN</p> <p>Manganese 92.6 MT</p> <p>Nickel 4.7</p> <p>Copper 4.3</p> <p>Cobalt 1</p> <p>(*figures are rounded off)</p>
<ul style="list-style-type: none"> ➤ Development of ocean climate change advisory services ➤ Technology for sustainable utilisation of marine bio-resources 	<ul style="list-style-type: none"> ➤ Deep ocean survey and exploration ➤ Energy from the ocean and offshore-based desalination ➤ Krill fishery from southern ocean

- India has been allotted a site of 75,000 square kilometres in the **Central Indian Ocean Basin (CIOB)** by the **International Seabed Authority (ISA)** for the exploitation of Polymetallic Nodules (PMN).
- The Ministry of Earth Sciences is carrying out exploration activities for Poly-metallic Nodules (PMN) in the

CIOB and for Poly-metallic Sulphides (PMS) in parts of Central and South-West Indian ridges.

- India was the first country to receive the status of a **‘Pioneer Investor’ in 1987** and was given an area of about **1.5 lakh sq km** in the CIOB for nodule exploration.
- In 2002, India signed a contract with the ISA and after complete resource analysis of the seabed **50% was surrendered** and the country retained an area of 75,000 sq km.

{For more details on Components of DOM refer June 2021 recitals}

Boma Technique

Boma technique undertaken at **Keoladeo National Park** for capturing and translocating spotted deer is set to improve the prey base in **Mukundara Hills Tiger Reserve**.

About Boma Capturing Technique

- It is popular in Africa. It involves the luring of animals into an enclosure by chasing them through funnel-like fencing.
- The funnel tapers into an animal selection-cum-loading chute supported with grass mats and a green net to make it opaque for animals, which are herded into a large vehicle for their transport to another location.
- This age-old technique was previously used to capture wild elephants for training and service.

Keoladeo National Park	Mukundara Hills Tiger Reserve
<ul style="list-style-type: none"> ● It is located in the State of Rajasthan. ● It was designated a Wetland of International Importance under the Ramsar Convention in 1981. ● It was declared a national park in 1982 and was listed as a World Heritage Site by UNESCO in 1985. 	<ul style="list-style-type: none"> ● It is located near Kota, Rajasthan. ● The park is situated in a valley formed by two parallel mountains viz. Mukundra and Gargola. ● It was declared a Wildlife Sanctuary in 1955 and a National Park in 2004. ● It was notified as a Tiger Reserve in 2013

Vedanthangal Bird Sanctuary

Environment Ministry’s Expert Appraisal Committee has recommended grant of environment clearance for Sun Pharmaceuticals Industries Ltd.’s expansion project in Tamil Nadu’s Madurantakam taluk, around 3.7 km from the Vedanthangal Bird Sanctuary.

About Vedanthangal Bird Sanctuary

- It is a protected area located in the Madurantakam taluk of Chengalpattu District.
- The British government took steps to develop Vedanthangal as a bird sanctuary as early as 1798. It was established in 1858 by order of the Collector of Chengalpattu.
- More than 40,000 birds, from various parts of the world visit the sanctuary during the migratory season every year. It is home to the pintail, gargantuan, gray wagtail, blue-winged teal, common sandpiper and similar migratory birds.

India’s Arctic Policy

The Centre released **India’s Arctic Policy**, with the aim of enhancing the country’s cooperation with the resource-rich and rapidly transforming region.

- India holds one of the 13 positions as the **Observer** in the Arctic Council.
- India’s engagement with the Arctic began when it signed the Svalbard Treaty in 1920 in Paris concerning Spitsbergen.

- Spitsbergen is the largest island of the Svalbard archipelago, part of Norway, in the Arctic Ocean. Spitsbergen is the only permanently inhabited part of Svalbard.

- India initiated its Arctic research program in 2007 with a focus on climate change

About India's Arctic Policy

- India's Arctic policy titled '**India and the Arctic: building a partnership for sustainable development**'
- The policy is built on **six central pillars** - science and research, climate and environmental protection, economic and human development, transportation and connectivity, governance and international cooperation, and national capacity building.
- Policy shall be implemented through an action plan, and an effective governance and review mechanism involving the inter-ministerial **Empowered Arctic Policy Group**.

Significance Of This Policy

- It aims to strengthen **national capabilities and competencies** in science and exploration, climate and environmental protection, maritime and economic cooperation with the Arctic region.
- It seeks to strengthen **institutional and human resource capacities** within the government and academic, research and business institutions through inter-ministerial coordination in pursuit of India's interests in the Arctic.
- It aims to offer a better analysis of the **implications of ice melting** in the Arctic on global shipping routes, energy security and exploitation of mineral wealth.
- The policy also seeks to **combat climate change** and protect the environment in the region, which is warming three times faster than the rest of the world.
- India also plans to study the impact of climate change in the Arctic, to improve response mechanisms across the world.
- The policy further lays down plans to **deploy space technology** to better study the Arctic region.
- It also seeks to **study the linkages between polar-regions and Himalayas** and deepen the cooperation between India and the countries of the Arctic region under various Arctic forums.
- It also seeks to increase **India's participation in the Arctic Council** and improve understanding of the complex governance structures in the Arctic, relevant international laws and geopolitics of the region

Mercury Pollution

Combating the global trafficking of mercury is discussed in the 2nd round of the fourth meeting of the Conference of the Parties to the Minamata Convention on Mercury (**COP-4.2**). **The declaration was read in Nusa Dua, Bali (Indonesia)**

Objectives of the Declaration: The non-binding declaration calls upon parties to:

- Develop practical tools and notification and information-sharing systems for monitoring and managing trade in mercury.
- Exchange experiences and practices relating to combating illegal trade in mercury, including reducing the use of mercury in artisanal and small-scale gold mining.
- Share examples of national legislation and data and information related to such trade.

About Minamata Convention on Mercury

- It is a multilateral environmental agreement that addresses specific human activities which are contributing to widespread mercury pollution.
- It is a UN treaty coming under the United Nations Environment Programme (UNEP).

- It is the world's first legally binding treaty that was adopted in 2013 and entered into force in August, 2017.
- India has ratified the Convention in 2018.
- Some 137 parties and countries are working together to control the supply and trade of mercury, reduce use, emissions and release mercury.
- The treaty also covers areas such as identification of at-risk populations, improving health facilities, and training health workers to better deal with mercury-related illnesses and diseases.

About Mercury

- Mercury is a naturally occurring element found in air, water and soil.
- It is released into the atmosphere through natural processes such as weathering of rocks, volcanic eruptions, geothermal activities.
- It is recognized by WHO as one of the top ten chemicals or groups of chemicals of major public health concern.
- Even small amounts of mercury can be toxic and have serious health effects-on the nervous, digestive and immune systems, and on the lungs, kidneys, skin and eyes.

About Minamata Disease

- It is caused by **methylmercury** poisoning which was first described in the inhabitants of Minamata Bay, Japan.
- This is due to the daily consumption of large amounts of fish and shellfish that were highly contaminated with the toxic chemical.
- The disease is characterized by peripheral sensory loss, tremors, and both hearing and visual impairment.

World Air Quality Report 2021

World Air Quality Report released recently which is prepared by Swiss organisation IQAir.

About This Report

- The report is based on PM2.5 air quality data from 6,475 cities in 117 countries, regions and territories around the world.
- The data used to create this report was generated by tens of thousands of regulatory and low-cost air quality monitoring stations operated by governments, non-profit organizations, research institutions etc.

Highlights Of This Report

- Air pollution continued to spike to unhealthy levels in 2021.
- The report revealed that not a single country managed to meet the WHO's air quality standard in 2021
- Bangladesh was the most polluted country, followed by Chad, Pakistan and Tajikistan. **India was the fifth most polluted country.**
- **New Delhi** continues to be the world's most polluted capital city for the fourth consecutive year.
- The index listed 35 Indian cities with the worst air quality tag for 2021 with Rajasthan's **Bhiwadi** topping the list followed closely by Uttar Pradesh's Ghaziabad.
- In 2021, 48% of India's cities exceeded 50 µg/m³, or more than 10 times the WHO guideline.
- Air pollution accounting for seven million deaths around the world every year.
- The estimated daily economic cost of air pollution is estimated at \$8 billion (USD), or 3 to 4 percent of gross world product.

Rooftop Solar Programme Phase-II

The Ministry of New and Renewable Energy is implementing Rooftop Solar Programme Phase-II for which the guidelines were issued in August 2019.

About Phase-II

- The programme will be implemented through DISCOMs. This will lead to ease of access for the consumers.
- Under this Programme **4000 MW** rooftop solar (RTS) capacity addition is targeted in residential sector through Central Financial Assistance (CFA).
- Under this scheme Ministry is providing a 40% subsidy for the first 3 kW and 20% subsidy beyond 3 kW and upto 10 kW of solar panel capacity
- For Residential Welfare Associations and Group Housing Societies, the CFA has been limited to 20% for the RTS plants for power supply to the common facilities with a maximum capacity of 500 kW.
- In addition, incentives up to 10% of the cost of rooftop solar are provided to Distribution Utilities depending upon achievements in capacity addition above baseline.
- The Programme is demand-driven and capacities are allocated based on demand received from Distribution Utilities and other state implementing agencies.

Key Objectives of The Programme

- To promote grid connected RTS in all consumer segments, viz., residential, institutional, social, Govt., commercial, industrial etc.
- To bring DISCOMs at forefront as key drivers for rapid deployment of RTS.
- To create awareness, capacity building, human resource development, etc.
- To promote sustainable business models.
- To promote domestic manufacturing of solar cells and module.

Why Needs This Programme

- As a part of Intended Nationally Determined Contributions (INDCs), India has committed to increase the share of installed capacity of electric power from non-fossil-fuel sources to **40% by 2030**. Solar energy is one of the main sources to accomplish the target of 40% of electric power from non-fossil-fuel.
- Government of India has set the target of achieving 100 GW of solar power capacity in the country by the year 2022 of which 40 GW to be achieved from rooftop solar (RTS).

Sujlam 2.0 Campaign

On world water day 23 March 2022, Union Jal Shakti Minister launches Sujlam 2.0 Campaign.

About The Mission

- This mission has been launched for **Grey Water Management**.
- **Nine ministries** sign joint advisory to undertake grey water activities as part of the campaign.
- Under the Campaign, ministries plan to mobilize communities, institutions like panchayats, schools, anganwadi to undertake management through people's Participation.
- Funds under National Health Mission (NHM), MGNREGS and 15th Finance Commission may be used to treat greywater at the healthcare centres and the treated water may be reused to recharge the groundwater.
- Creation of individual and community greywater management assets will be encouraged.
- With active participation from all States and local communities' great success was achieved under the Sujlam 1.0 campaign which was started in August 2021. More than 1 million soak pits were built at household and community level across the country.

About Gray-water

- It refers to domestic wastewater (generated in households or office buildings) without fecal contamination (e.g. washing dishes, laundry and bathing).
- Because it contains fewer pathogens, it is generally safe to handle and easy to treat and reuse onsite for toilet flushing, landscape or crop irrigation, and other non-potable uses.
- Every day, 31 billion litres of greywater are generated in India, according to estimates.

Lead Poisoning

High levels of lead were found in the blood of thousands of children living around the Kabwe mine in Zambia.

About Lead Poisoning

- Children under the age of 6 are particularly vulnerable to lead poisoning, which can seriously affect mental and physical development.
- It is a toxic substance that can cause serious health effects in humans and animals.
- At very high levels, lead poisoning can be fatal.
- Lead-based paint and lead-contaminated dust are common sources of lead poisoning. Other sources include contaminated air, water and soil.
- Lead poisoning can be hard to detect, even people who seem healthy can have high blood levels of lead. It accounts for about 0.6% of the global burden of disease.

Step Taken To Prevent Lead Poisoning

- WHO has identified lead as one of 10 chemicals of major public health concern.
- WHO along with the United Nations Environment Programme has formed the “Global Alliance to Eliminate Lead Paint” to promote a phase-out of the manufacture and sale of paints containing lead.
- The Ministry of Environment, Forest and Climate Change, Government of India has passed a notification in November 2016 and has prohibited manufacture, trade, import as well as export of paints containing lead or lead compounds in excess of 90 parts per million (ppm).

Hornbill Nest Adoption Program (HNAP)

Recently, the Hornbill Nest Adoption Program of Arunachal Pradesh celebrated a decade of successful conservation

- The Hornbill Nest Adoption Program (HNAP) is a community-based conservation initiative.
- Through this program tribal villagers protect **nest trees** of hornbills in forests around villages on the fringe of the Pakke Tiger Reserve, Arunachal Pradesh.
- It is led by hunter-turned-protectors from the Nyishi tribe.
- It was started in 2012, in partnership with the Arunachal Pradesh Forest Department and the Ghora-Aabhe Society (a local NGO).

About Hornbill

- Hornbills are a family of birds found in tropical and sub-tropical Africa, Asia and Melanesia.
- They are characterized by a long, downward-curving bill that is often brightly colored.
- They contribute immensely and play an important role in the process of ecological balance and conservation of ecosystems in the form of dispersal of forest plants. Hornbills are called ‘forest engineers’ or ‘farmers of forest’

- They are at risk of habitat hunting and destruction of large trees that are necessary for them to feed and build nests.
- India is home to nine species of hornbills. The northeastern region of India has the highest diversity of hornbill species. The Hornbill festival celebrated in Nagaland is named after the bird – Hornbill which is the most revered and admired bird for the Nagas.

Microplastics In Blood

Researchers have found microplastics in **blood samples** for the first time, according to a study in the Netherlands.

- Previous work had shown that microplastics were 10 times higher in the faeces of babies compared with adults and that babies fed with plastic bottles are swallowing millions of microplastic particles a day.

Key Findings

- The researchers adapted existing techniques to detect and analyze particles that were as small as **700 nanometers** in size
- About half of these plastic were Polyethylene Terephthalate (PET) plastics, which is used to make food grade bottles.
- The discovery shows the particles can travel around the body and may lodge in organs.
- The impact on health is as yet unknown.
- But researchers are concerned as microplastics cause damage to human cells in the laboratory.
- It can also latch on to the **outer membranes of red blood cells** and may limit their ability to transport oxygen.

About Microplastics

- These are small plastic pieces less than **five millimetres** in diameter.
- It come from a variety of sources, including from larger plastic debris that degrades into smaller and smaller pieces. They cause pollution by entering natural ecosystems.
- **Primary microplastics** are small pieces of plastic that are purposefully manufactured. They are commonly used in facial cleansers and cosmetics, or in air blasting techniques.
- On the other hand, **secondary microplastics** are small pieces of plastic obtained from the breakdown of larger plastic debris, both at sea and on land.

Thermobaric Weapon

According to reports from the Ukraine government and human rights groups, Russian forces in Ukraine may use thermobaric weapons.

About Thermobaric Weapon

- Thermobaric weapons are generally deployed as rockets or bomb.
- The thermobaric bomb involves a two-stage munition.
 - The first stage converts carbon-based fuel into minute metal particulates, which are discharged as an aerosol.
 - The second part detonates the aerosol, converting it into a huge fireball and simultaneously creating an impactful shock wave. Inside this shock wave, a vacuum is created, which draws in (sucks) the nearby oxygen and exponentially enhances the severity of the explosion.
- They work by releasing fuel and explosive charges. Different fuels can be used, including toxic powdered metals and organic matter containing oxidant.
- The explosive charge disperses a large cloud of fuel which then ignites in contact with the oxygen in the surrounding air.
- They can penetrate bunkers and other underground locations, starving the occupants of oxygen.
- It is also known as an **aerosol bomb, fuel-air explosive (FAE), or vacuum bomb**.
- Vacuum bombs are not prohibited by any international law or agreement, but their use against civilian populations in built-up areas, schools or hospitals, could attract action under the Hague Conventions of 1899 and 1907
- It causes significantly greater devastation than a conventional bomb of comparable size.

Cluster Munitions

- A cluster munition means a “conventional munition that is designed to disperse or release explosive submunitions each weighing less than 20 kilograms, and includes those explosive submunitions”.
- Cluster munitions are non-precision weapons that are designed to injure or kill human beings indiscriminately over a large area, and to destroy vehicles and infrastructure such as runways, railway or power transmission lines.
- They can be dropped from an aircraft or launched in a projectile that spins in flight, scattering many bomblets as it travels.
- Many of these bomblets end up not exploding, but continue to lie on the ground, often partially or fully hidden and difficult to locate and remove, posing a threat to the civilian population for long after the fighting has ceased.

Daylight Harvesting Technology

Ministry of Science & Technology has decided to promote a unique, possibly India's first, Start-up in latest Daylight Harvesting Technology.

About Daylight Harvesting Technology

- It is one of the most advanced techniques used in sustainable lighting designs for contemporary buildings.
- It is basically bringing natural sunlight inside the rooms.
- It automatically adjusts the brightness of light in conjecture to the amount of light available in that space.

- The systems use a light level sensor, a photosensor, to detect the prevailing light level, luminance or brightness, in open-loop or closed-loop systems.
- Photosensors are used to adjust electric lighting based on the available daylight in the space.

Significance

- The solar energy spectrum has 45% energy as visible light and this can be used to harvest building illumination for about 9-11 hours a day.
- The technology used is completely indigenous, economically viable and easy to deploy and requires minimal maintenance over a long period of time.
- This can reduce the consumption of electric lighting energy by **70-80%**, in addition to reducing the consumption of air-conditioning (cooling load).
- The daylight harvesting technology will be the next step towards a sustainable future.
- It will contribute to meet one of the commitments of the five nectars of “PANCHAMRIT” i.e., to make India a Net Zero emission country by 2070.

Kilonova

- Astronomers may have spotted the afterglow from an epic kilonova explosion.
- This kilonova scattering event has been seen with the Chandra X-ray Observer.
- Kilonovas occur when **two hyper-dense neutron stars collide**, which are the remnants of stars that died in supernova explosions.
- They produce a luminous flash of radioactive light that produces large quantities of important elements like silver, gold, platinum and uranium.
- A kilonova is 1,000 times brighter than a classical nova.

Europa Clipper

NASA Begins Assembly of Europa Clipper Spacecraft.

About Europa Clipper

- Formerly known as the Europa multiple flyby mission, it is an interplanetary mission being developed by NASA.
- The spacecraft is scheduled to launch in October 2024.
- It is being designed to study the **moon Europa** through a series of flybys while orbiting Jupiter.
- Europa is an icy moon of the planet Jupiter. It has long been a high priority for its exploration because it holds a salty liquid water ocean beneath its icy crust.
- The ultimate aim of this mission is to determine if Europa is habitable, possessing all three of the ingredients necessary for life: liquid water, chemical.

Noor 2 Satellite

Iran's Islamic Revolutionary Guard Corps (IRGC) successfully launched a military satellite, Noor-2, into orbit at an altitude of 500 km above Earth.

About Noor 2 Satellite

- This is the Islamic Republic's **second** military satellite launch.
- In April 2020, the first Noor military satellite was launched.

- Placing a second satellite in space would be a major advance for Iran's military.
- The satellite weighs 45 kg or less than 100 pounds.
- The three-stage Qased, or "Messenger", carrier launched the Noor 2, from Shahroud space port.
- Further details about the Noor-2 satellite were not released by the country's officials.

Newest Crater On Moon

- A leftover piece of a spacecraft flying through space, hit the surface of the moon, creating a new crater that may be around 65 feet wide.
- The piece of space was from the third-stage booster of **Chang'e 5-T1**, a lunar mission launched by the China in 2014.
- This is the first recorded unintentional case of space junk hitting the Moon.
- The speed, trajectory, and time of impact were calculated using earth-based telescope observations called Project Pluto (blog that tracks near-earth objects).

About Lunar Craters

- Lunar craters are impact craters on Earth's Moon.
- The Moon's surface has many craters, all of which were formed by impacts.
- International Astronomical Union currently recognizes 9,137 craters, of which 1,675 have been dated.
- The largest crater on the Moon is called **South Pole-Aitken Basin**.
- Craters on the moon are of a more permanent nature than those on earth. Moon's **lack of water, atmosphere, and tectonic plates**, there is little erosion, and craters are found that exceed two billion years in age.

About Space Junk

- Space junk also called space debris, is any piece of machinery or debris left by humans in space.
- This material is orbiting Earth but is no longer functional.
- It can refer to big objects such as dead satellites and can also refer to smaller things, like bits of debris or paint flecks that have fallen off a rocket.
- There are approximately 23,000 pieces of debris larger than a softball orbiting the Earth.
- They travel at speeds up to 17,500 mph, fast enough for a relatively small piece of orbital debris to damage a satellite or a spacecraft.
- **Kessler Syndrome**: It says if there is too much space junk in orbit, it could result in a chain reaction where more and more objects will collide and create new space junk in the process, to the point where Earth's orbit becomes unusable – a Domino Effect.

Solar Spicules

Researchers from India and the U.K. led by astronomers from the Indian Institute of Astrophysics, Bengaluru, have explained the origin of 'spicules' on the Sun

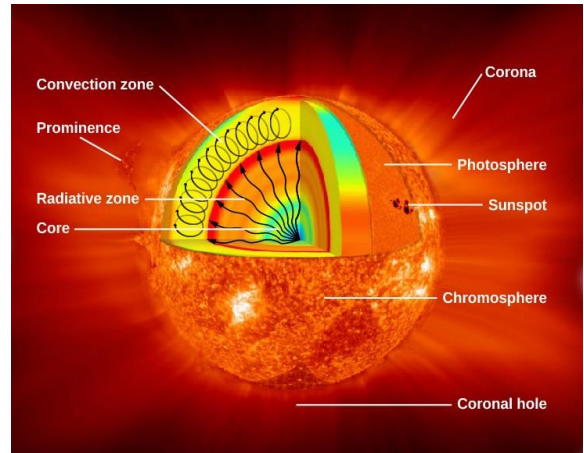
Anomaly Of Sun's Temperature

- The temperature at the core of the Sun is nearly 15 million degrees Celsius, while that at its surface layer, known as the **photosphere**, is merely 5,700 degrees C.
- The natural thing to expect is that still further outwards, in its atmosphere, known as the **corona**, the temperatures would be comparable to that at the surface (photosphere).

- However, the temperature of the corona is much higher.
- It starts increasing outside the photosphere, reaching a value of about one million degrees or more in the corona.

About Solar Spicules

- Solar spicules are **jets of plasma**, shooting out from the Sun's outermost layer the chromosphere and making incursions into its atmosphere. These solar spicules emanate from the interface of the corona and the photosphere.
- A typical spicule may be 4,000-12,000 kilometres long and 300-1,100 kilometres wide.
- These are structures that are believed to transport momentum to the solar wind and to provide heat to the solar Corona
- It has been suspected that these spicules act as conduits through which mass and energy from the lower atmosphere bypass the photosphere and reach the corona.
- They are made of plasma – a mixture of positive ions and negatively charged electrons. The coronal plasma emits light in extreme ultraviolet.
- They move upwards with speeds between 15 and 110 km/s from the photosphere and last a few minutes each.
- In solar physics, a spicule, also known as a **fibril or mottle**.
- These jets rise and fall back under the influence of the Sun's gravity, which is 20 to 30 times greater than Earth.
- Some jets are so energetic that they propel into the solar corona and beyond.
- The four ingredients that favour solar plasma jets are gravity, its fluid nature, strong quasi periodic triggers to eject plasma and Sun's powerful magnetic field.
- Plasma is ejected from the sun's surface as jet streams through periodic kicks of convection.



Gallium Nitride (GaN)

The Union Minister of State for Electronics & Information Technology visited the Gallium Nitride Ecosystem Enabling Centre and Incubator (GEECI) facility.

About Gallium nitride (GaN)

- It is a very hard, mechanically stable wide bandgap semiconductor as it has a hexagonal crystal structure.
- With high breakdown strength, fast switching speed, high thermal conductivity and low resistance, power devices based on GaN outperform silicon-based devices.
- Gallium nitride crystals can be grown on a variety of substrates, including sapphire, silicon carbide (SiC) and silicon (Si).
- GaN is used in the production of semiconductor power devices as well as RF components and light-emitting diodes (LEDs).
- GaN has demonstrated the capability to be the displacement technology for silicon semiconductors in power conversion, RF, and analog applications.
- GaN Technology is of strategic importance with its application to 5G, space and defence application. It offers a window of opportunity to play a key role in enabling e-vehicles and wireless communication.

About GEECI Facility

- It is situated at Indian Institute of Sciences (IISc), Bengaluru.
- The facility has been jointly set up by the Ministry of Electronics and Information Technology and IISc Bengaluru.
- It aimed at establishing GaN based Development Line Foundry facility, especially for RF and power applications, including strategic applications.

Away From Reactor (AFR) Facility

Kudankulam Village Panchayat has passed a resolution against the construction of the Away From Reactor (AFR) facility at the Kudankulam Nuclear Power Project (KKNPP) site for storing nuclear waste.

About AFR Facility

- The scheme for the storage of spent fuel in a nuclear power plant is **two-fold**.
 - One facility is located within the reactor building/service building, generally known as the spent fuel storage pool/bay.
 - Another is located away from the reactor, called the Away From Reactor (AFR) Spent Fuel Storage Facility, but within the plant's premises.
- The spent fuel storage pool inside the reactor building has a limited capacity and is used for immediate storage of the spent fuel removed from the reactor during refuelling.
- The fuel remains in the pool initially for a few years for it to be cooled sufficiently before it is shifted to the facility.
- The AFR Spent Fuel Storage Facility is functionally similar to the Spent Fuel Pool inside the reactor building, except in terms of capacity.

Reason for Resolution

- The gram panchayat is of the view that the AFR site will lead to radioactive pollution and deplete groundwater, which is used for drinking water and irrigation.

Arguments of Union Government

- The proposed AFR facility at KKNPP reactors 1 and 2 is for **storage of spent fuel only** and not for storage of nuclear waste, as perceived by a few.
- The design ensures that there would not be any adverse impact of the facility on the personnel, the public and the environment.
- The radiation dose on account of AFR to the public would be negligible, when compared to the exposure from natural radiation background sources like soil, sun etc.
- This has been established at the Tarapur and Rawatbhata sites, where AFRs have been in operation for many years.

About Nuclear Waste

- Also called radioactive waste, which is a by-product of nuclear reactors, fuel processing plants and research facilities. It is also generated during the shutdown and destruction of nuclear reactors and other nuclear facilities.
- There are two broad classifications: **high-level or low-level waste**.
 - ✓ High level waste is mainly spent fuel extracted from reactors after power generation.
 - ✓ Low level waste comes from reactor operations and the medical, educational, industrial and other commercial uses of radioactive material.

White Phosphorus Bombs

- Russia accused of attack on Ukraine using illegal phosphorus bombs.
- International law prohibits the use of **white phosphorus shells** in heavily populated civilian areas but allows them in open spaces to be used as cover for troops.

About White Phosphorus Bombs

- White phosphorus bombs are weapons that use one of the common allotropes of the chemical element phosphorus.
- It is used in fumes, lights and incendiary warships, and is usually the burning element of tracer ammunition.
- It is **pyrophoric** which mean it ignites on contact with air, burns fiercely and can ignite clothing, fuel, ammunition and other flammable materials.

About White Phosphorus

- It is a colourless, white or yellowish, waxy solid.
- It does not happen naturally. It is produced using phosphate rocks.
- It is a highly flammable substance that reacts with oxygen in the air.
- It can catch fire at a temperature of 10 to 15 degrees above room temperature.

About Chemical Weapons

- Chemical weapons are weapons and other equipment that use the toxic effects of chemicals on living organisms to cause death or other harm.
- To qualify as a chemical weapon, the toxic effects of warheads must not necessarily be fatal.
- Chemical weapons are considered weapons of mass destruction, as toxic chemicals can spread over large areas and affect large numbers of people.

International Law Regarding Use of Chemical Weapons

- Chemical Weapons Convention (CWC) is a multilateral treaty banning chemical weapons and requiring their destruction within the stipulated time.
- Negotiations for the CWC began in 1980 at the United Nations Conference on Disarmament.
- The convention was opened for signature in January 1993. It became effective from April 1997.
- Members should also declare the riot-control agents (tear gas) in possession of them.
- India signed the treaty in January 1993. The Chemical Weapons Convention Act, 2000 was passed to implement the CWC.
- Apart from CWC, **Australia Group** seeks to check proliferation of chemical or biological weapons. India joined (as 43rd Participant) the Australia Group (AG) in January 2018.

Man Portable Air Defence System (MANPADS)

United States and NATO approved a arms package for Ukraine, which would include US-made Stinger Missiles, which are a type of shoulder-fired **Man-Portable Air-Defence Systems**.

About MANPADS

- MANPADS are portable, short-range **surface-to-air missiles**.
- It can be fired by individuals or small groups to destroy aircraft or helicopters.
- It has a maximum range of 8 kilometres and can engage targets at altitudes of 4.5 km.
- It can be shoulder-fired, launched from atop a ground-vehicle, fired from a tripod or stand, and from a helicopter or boat.

- Most MANPADS have a passive or '**fire and forget**' guidance system
- Countries such as India, Pakistan, Germany, UK, Turkey and Israel have also used MANPADS in their defence efforts.
- Russia is by far the biggest exporter of MANPADS, having sold over 10,000 such systems between 2010-2018 to various countries including Iraq, Qatar, Kazakhstan, Venezuela, and Libya.

HANSA-NG

HANSA-NG has successfully completed the sea-level trials in Puducherry.

About HANSA-NG

- HANSA-New Generation (NG) is first of its kind, indigenously developed aircraft trainer.
- It developed by the CSIR-National Aerospace Laboratories (CSIR-NAL).
- It is an upgraded version of HANSA, which saw the first flight in 1993, and was certified in 2000.
- It is designed to meet the need for trainer aircraft by flying clubs in India.
- The Centre approved HANSA-NG in 2018 and NAL retro-modified HANSA-3 aircraft with a glass cockpit and got it certified by DGCA .
- It is an ideal aircraft for Commercial Pilot Licensing (CPL) due to its low cost and low fuel consumption.

Biodegradable Carbonoid-metabolite

- Researchers at IIT Kanpur have developed a new nanoparticle-based biodegradable carbonoid-metabolite (BioDCM).
- It is able to protect agricultural crops from fungal and bacterial infections.
- The technology is essentially a protective biological alternative which is useful in enhancing crop protection against various diseases, especially rice crops.
- This extracted metabolite acts as an effective organic antimicrobial agent against fungal/bacterial pathogens while naturally enriching the soil.

SARAS 3 Radio Telescope

SARAS 3 radio telescope refutes recent claim of the discovery of a radio wave signal from cosmic dawn.

Background Of The Discovery

- In 2018 a team of researchers from Arizona State University (ASU) and MIT in the US detected a signal from stars emerging in the early universe using data from the **EDGES radio telescope**.
- The study published in the journal Nature created much excitement in the astronomy community around the world.
- Researchers had claimed the discovery of a radio wave signalling the birth of the First Stars.
- However, the world awaited confirmation from independent researchers.

Current Findings

- After a rigorous statistical analysis, a researcher at Raman Research Institute (RRI) said that SARAS 3 did not find any evidence of the signal claimed by the EDGES experiment.
- However, astronomers still do not know what the actual signal looks like.
- Having rejected the ASU/MIT claim, the SARAS experiment is geared towards discovering the true nature of Cosmic Dawn.

- Cosmic Dawn is the time in the infancy of our Universe when the first stars and galaxies came into existence.

About SARAS 3

- Shaped Antenna Measurement of the Background Radio Spectrum (SARAS) 3 radio telescope was invented and built by the astronomers at RRI.
- In the year 2020 the radio telescope was deployed in **lakes in Northern Karnataka**, on **Dandiganahalli Lake and Sharavati backwaters**.
- It is a courageous attempt to design, build and deploy in India a precision radio telescope to detect extremely faint radio wave signals from the depths of time, from our Cosmic Dawn. It's a niche high-risk high-gain experimental effort.

PARAM Ganga

Param Ganga, a made-in-India Petascale supercomputer has been deployed at the Indian Institute of Technology Roorkee with a supercomputing capacity of 1.66 Petaflops. The basic idea behind building a Petascale Supercomputer with manufactured in India components is to lead the path towards Aatmanirbhar Bharat

About PARAM Ganga

- It is designed, developed, and commissioned by the Centre for Development of Advanced Computing (C-DAC).
- It has been developed under the guidance of the National Supercomputing Mission.
- Its goal is to offer computational power to the user community of IIT Roorkee as well as neighbouring academic institutions.

{For more about Supercomputers refer topic "Param Pravega " February 2022 Recitals}

Distribution Of Argon-40 In Lunar Exosphere

Chandrayaan-2 makes first observation of global distribution of Argon-40 in lunar exosphere.

Major Findings

- The Chandra's Atmospheric Composition Explorer-2 (CHACE-2), a quadrupole mass spectrometer on Chandrayaan-2 mission made the observations.
- The gas found in the **lunar exosphere** is believed to have escaped from the lunar surface.
- The observation of CHACE-2 suggests that Argon-40 (Ar-40) has significant **spatial heterogeneity** in distribution.
- There are localised enhancements (termed as **Argon bulge**) over several regions including the **KREEP** [potassium (K), Rare-Earth Elements, and Phosphorus (P)] on **South Pole Aitken** terrain (impact crater on the far side of the Moon).
- Ar-40 is such an important tracer atom to study the dynamics of the lunar exospheric species.
- Ar-40 originates from the radioactive decay of Potassium-40 (K-40) present below the lunar surface.
- Once formed, it diffuses through the inter-granular space in the lunar surface dust and makes its way up to the lunar exosphere through seepage and faults.

Significance Of The Discovery

- These observations provide insight on dynamics of the lunar exospheric species, as well as on the radiogenic activities in the first few tens of metres below the lunar surface.
- The CHACE-2 observations provide the diurnal and spatial variation of Ar-40 covering the **equatorial and mid latitude regions** of the Moon.

- The uniqueness of this result lies in the fact that although Apollo-17(1972) and Lunar Atmosphere and Dust Environment Explorer (LADEE Mission 2014) have detected the presence of Ar-40 in the lunar exosphere, the measurements were confined to the near-equatorial region of the Moon.

About Exosphere

- Exosphere is the outermost region of the upper atmosphere of a celestial body where the constituent atoms and molecules rarely collide with each other and can escape into space.
- Earth's Moon features a surface-boundary-exosphere.
- For the Moon, various components of the exosphere are fed from the surface by various processes, such as thermal desorption, solar wind sputtering, photo-stimulated desorption, and micrometeorite impact vaporization.

Nutraceuticals

- Nutraceuticals is a broad umbrella term used to describe any product derived from food sources that has **additional health benefits** in addition to the original nutritional value found in foods.
- It can be considered a **non-specific biological treatment** that is used to promote general well-being, control symptoms, and prevent malignant processes.
- They can be classified on the basis of their natural sources, pharmacological conditions, as well as chemical constitution of the products. Most often they are grouped in the following categories: **dietary supplements, functional food, medicinal food, pharmaceuticals.**
- Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) Kendras have added nutraceuticals products.

Potential Health Benefits

- These products may have roles in many biological processes, including antioxidant protection, cell proliferation, gene expression and protection of mitochondrial integrity.
- It can be used to improve health, prevent chronic diseases, delay the aging process, and in turn increase life expectancy, or support body functions and integrity.
- These products are considered healthy sources for the prevention of life-threatening diseases such as diabetes, kidney and gastrointestinal disorders as well as various infections.

ExoMars 2022 Mission

European Space Agency's ExoMars 2022 mission has been delayed after the agency suspended all cooperation with Russia's space program Roscosmos.

About ExoMars

- It is a joint endeavour between European Space Agency and the Russian space agency, Roscosmos.
- The programme comprises **two missions**. The 1st mission, **Trace Gas Orbiter** was launched in 2016 to study the likelihood of present Martian life from orbit. The 2nd mission, a **rover** will hunt for signs of past life on Mars' surface.
- The primary objective of the mission is to investigate whether there has ever been life on Mars and also to understand the history of water on the planet.
- ESA and NASA were the original ExoMars collaborators, but NASA dropped out in 2012 due to budgeting problems. Russia took NASA's place in the project in 2013.

Kamikaze Drone

United States announced USD 800 million in new military aid to Ukraine, including Kamikaze or suicide drones.

About Kamikaze Drone

- It is small **unmanned** drones that are loaded with explosives and can be flown directly over a tank or group of soldiers, destroying them when they hit a target and detonates.
- It is called Switchblade drones because their bladelike wings spring out on launch.
- Because of their small size they are difficult to detect on radar.
- It can even be programmed to hit targets without human intervention based on **facial recognition**.
- It has a feature that allows the operator to **adjust the blast radius**. So, it can kill the driver of a vehicle but not a passenger.
- The Switchblade also has **cameras** that show a target seconds before impact.

Kinzhal Missile

- Russia claims first use of hypersonic Kinzhal missile in Ukraine
- It is a Russian **hypersonic** aero-ballistic air-to-surface missile with nuclear capability.
- It has a range of more than 2,000 kilometres, a top speed of Mach 10.
- It can carry both conventional and nuclear warheads

GOES-T Satellite

- **NASA** launches next-generation **Geostationary Operational Environmental Satellite (GOES)**. The satellite is named as GOES-T.
- Once the satellite gets positioned in its geostationary orbit it will be renamed from **GOES-T to GOES-18**.
- It will be used by the **National Oceanic and Atmospheric Administration (NOAA)** to forecast weather and hazardous environmental conditions in the **Western Hemisphere**.

Hwasong-17

- North Korea has test-fired an intercontinental ballistic missile (ICBM) named **Hwasong-17**.
- Analysts say the weapon is the largest, liquid-fuelled ICBM in the world launched by road-mobile launcher.
- Due to this missile's size, it can carry multiple decoys & warheads, analysts have called it a '**monster missile**'.
- During the testing it flew 1,090 km at a maximum altitude of 6,248.5 km and hit a target in the Sea of Japan.
- This missile can potentially deliver a nuclear warhead to any United States location.

Pacer Initiative

Polar Science and Cryosphere (PACER) scheme has been approved for continuation during 2021-2026.

About The Scheme

- The scheme is implemented through **National Centre for Polar and Ocean Research (NCPOR)** an autonomous institute under the **Ministry of Earth Sciences**.
- Scheme comprising the Antarctic program, Indian Arctic program, Southern Ocean program and Cryosphere and Climate program.

Major Achievements

- **Expedition to Antarctica:** Executed 39th & 40th Indian Scientific Expedition to Antarctica. 41st Indian Scientific Expedition to Antarctica is ongoing.

- **Ice-sheet dynamics: Ten sediment cores** were collected from the lakes to reconstruct past climates associated with ice sheet dynamics.
- Various glacial and geophysical measurements were carried out in the **coastal Drowning Maud Land (cDML)** to understand the modern ice accumulation patterns surrounding ice rise and the remote contribution to glacial chemical processes.
- **Field-based studies were conducted** in the lakes of Larsemann hills, East Antarctica for understanding of biogeochemical process in supra-glacial environments.
- **Clear-air atmospheric observatories** containing automatic weather stations, a suite of sensors to measure aerosol and greenhouse gas concentrations has been established at **Maitri and Bharati stations**.
- 23 research projects related to glaciology, marine science, polar biology, and atmospheric science were successfully carried out during 2019-20 Arctic Expedition.
- **IndARC mooring system** along with Hydrophone system was successfully retrieved and deployed in Kongsfjorden, Svalbard.
 - Coastal cruises were undertaken in the Arctic Svalbard archipelago to carry out biogeochemical and microbial research in the glacio-marine system.
- **Glaciological field campaigns** were carried out in six benchmark glaciers in Chandra basin of Lahaul-Spiti region of Western Himalaya.
- Two new **Automatic Weather Station (AWS) systems** were installed at Baralacha La, a high elevation site in the arid Spiti region to strengthen infrastructure across the Chandra basin.

Cornershot Weapon System (CSWS)

- It is designed and developed by the DRDO.
- It can engage targets located around the corners as the system bends and captures video feed thus saving soldiers from any surprise counter attack.
- It allows to attack an armed target, without exposing himself for any counterattack.
- It is also equipped with day & night camera, invisible lasers, laser aiming device, tactical flashlight, colour LCD monitor and a power source (rechargeable battery).
- The body is made from high-grade aluminium alloy to make it lighter and durable.

Variable Refresh Rates (VRR)

According to a report by **About Chromebooks**, Google is said to be testing support for variable refresh rates (VRR) in the **Chrome OS**

About VRR

- A display supporting a variable refresh rate usually supports a specific range of refresh rates. This is called the variable refresh rate range (VRR range).
- It is measured in Hertz (Hz). So, a 30Hz or 60Hz display can refresh 30 or 60 times per second respectively. The higher the refresh rate, the better the viewing experience.
- Displays higher than 120 Hz can provide a smoother and more comfortable viewing experience. This is necessary when playing video games or watching videos.
- VRR supports a wide range of refresh rates, allowing its refresh rate to change in real-time based on the frames-per-second (FPS) rate coming from a source device such as a gaming console.
- In mobile devices: it saves battery power on them as the adaptive refresh rate does not run at the highest rate all the time and switches to a lower refresh rate during less graphic-intensive tasks

CULTURE

Konark Sun Temple

- Odisha government has planned to run the Konark Sun Temple completely on **solar energy**. Konark is going to be the 1st model town in Odisha to shift from grid dependency to green energy.
- By 2022-end, the state has targeted to generate 2,750 megawatt (MW) from renewable energy sources like the sun, wind, biomass, small hydro and waste-to energy (WTE), etc.

Konark Sun Temple

- It is a 13th-century CE temple dedicated to sun god Surya, at Konark on the coastline of Odisha. It was built by **King Narasimhadeva I of Eastern Ganga Dynasty** around **1250 CE**.
- The word 'Konark' is a combination of two Sanskrit words **kona** (corner or angle) and **arka** (the sun). The temple is conceived as a **giant stone chariot** with 24 wheels and 7 horses.
- Once over 200 feet (61 m) high, much of the temple is now in ruins. The structures and elements that have survived are popular for their intricate artwork, iconography, and themes.
- The temple follows the **Kalinga or Orissa style of architecture**, which is a subset of nagara style of Hindu temple architecture.
- Declared a **UNESCO world heritage site** in 1984, it is a major pilgrimage site for Hindus, who gather here every year for the **Chandrabhaga Mela** around the month of February.
- This temple was called the **Black Pagoda** in European sailor accounts as early as 1676 because its great tower appeared black.
- Similarly, the Jagannath Temple in Puri was called the **White Pagoda**. Both temples served as important landmarks for sailors in the Bay of Bengal.

Theyyam

- As part of its efforts to promote cultural tourism, Kerala Tourism has decided to live stream Theyyam performances. Theyyam is a popular ritual form of dance worship in Kerala and Karnataka. It consists of thousand-year-old traditions, rituals and customs.
- The ceremonious dance is accompanied by the chorus of musical instruments like Chenda, Elathalam, Kurumkuzal and Veek kuchenda. Each Theyyam is a man or a woman who attained divine status by performing heroic deeds or by leading a virtuous life.
- Most Theyyams are believed to be the incarnations of Shiva or Shakti (the consort of Shiva) or they have strong associations with these principal deities of Hinduism.
- The people consider Theyyam itself as a channel to God and they thus seek blessings from Theyyam.
- There are over 400 separate Theyyams, each with their own music, style and choreography. The most prominent among these are Raktha Chamundi, Kari Chamundi, Muchilottu Bhagavathi, Wayanadu Kulaven, Gulikan and Pottan.
- Theyyam is performed by males, except the Devakoothu theyyam; the Devakoothu is the only Theyyam ritual performed by women.

Pandrethan Temple

- The Chinara Corps of the Indian Army was recently accorded recognition by the **National Monuments Authority (NMA)**, for preserving and rejuvenating the Pandrethan temple.

- The Chinar Corps had adopted the ancient excavation site within the cantonment and after restoration, had named it 'Dharohar'.
- The Pandrethan temple, an **8th century heritage site** is situated in **Srinagar's Badamibagh**.
- The site hosts several excavated figurines tracing back to the 2nd century – in the form of two large monolithic rock shiva lingams, seven Gandhara-style sculptures and a huge rock carving of the feet of a monolithic statue.
- Situated in the foothills of **Zabarwan range**, and on Jhelum River banks, it has magnificent sculptures of Shiva Trimurti, Varah and Padmapani Avalikiteshwara.
- The site near Shiva temple was excavated by the British-era ASI in 1913, yielding several Buddhist sculptures and rubbles of a Chaitya assignable to the 8th century.

National Monuments Authority (NMA)

- NMA has been set up as per the provisions of The Ancient Monuments and Archaeological Sites and Remains (AMASR) Act, 2010. It operates under the aegis of the Ministry of Culture.
- Several functions have been assigned to the NMA for the protection and preservation of monuments and sites through management of the prohibited and regulated area around the centrally protected monuments.

GI Tag For Nagaswaram

- Nagaswaram made in **Narasinghapettai in Thanjavur district** has been granted the Geographical Indication (GI) tag under the category of musical instruments.
- The musical instrument is traditionally made by artisans based in a village near **Kumbakonam** who make them through specialized processing skills, a technique inherited from their forefathers.
- GI Tag is issued for agricultural, natural, or manufactured goods that have a unique quality, reputation, or other characteristics attributable to their geographical origin.

Nagaswaram

- Nagaswaram is a **wind instrument** that has also been accorded a high status as a '**Mangala Vadyam**' and is played in religious ceremonies, auspicious occasions, and classical concerts.
- The instrument is also known as 'nakaswaram'. It is believed that Lord Shiva gifted the instrument to the demon, Nagasuran. It has the shape of a snake, and nagas (meaning snakes) used this instrument, hence it came to be known as nagaswaram.
- The double-reeded instrument is made up of **wood** and has two parts – a conical tube and a **metal bell**. The major portion of the 'Narasinghapettai nagaswaram' is made from the Aacha (*Hardwickia binata*) tree.
- The horn-like portion of Nagaswaram is known as 'Olavi' and the loudspeaker-like portion 'anasu'. 'Jeevali' is played at one end of the horn. It is through this 'jeevali' that air is blown.

Benefits of GI Tag

- **Financial Assistance:** The GI tag will help the artisans receive assistance from the Indian government. Further, it can also boost the trade of nagaswaram makers.
- **Benefits to country:** The tag increases the significance and the popularity of the product and enhances export opportunities. Furthermore, it also promotes government initiatives such as Vocal for Local, Buy Tribal, domestic and rural tourism, and more.
- **Protects the culture:** Artisans possess unique skills and knowledge of traditional practices and methods, passed down from generation to generation, which needs to be protected and promoted. With GI tags, the products get due acknowledgment, promotion, and protection.