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(Institute for IAS Examination)

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Current Affairs (JUNE 2022)

## **THE RECITALS AS A GAME CHANGER IN PRELIMS 2022**

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### **Editor's Cut**

- ✔ Periodic Labour Force Survey (PLFS)
- ✔ Central Advisory Board On Disability
- ✔ Ration Card Now Usable Pan-India
- ✔ Online Child Sexual Abuse
- ✔ Cooperatives on GeM
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- ✔ 25th Founding Day of BIMSTEC
- ✔ XIV BRICS Summit
- ✔ 48th G7 Summit



*From Director's Desk...*



## “THE RECITALS AS A GAME CHANGER”

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*Wishing Aspirants all the best for CS Main Examination !!*

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According to the latest Periodic Labour Force Survey (PLFS), which also captured data on migration for the first time, nearly 88% of migrants moved within the same state in 2020-21, while 11.8% moved to another state during the same period.

- PLFS is released by Ministry of Statistics and Programme Implementation (**MOSPI**).

## Periodic Labour Force Survey

National Statistical Office (NSO) launched the Periodic Labour Force Survey (PLFS) in April 2017. The objective of PLFS is primarily two fold:

- To estimate the key employment and unemployment indicators (viz. Worker Population Ratio, Labour Force Participation Rate (LFPR), Unemployment Rate) in the short time interval of three months for the **urban areas only** in the **Current Weekly Status (CWS)**.
- To estimate **employment and unemployment** indicators in both **Usual Status and CWS** in both **rural and urban areas annually**.

### Overview of Migration In India

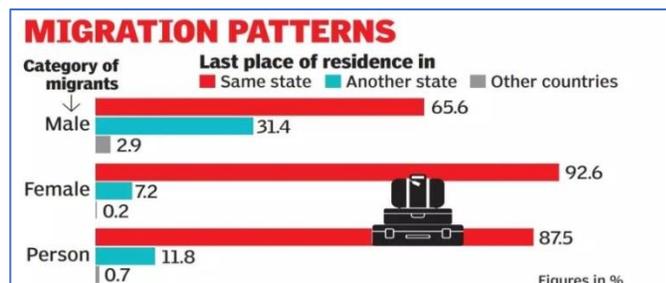
- Migration is the **movement of people away from their usual place of residence**, across either *internal (within country)* or *international* (across countries) borders.
- **Article 19(1)(e)** of the Indian Constitution guarantees all Indian citizens the right to reside and settle in any part of the territory of India, subject to reasonable restrictions in the interest of general public or protection of any scheduled tribe.
- As per 2011 Census, India had **45.6 crore migrants in 2011** (38% of the population) compared to 31.5 crore migrants in 2001 (31% of the population).
- Between 2001 and 2011, while the population grew by 18%, **the number of migrants increased by 45%**.
- In 2011, **99% of total migration was internal** and immigrants (international migrants) comprised 1%.

### Findings of PLFS

- **Unemployment Rate:** It fell to 4.2% in 2020-21, compared with 4.8% in 2019-20. The rural areas recorded an unemployment rate of 3.3% and urban areas recorded an unemployment rate of 6.7%.
- **LFPR:** The percentage of persons in the labour force (that is, working or seeking work or available for work) in the population increased to 41.6% during 2020-21 from 40.1% in the previous year.
- **Worker Population Ratio (WPR):** It increased to 39.8% from 38.2% of the previous year.
- The massive migration triggered by the lockdown in the aftermath of the pandemic had prompted calls for better data on the issue to devise policies to combat a surge in such movement.
- The **migration rate** (percentage of migrants belonging to male or female category of persons) across the country was at 28.9% during the July 2020-21 period.
- The survey looked at distribution of internal migrants by four types of migration streams, which includes rural-to-rural, rural-to-urban, urban-to-rural and urban-to-urban.

### Patterns of Migration

- One kind of classification is - **rural-rural (54% of classifiable internal migration), rural-urban, urban-rural (7% or 3 crore) and urban-urban**. Rural-urban and urban-urban movement accounted for around 8 crore migrants each.
- Another way to classify migration is - **intra-state**



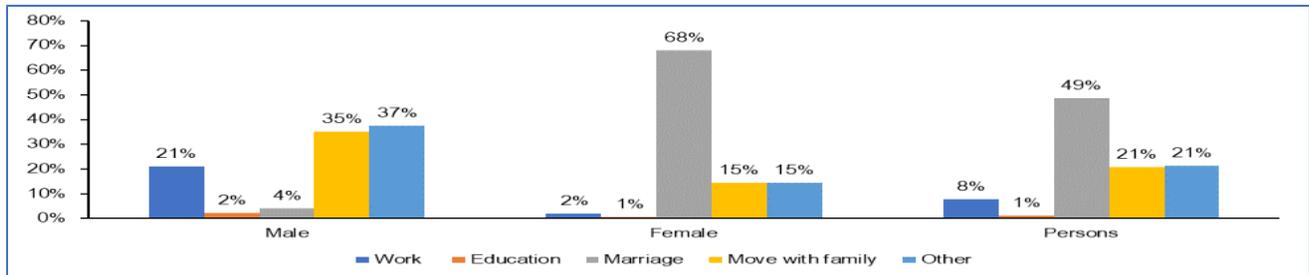
and inter-state.

- ✓ In 2011, intra-state movement accounted for almost 88% of all internal migration (39.6 crore persons).
- ✓ According to 2011 Census, there were 5.4 crore inter-state migrants. As of 2011, **Uttar Pradesh** (83 lakh) and **Bihar** were the largest source of inter-state migrants while **Maharashtra** (60 lakh) and **Delhi** were the largest receiver states.

### Reasons For Internal Migration

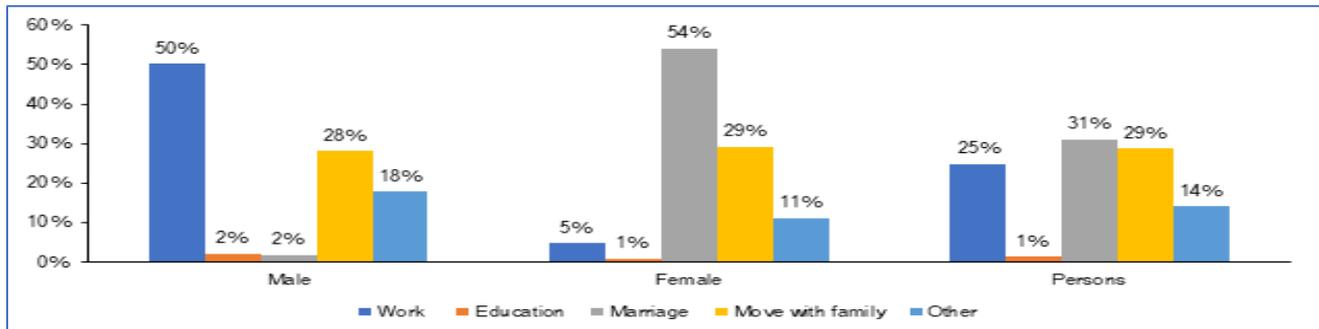
#### • Reasons For Intra-State Migration

- ✓ As of 2011, the majority (70%) of **intra-state** migration was due to reasons of **marriage and family** with variation between male and female migrants.
- ✓ While 83% of females moved for marriage and family, the corresponding figure for males was 39%.
- ✓ Overall, 8% of people moved within a state for work (21% of male migrants and 2% of female migrants).



#### • Reasons For Inter-State Migration

- ✓ Movement for **work** was higher among **inter-state migrants** (50% of male and 5% of female interstate migrants).
- ✓ Size Of Migrant Labour Force: As per the Census, there were **4.5 crore migrant workers** in 2011.
- ✓ The Economic Survey (2016-17) estimated **6 crore inter-state labour migrants** between 2001-2011.



### Issues Faced By Migrant Labour

- Lack of access to **affordable housing and basic amenities** in urban areas.
- Lack of **social security and health benefits** and poor implementation of minimum safety standards law.
- Lack of **portability of state-provided benefits**, especially food provided through the PDS is not effectively implemented. This has been partially remedied by one nation one ration card scheme.
- Poor implementation of protections under the Inter-State Migrant Workmen Act, 1979 (ISMW Act), which provides certain protections for inter-state migrant workers.
- **Impact of Covid-19:** The lockdown has severely impacted migrants, several of whom lost their jobs due to shutting of industries and were stranded outside their native places.

### Factors Slowing The "Migration Policy" Momentum

- **Politicisation of Migration:** 'Destination States' experience a tension between economic needs (of migrant labour) and political needs (which promote nativist policies of imposing domicile restrictions on employment and social security).

- ✓ Thus, the response to internal migration follows from State-specific calculations on what political dividends might be reaped
- **Inaccurate Identification of Migrants:** Migrants are located inside two larger categories that have long troubled policymakers: the **unorganised worker** and the **urban poor**.
  - ✓ Slum development continues as the primary medium for alleviating migrant concerns, while in reality, most migrants live on worksites that are out of the policy gaze
  - ✓ Even the e-Shram portal has been unable to accurately distinguish and target migrants.
- **Failure of Official Datasets for Migration** to capture the actual scale and the frequency of internal migration in India.



## Central Advisory Board On Disability

The Central Advisory Board on Disability, which is mandated to meet every *six months* under the Rights of Persons with Disabilities Act, 2016, has not been re-constituted since the previous board's three-year term ended in November 2020.

### Central Advisory Board on Disability

- *Section 60* of the Act empowers the Central Government to constitute a body to be known as *Central Advisory Board on Disability*
- In pursuance of this power, the Central Government had constituted the Central Advisory Board on Disability with **Union Minister of Social Justice and Empowerment** as the ex-officio chairperson.
- The panel is meant to “facilitate the continuous evolution of a comprehensive policy for the empowerment of persons with disabilities and the full enjoyment of rights”
- The board is mandated to meet every six months under the Act.

### Disabilities In India

- According to an estimate by the WHO, globally, 15% of the population live with some form of disability, while over 80% of that share living in Low- and Middle-Income Countries.
- In India, **over 2.2%** of the total population endures some form of severe mental or physical disability.
- Conceptually, since the condition of disability is rather transient than static, there is no one universal definition of

#### Salient Features of the Rights of Persons with Disabilities Act, 2016

- It came into force in December 2016 to give effect to the **United Nations Convention on the Rights of Persons with Disabilities (UNCRPD)**.
- RPWD Act 2016 has categorized person with disability into three:
  - Person with benchmark disability;
  - Person with disability;
  - People with disabilities having high support needs.
- In the RPWD Act 2016, there has been an increase in the type of disabled, which has been increased from 7 types to 21 types and the Central Government has the power to add more to the list.
- These **21 types of disabilities** include:
  - Blindness, Low-vision, Leprosy Cured persons, Hearing Impairment (deaf and hard of hearing), Locomotor Disability, Dwarfism, Intellectual Disability, Mental Illness, Autism Spectrum Disorder, Cerebral Palsy, Muscular Dystrophy Chronic, Neurological conditions, Specific Learning Disabilities, Multiple Sclerosis, Speech and Language disability, Thalassaemia, Haemophilia, Sickle Cell disease, Multiple Disabilities including deaf blindness, Acid Attack victim, Parkinson's disease.
- It has **increased the quantum of reservation for people suffering from disabilities from 3% to 4% in government jobs and from 3% to 5% in higher education institutes.**
- Every child with benchmark disability between the age group of 6-18 years shall have the right to free education.
- A separate National and State Fund were created to provide financial support to the persons with disabilities.

what comprises a disability.

- In India, the list of criteria that categorizes people as disabled was revamped in 2016 and came into effect with the Rights of People with Disabilities Act.

### Challenges Faced by Persons with Disabilities

- **Attitudinal Barriers:** Attitudinal barriers, which result in *stigmatisation and discrimination*, deny people with disabilities their dignity and potential and are one of the greatest obstacles to achieving equality of opportunity and social integration.
- **Environmental Barriers:**
  - ✓ Physical barriers in the natural or built environment 'prevent access and affect opportunities for participation and inclusion'.
  - ✓ Lack of services or problems with service delivery also restrict participation of people with disabilities.
- **Institutional Barriers:** These include many laws, policies, strategies or practices that discriminate against people with disabilities.
- **Institutionalised Barriers:** Sometimes internalised barriers relating to people with disabilities results in their exclusion from societal interactions, which in turn can result in their '*lack of pro-active behaviour* in expressing their opinions and claiming their rights', leading to further exclusion.

### Government's Initiatives For Persons with Disabilities (PwDs)

**Accessible India Campaign** Department of Empowerment of Persons with Disabilities (DEPWD) has launched Accessible India Campaign (**Sugamya Bharat Abhiyan**) as a nation-wide Campaign for achieving universal accessibility for PwDs in 2015. It has three components:

- Build Environment accessibility
- Build Transportation system accessibility
- Build Information & Communication system accessibility

**DISHA** This is an early intervention and school readiness scheme for children up to 10 years with the disabilities covered under the National Trust Act

**VIKAAS** A day care scheme for persons with autism, cerebral palsy, mental retardation and multiple disabilities, above 10 years for enhancing interpersonal and vocational skills.

**SAMARTH** A scheme to provide respite home for orphans, families in crisis, PwD from BPL, LIG families with at least one of the four disabilities covered under the National Trust Act.

**SAHYOGI** A scheme to set up Caregiver Cells (CGCs) for training and creating skilled workforce of caregivers to care for PwD and their families.

### Way Forward

- Kerala became first state to conduct a census of its own called **Kerala Disability Census** for 2014-15. Other states must follow example. The scale of disability in India needs to be better understand by improving the measurement of disability.
- **Increase public awareness and understanding of disability** through social marketing and campaigns.
- **Accessibility and support services** for persons with disability must be increased.
- **End Institutional Exclusion:** Not only the Ministry of Social Justice and Empowerment, but every other ministries along with different departments will have to take blame for poor disability environment in India.
- Newer thinking and better coordination of programs is required. Most importantly, persons with disabilities should themselves be made **active participants in the development process**.
- There is need for **deepened preventive health programs** and **all children screened at a young age**.
- Strengthen and support **research on disability**.

## Conclusion

- India has a **growing disability rights movement** and one of the **more progressive policy frameworks** in the developing world. But, a lot more needs to be done in implementation and “**getting the basics right**”.
- By providing them aids to overcome their disability and enabling them to earn a dignified livelihood, we can actually transform **them from being disabled to being differently-abled**.

### Extra Mile

The Social Justice and Empowerment Ministry has invited public feedback on the new draft national policy on persons with disabilities (PwD). The draft policy proposes interventions in disability prevention, education, healthcare, social security and accessibility.

#### National Policy for PwD, 2006

The existing National Policy for PwD was adopted in 2006. The policy seeks to --

- recognize that PwDs are valuable human resource for the country
- create an environment that provides them equal opportunities, protection of their rights and full participation in society.

#### Focus Areas Of 2006 Policy

- **Prevention of Disabilities:** The policy calls for programme for *prevention of diseases*, which result in disability and the creation of awareness regarding measures to be taken for prevention of disabilities.
- **Rehabilitation Measures:** Physical, educational and economic rehabilitation.
- **Women with disabilities:** Special programmes will be developed for education, employment and providing of other rehabilitation services to women with disabilities
- **Children with Disabilities:** These are the most vulnerable group and need special attention. The Government would strive to:
  - ✓ Ensure right to care, protection and security for children with disabilities;
  - ✓ Ensure the right to development with dignity and equality creating an enabling environment where children can exercise their rights.
  - ✓ Ensure inclusion and effective access to education, health, vocational training.
- **Barrier-free environment:** That supports the independent functioning of individuals.
- **Issue of Disability Certificates:** The Government will ensure that the persons with disabilities obtain the disability certificates without any difficulty in the shortest possible time.
- **Implementing Agency:** Ministry of Social Justice & Empowerment is the nodal agency to coordinate all matters relating to the implementation of the Policy.

#### Need For Revision Of 2006 Policy

- The new policy has been drawn in keeping with the provisions of the RPwD Act 2016 and the vision of **the National Education Policy 2020**.
- Also, a revision was required as the existing policy was drafted in 2006, after which India signed the United Nations Convention on the Rights of Persons with Disabilities in 2007.

#### Major Proposals In New Policy

- **Focus On Diversified Causes Of Disability**
  - ✓ The draft said the current national programme on prevention of disabilities focused on traditional causes.
  - ✓ However, there were other causes of disability, such as malnourishment, medical negligence, socio-cultural factors and impairment caused by disasters.
- **Cross Disability Early Intervention Centres:**
  - ✓ Research findings show that one-third of disabilities in children are preventable if detected early. Hence,

the new draft Policy calls for developing a network of '**Cross Disability Early Intervention Centres**' (CDEICs) in every district of the country.

- ✓ The policy lays out broad roadmap for developing CDEICs to provide facilities like screening and identification and referral for rehabilitative services.

- **Educational Institutions:**

- ✓ The States and UTs should add a provision on compliance with the RPwD Act 2016 when granting permission or recognition to educational institutions.
- ✓ A module on disability should be included in MBBS and other medical courses.

- **More Accessible Vehicles**

- ✓ The draft policy said that the Ministry of Road Transport and Highways will issue necessary guidelines for making modification in the personal vehicles being used by persons with disabilities as per requirement. This is to make vehicles more accessible.



## Ration Card Now Usable Pan-India

Assam has become the last and the 36th State/UT to implement One Nation One Ration Card (**ONORC**) scheme. With this, the scheme now covers all the states and UTs, making distribution of subsidised and free foodgrain security portable throughout the country.



### One Nation One Ration Card (ONORC)

- It is aimed at enabling migrant workers and their family members to buy subsidised ration from any fair price shop (FPS) anywhere in the country.
- All eligible ration cardholders or beneficiaries covered under the National Food Security Act (NFSA), 2013 can access their entitlements from anywhere in India.
- The facility was started as inter-State portability of ration cards in 4 States w.e.f. August 2019.
  - These four states were Andhra Pradesh-Telangana and Gujarat-Maharashtra.

- Department of Food and Public Distribution is the nodal agency responsible for implementation of this scheme.

#### Key Features:

- The beneficiaries under the system are ration cardholders (10 digit number) who are eligible to get food grains from FPS. Any citizen, who is declared under BPL category is eligible to get the benefit of this scheme across the country.
  - Ration cardholders can buy up to 5 kg of rice at Rs 3/kg, wheat at Rs 2/kg, and coarse grains at Rs 1/kg per month.
  - This was mandated under the NFSA passed in 2013.
- These beneficiaries can claim either full or part food-grains from any FPS in the country.
  - This can be done through existing ration card with biometric/Aadhaar authentication in a seamless manner.
- The scheme also allows their family members back home, if any, to claim the balance food-grains on same the ration card.

### How Does ONORC Work?

- ONORC is based on technology that involves details of beneficiaries' ration card, Aadhaar number, and electronic Points of Sale (ePoS).
- The system identifies a beneficiary through biometric authentication on ePoS devices at FPS.
- The system runs with the support of two portals which host all the relevant data.



Integrated Management of Public Distribution System (IM-PDS) ([impds.nic.in](http://impds.nic.in))

Annavitran ([annavitran.nic.in](http://annavitran.nic.in))

## Benefits

- **Hassle Free Ration To Migrants:** Previously, with ration card, a beneficiary could only purchase subsidised food grains from PDS which was assigned to them in their locality. Due to this, there have been many issues faced by the migrants who shift to other cities for work.
- **Empowerment Of Beneficiaries:** Now the beneficiaries have the opportunity to choose their own dealer. With many cases of misallocation, the beneficiary can switch to another FPS shop instantly, if there is any case of foul play.
- **Step Towards Fulfilment Of SDG:** It will also help achieve the target set under SDG 2: Ending hunger by 2030. It also aims to address the poor state of hunger in India.
- **Improved Efficiency:** Use of technology improved the efficiency of PDS network.
- **Nutritional Security:** With cheap food grain available to migrants, there are chances of more expenditure towards fruits and vegetables
- **Help In Understanding Migration Pattern:** The centralised FRP shop data may be used to formulate policies on intra- and inter-state migration.
- **Prevent Duplication and Double Benefits:** It will help in reducing the number of dual ration cardholders. It will be in sync with the motto of Minimum Government Maximum Governance.

## Performance So Far

- **All States/UTs covered:** With inclusion of Assam, the scheme now covers all states/UTs.
- **Significant Portable Transactions**
  - ✓ Since 2019, about 71 crore portable transactions have taken place delivering food-grains equivalent to about Rs 40,000 crore in food subsidy through portability.
  - ✓ At present, a monthly average of about 3 crore portable transactions are being recorded.
- **During Covid-19:** From April 2020 till date, about 64 crore portable transactions have been recorded. It delivered foodgrains equivalent to about Rs 36,000 crore in food subsidy through portability.
- **MERA RATION mobile application:** The government has also rolled out the 'MERA RATION' mobile application to take maximum advantage of the ONORC plan. The mobile app is providing a host of useful real-time information to the beneficiaries and is available in 13 languages.

## Challenges

- 100% of ration cards are **yet to be linked to Aadhaar**;
- There is a **lack of clarity on operating procedures and beneficiary entitlements** with regard to prices and food habits in different states;
- There are presently 5.46 lakh FPS across the country, but **only 4.75 lakh ePoS devices have been installed**. Each FPS must mandatorily have an ePoS device;
- Critics have flagged a need for increase in inclusivity in the PDS. More people require subsidies than are presently enlisted in the available system;
- **Operational Challenges:**
  - ✓ Internet penetration is still less in India for the smooth functioning of ONORC.
  - ✓ Changes in Fingerprints have also been reported both due to genetics and due to constant work-related wear and tear especially in case of labourers.
  - ✓ Logistics Issue: There is a quota allocated to every state for the purchase of food grains from FCI. Constant migration may disturb that procurement pattern.
  - ✓ At places of emigration, food grain may get wasted. While the places where immigration is dominant may face a PDS food crunch.

- An analysis by PRS Legislative research indicates a leakage of 40.4% of all food grains under the PDS network.

### Extra Mile

Recently, the Union Minister for Labour & Employment said that the *e-Shram portal is being integrated with One Nation One Ration Card scheme*.

## About e-Shram Portal

Shrmev Jayate

NATIONAL DATABASE OF UNORGANISED WORKERS

- In August 2021, the Union Ministry of Labour & Employment launched a **national database to register unorganised workers**, called the **e-Shram portal**.
- The portal came into being after the Supreme Court directed the Government to complete the registration process of unorganised workers.
- The government aims to register **38 crore unorganised workers**, such as construction labourers, migrant workforce, street vendors and domestic workers, among others.
  - The target group for the registration process is those aged between 16 and 59.
- A worker can register on the portal using his/her **Aadhaar card number** and **bank account details**, apart from filling other necessary details like **date of birth, home town, mobile number and social category**. The registrations can be done through **Common Service Centres (CSC)**, Self, or through **State Seva Kendras**.

### Benefits

- The aim of e-Shram portal is to boost the last-mile delivery of the welfare schemes for over 38 crore unorganised workers in the country.
- Each registered worker will be issued an identity card (with a 12-digit unique number), which can be used across the country to avail any benefits announced by the Government.
- The data on portal will be used for optimum realization of workers' employability and extend the benefits of social security schemes to them.
- The Union Govt has already announced **linking accidental insurance with registration** on the e-Shram portal.
  - ✓ If a registered worker meets with an accident, he/she will be eligible for Rs 2 lakh on death or permanent disability and Rs 1 lakh on partial disability.
  - ✓ The benefits include those offered during natural calamities.
- As announced in Budget 2022-2023, work is also **underway to link four portals** - the National Career Service, e-Shram, UDYAM (for individuals interested in beginning MSMEs) and ASEEM (Atmanirbhar Skilled Employee Employer Mapping).

### Informal Economy In India

- The latest data of informal sector workers registered on the e-Shram portal shows that a majority of them are living under extreme poverty.
- **27.69 crore** informal sector workers are registered on the e-Shram portal.
- **94.11%** of the workers registered on the portal have a **monthly income of Rs 10,000 or below**, while 4.36% have a monthly income between Rs 10,001 and Rs 15,000.
- The **social category analysis** of the data shows that 74.44% of registered workers are socially backward classes, including 45.32% OBC, 20.95% SC and 8.17% ST. General Category workers form the remaining 25.56%.
- **Occupation wise**, agriculture is at the top with 52.11% of enrolments done by those related to the farm sector followed by domestic and household workers at 9.93% and constructions workers at 9.13%.
- **Top-5 states** in terms of registrations are Uttar Pradesh, Bihar, West Bengal, Madhya Pradesh and Odisha.

### Age and Gender Distribution

- 61.72% of the registered workers are of the age from 18 years to 40 years, while 22.12% are of the age from 40

years to 50 years.

- Workers aged above 50 years are 13.23%, while 2.93% of workers are aged between 16 and 18 years.
- 52.81% of registered workers are female and 47.19% are male.

Almost all targeted informal sector workers will be registered on e-Shram portal during this calendar year. This will serve as a big opportunity to draft an evidence-based policy for the large section of deprived classes in the country.



## Online Child Sexual Abuse Cases

- The CBI is in the process of sending requests to several countries seeking information under the Mutual Legal Assistance Treaties (MLATs).
- MLAT is a legal agreement between two or more countries for the purpose of **gathering/exchanging information** in an effort to enforce public or criminal laws.
- The information sought is about those involved in the online sexual abuse of minors and circulation of child pornographic material on social media platforms.

### Enforcing MLATs in India

- Ministry of Home Affairs (MHA) is the nodal Ministry and the Central authority for seeking and providing mutual legal assistance in *criminal law matters*.
- Ministry of External Affairs (MEA) may be involved in this process when such requests are routed through diplomatic channels by these Ministries.
- Section 105 of the Criminal Procedure Code (CrPC) speaks of reciprocal arrangements to be made by the Centre with the Foreign Governments.

### Background

- Two dozen cases related to the online sexual abuse of minors and circulation of child pornographic material on social media platforms were registered in November 2021.
- CBI probe in these cases has resulted in identification of more than 80 Indian accused persons.
- The agency has gathered inputs related to over 50 groups with more than 5,000 offenders, involving the nationals of about 100 countries.

### Issue Of Online Child Sexual Abuse And Exploitation

- Online child sexual abuse and online child sexual exploitation involve the use of ICT as a means to sexually abuse/ exploit children.
- The United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) defines child sexual abuse as:
  - ✓ Contacts or an interaction between a child and an older or more knowledgeable child or adult when the child is being used as an object for the older child's or adult's sexual needs.
  - ✓ These contacts or interactions are carried out against the child using force, trickery, bribes, threats or pressure.
- The increase in young people (including children and infants) accessing the internet has seen a corresponding upward trend in cases of online child sexual exploitation, especially during Covid-19.

## Countering Online Child Sexual Exploitation And Abuse

### International conventions

- Convention on the Rights of Child of 1989, and The Optional Protocol to the Convention on the Rights of the Child on the sale of children, child prostitution and child pornography of 2000.
- These two conventions enumerate children's rights and clarify the obligation of states to protect children from sexual exploitation and sexual abuse.

### International collaboration

- Countries all over the world are collaborating to fight with this challenge.
- They use bilateral/multilateral treaties in the form of MLATs to seek information and do the needful.

### WeProtect Initiative

- In 2014, to tackle this issue globally, the UK government, with support from other national governments, leading technological companies, INTERPOL, UN agencies and civil society organizations, established this initiative.
- The initiative developed **WeProtect Global Alliance *Model National Response (MNR)***.
- MNR provides a comprehensive blueprint for effectively tackling child sexual exploitation and abuse at the national level.

### INTERPOL's International Child Sexual Exploitation (ICSE) database

- This database has been created to counter online child sexual exploitation and abuse.
- It not only aids in the identification of child victims of sexual exploitation and abuse, but also aid in the identification and investigation of perpetrators.

## Indian Laws/Initiatives

- **Protection of Children against Sexual Offences Act, 2012 (POCSO Act)**
- **Section 67B of the Information Technology (IT) Act, 2000** specifically provides stringent punishment for publishing, browsing or transmitting child pornography in electronic form.
- **Sections 354A and 354D of IPC** provide punishment for cyber bullying and cyber stalking against women.
- **Cyber Crime Prevention against Women and Children (CCPWC)** under which an online Cyber Crime reporting portal has been launched.
- **National Commission for Protection of Child Rights (NCPCR)** and **State Commission for Protection of Child Rights (SCPCR)**s are also mandated to monitor the implementation of the POCSO Act, 2012.

## Challenges

- Gaps in legislative frameworks and generally limited law enforcement capacity.
- Overall weak child protection systems.
- Significantly understaffed social welfare workforce, lacking professional recognition.
- Limited awareness of, and sense of urgency to address the issue among all professional cadres
- The COVID-19 pandemic has further highlighted the limited and highly volatile, capacity of social welfare and child protection systems across the world.

## Way Forward

- Move towards a comprehensive and integrated approach to tackling child sexual exploitation and abuse. Focusing on the digital dimensions alone will not yield the result.
- Move from project-based support to system-strengthening through statutory bodies.
- Strengthen multi-sectoral, national collaboration.
- Facilitate cross-border, regional and international collaboration.
- Promote child participation and children's agency.

- The Union Cabinet, recently gave its approval for expanding the mandate of Government e-Marketplace (GeM) to allow procurement by Cooperatives as buyers on GeM.
- Cooperatives are people-centered enterprises owned, controlled and run by their members to realise their common economic, social, and cultural needs and aspirations.
- There are currently **8.54 lakh registered cooperatives**, with **27 crore members**.
- Cooperatives play an important role in addressing the developmental needs of underprivileged classes, especially in agricultural, banking and housing sectors.

## Government e-Marketplace (GeM)

- It was launched in 2016, by the **Ministry of Commerce and Industry** to create an **open and transparent procurement platform**, facilitating online procurement of common use **Goods & Services** for government buyers.
- Later, a Special Purpose Vehicle (SPV) by the name of GeM SPV was set up as the **National Public Procurement Portal** in 2017.
- The portal is **open for all government buyers**—Central and State Ministries, departments, public sector enterprises, autonomous institutions, local bodies, etc.
- Till now, private-sector buyers were not allowed to purchase through the platform, although **sellers can be from both the segments** – private and government. Sellers range from small businesses to large companies.
- It also provides the tools of **e-bidding and reverse e-auction** to facilitate the government users achieve the best value for their money.
- GeM has made it mandatory for sellers to enter the **Country of Origin** while registering all new products on GeM so that the buyers can choose to buy only those products that meet the minimum local content criteria.
- **SPV** is an entity which is **formed for a single, well-defined purpose** and can be formed for any lawful purpose. It is, primarily, a **business association of persons or entities** eligible to participate in the association.



## Implementation Roadmap

- GeM will offer a dedicated onboarding process for **cooperatives**, technical infrastructure to support additional users on existing portals and other assistance to them.
- At the same time, to protect the sellers' interests and ensure timely payments, the modalities of payment systems will be decided by GeM in consultation with the cooperation ministry.
- To cover for these incremental costs, GeM may charge an appropriate transaction fee from cooperatives. This will be planned to ensure self-sustainability of operations for GeM, and hence no major financial implication is expected for government.

## Benefits

- The current move will help cooperatives in getting competitive prices through an open and transparent process.
- Moreover, since the societies have more than 27 Crore members, procurement through GeM would not only economically benefit the common man, but it would also enhance the credibility of the cooperatives.
- It is also expected to enhance overall **ease of doing Business** for cooperatives, while providing a larger buyer base to the GeM registered sellers

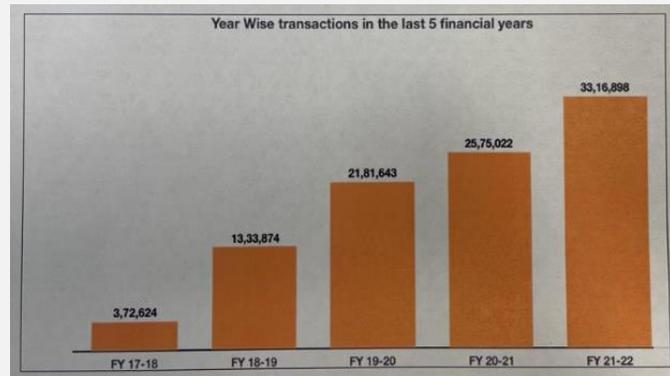
## Extra Mile

### Significance of GeM

- GeM is transparent, efficient, has the economy of scale and is speedy in procurement.
- The Gross Merchandise Value (GMV) on GeM has grown at a compound annual growth rate (CAGR) of over 84.5% from FY 2018-19 to FY 2021-22.

✓ **GMV** is the total amount of sales a company makes over a specified period of time, typically measured quarterly or yearly.

- GeM has delivered 178% growth in GMV in the FY 2021-22 and has crossed Rs 1 lakh crore in FY 2021-22 alone, which is higher than the cumulative GMV till FY 2020-21.
- Different independent studies, including those by the World Bank and National Economic Survey 2021, have highlighted substantial savings due to GeM's ability to pool in more participation and provide cost effective options.



### Challenges With GeM

- **Multiple Portals:** There are multiple portals in Central government departments, such as the defense procurement portal, Indian Railways e-Procurement System, which could limit GeM's effort to achieve its mandate as the National Public Procurement Portal.
- **Lack of Compliance:** It also faces a bit of a challenge in getting all Central organizations to comply with Rule 149 of the General Financial Rules (GFR) 2017, which mandates that all common-use goods and services that are available on the GeM portal should necessarily be procured on the platform.
- **Use of Vernacular Language:** The user interface for public purchase portals should be in local language to tackle the issue of a particular language dominance.



## National e-Governance Service Delivery Assessment 2021

Union Ministry of Personnel, Public Grievances and Pensions has released the second edition of the National e-Governance Service Delivery Assessment (NeSDA) 2021.

### About NeSDA

- Department of Administrative Reforms & Public Grievances (DARPG) had constituted NeSDA in 2019. This drive was part of DARPG's mandate to boost the e-government endeavours and drive digital government excellence.
- It is a biennial study which assesses States, UTs, and focus Central Ministries on the effectiveness of e-Governance service delivery.
- NeSDA helps the respective governments improve their delivery of citizen centric services and shares best practices across the country.

### NeSDA 2021

- NeSDA 2021 covers services across **seven sectors** -- Finance, Labour & Employment, Education, Local Governance & Utility Services, Social Welfare, Environment and Tourism sectors.
- The portals assessed were classified into one of two categories.
  - ✓ **1<sup>st</sup> category:** The designated portal of the respective government that provides a **single window access** to information and service links. These portals were assessed on four parameters, viz., Accessibility, Content Availability, Ease of Use, and Information Security & Privacy.

- ✓ **2<sup>nd</sup> category:** It comprises of the **Services Portals** which focus on the digital delivery of services and provide service-related information. The Services Portals were assessed on an additional three parameters: End-service Delivery, Integrated Service Delivery, and Status & Request Tracking.

## Summary of Assessment Report

### 1. Progress for e-Governance services across the country

- ✓ NeSDA 2021 has shown clear progress for e-Governance services across the country.
- ✓ Improvement in the country's e-Governance landscape may be summarized in the following key takeaways:
  - Increase in e-Service Delivery
  - Rise in use of Integrated / Centralized Portals for delivery of e-Services
  - Improvement across assessment parameter scores.

### 2. Ranking of State / UT Portals is as follows:

Rank	North-East and Hill States	Remaining States – Group A	Remaining States – Group B	Union Territories
1	Nagaland	Kerala	Odisha	Jammu & Kashmir
2	Meghalaya	Tamil Nadu	Uttar Pradesh	Andaman & Nicobar Islands
3	Assam	Punjab	Bihar	Puducherry

### 3. Ranking of State / UT Services Portals:

Rank	North-East and Hill States	Remaining States – Group A	Remaining States – Group B	Union Territories
1	Meghalaya	Punjab	Rajasthan	Jammu & Kashmir
2	Tripura	Tamil Nadu	Uttar Pradesh	Andaman & Nicobar Islands
3	Assam	Haryana	Madhya Pradesh	Delhi

### 4. Satisfaction With e-Services Provided by States/UTs

- ✓ The e-Services of Finance and Local Governance & Utility Services sectors were the most widely used by citizens.
- ✓ The rising trend of e-Services delivery shifting from single silo departmental portals to integrated / centralized portals has resulted in higher citizen satisfaction & greater number of e-Services being offered.
- ✓ An overall improvement has been seen in scores across all parameters and at all levels. *Information Security & Privacy* is the most improved parameter across all portals.

### 5. Ranking of Central Ministries

Rank	Ministry Portal	Ministry Services Portal
1	Home Affairs	Finance – Central Public Procurement Portal (CPPP)
2	Rural Development	Home Affairs - Digital Police
3	Education	Personnel, Public Grievances & Pensions – Bhavishya Portal

## Government Initiatives

- In Maharashtra Government has issued a resolution allowing citizens to inspect records at district level and local bodies under RTI for two hours every Monday. It will bring transparency.
- **Mission Karmayogi:** The capacity building programme will be delivered through an Integrated Government Online Training or iGOT-Karmayogi digital platform, with content drawn from global best practices rooted in Indian national ethos.
- **E- Kranti-** Electronic delivery of services- transforming e-gov by delivering all government services electronically to the citizens through integrated and interoperable systems.

- **Aspirational Districts Programme:** It is aimed at transforming 115 most backward districts with focused interventions in the field of health and nutrition, education, agriculture and water management, financial inclusion and skill development.
- **Government e- marketplace (GEM)** was launched in 2016 for single window online procurement.
- **National Data Sharing And Accessibility Policy (NDSAP)** to promote data sharing and enable access to Government of India owned data for national planning and development.
- **National E-Governance plan 2006** for improving service delivery and ensuring efficiency, transparency and reliability.
  - ✓ Programs launched under e-Governance: Pro-Active Governance and Timely Implementation (**PRAGATI**), **Digital India Program, MCA21** (to improve the speed and certainty in the delivery of the services of Ministry of Corporate Affairs), **Passport Seva Kendra (PSK)**, online Income tax return, etc.
- **Sevottam Model** was developed in 2006 that access the quality of internal process and their impact on quality-of-service delivery.
- **Right to Information:** RTI Act, 2005 gives greater access of the citizen to the information which in turn improves the responsiveness of the government to community needs
- Government of India commenced the exercise to formulate **Citizen’s charters** in 1996 for all states and UTs.
- **Police Reforms:** Modernizing police forces and implementing the Model Police Act of 2015. Reform of FIR lodging mechanism, including introducing filing e-FIRs for minor offences.
- **Legal Reforms:** The Central Government has scrapped nearly 1,500 obsolete rules and laws with an aim to bring about transparency and improve efficiency.

For the nation to achieve progress faster on all fronts, every section of society should be part of the growth story. Effective functioning of governance can be achieved by reformulating our national strategy to Gandhian principle of Antyodaya and to develop probity in governance.

**EXTRA MILE**

Prime Minister has announced that his government’s aim is to take welfare schemes to the level of saturation with a “**people- centric**” approach rather than the “government centric” approach.

**Importance of Good Governance**

- Good governance is directly linked to country’s economic prosperity. E.g., Finland is ranked 1<sup>st</sup> on Chandler Good governance index.
  - ✓ India is positioned exactly at midpoint – 52nd position out of 104 countries
- It protects vulnerable and low socio-economic population.
- Democracy derives its legitimacy from the people of state. In the absence of good governance, legitimacy is eroded.
- It is linked to the satisfaction of citizen thus health of political situation in the country.

**According to ARC Report, there are four pillars of good governance**

**Ethos/ Culture of service to the citizen**

- Transparent and free flow of information that is easy to understand and interpret.
- Accountable Government.
- Participative practices.

**Equity/Treating all citizens alike, with empathy to the vulnerable**

- Responsive towards citizens
- Accessible
- Following rule of law.

**Efficiency**

Speedy and effective delivery of service without harassment.

**Ethics**

Honesty, integrity and transparency.

**Resistance In Way Of Good Governance**

- **Lack of Accountability:** Due to tedious *disciplinary process* and hand in glove with political structure, there is lack of accountability.

- **Red-tapism:** It leads to misusing rules for benefits.
- **Digitally Handicapped:** There is lack of capacity within government specially with the use of technology.
- **Attitudinal Problems in Civil Service:** They are seen as to be inflexible, self-serving and inward looking. E.g., Recent incidence of shutting down the stadium during the practice time of athletes and serving their self-interest.
- **Lack of Awareness:** There is extremely low level of awareness of rights and duties among citizens.
- **Structural Problems:** Issues like political nexus, lack of social audit, corruption, communication gap between ministries and departments, hierarchies etc. creates **delay in work** thus creating barrier in quality and timely service.
- **Criminalization of Politics:** According to the Association of Democratic Reforms, 43% of Members of Parliaments of Lok Sabha 2019 are facing criminal charges. It is a 26% increase as compared to 2014.
- **Gender Disparity:** To ensure good governance it is essential to ensure the empowerment of women.
- **Centralisation:** Panchayati Raj Institutions (PRIs), currently suffer from inadequate devolution of funds as well as functionaries to carry out the functions despite 14th Finance Commission increased the tax devolution of the divisible pool to states from 32% to 42% for years 2015 to 2020.



## Governor's Power To Call For A Floor Test

The Governor's decision to call for the floor test has been in the spotlight once again in the case of current political crisis of Maharashtra.

- This political crisis erupted when some of the legislators (MLAs) of Shiv Sena - the largest political party in the Maha Vikas Aghadi coalition ruling the state, have aligned themselves with the party's rebel leader.

### Floor Test

- A floor test is taken at the floor of the legislative house to know whether the executive enjoys the confidence of the legislature.
- It is **constitutional mechanism (Article 164)** under which Chief Minister appointed by the Governor can be asked to prove the majority on the floor of the legislative Assembly.
- When a single party secures the majority of the seats in the house, the Governor appoints the leader of the party as Chief Minister.
  - In case more than one person is claiming to form the government and the majority is not clear, the Governor may call for a special session to see who has the majority.
  - In case of a tie, the Speaker casts his vote.
- If the majority is questioned, the leader of the party which claims majority has to move a vote of confidence and prove majority among those present and voting. The Chief Minister has to resign if he or she fails to prove majority.

### Composite Floor test

- It is conducted only when **more than one person stakes claim to form the government.**
- The Governor calls for special session to see who has the majority.
- The majority is then counted based on those present and voting.

### Constitutional Provision Related To Governor In Calling For A Floor Test

- **Article 174 of the constitution** authorizes the Governor to summon, dissolve and prorogue the state legislative assembly.

- ✓ The SC in the **Nabam Rebia case and Bamang Felix vs Deputy Speaker case (the Arunachal Pradesh Assembly case) 2016** had expressly stated that a Governor can summon, prorogue and dissolve the House, **only on the aid and advice of the Council of Ministers.**
- **Article 175 (2)(b):** Governor can summon the House and call for a floor test to prove whether the government has the numbers.
  - ✓ The SC in **Arunachal Pradesh Assembly case 2016** also clarified that **if the Governor had reasons to believe** that the Chief Minister and her or his Council of Ministers have lost the confidence of the House, a floor test could be ordered.
- The speaker can call for a floor test if the house is in session. But when Assembly is not in session, **the Governor's residuary powers under Article 163 allow him for a floor test.**
  - ✓ In **Shiviraj Singh Chouhan Vs Speaker, Madhya Pradesh Legislative Assembly case 2020**, the Supreme Court upheld the power of speaker to call for a floor test if there is prima facie view that the government has lost its majority.

In major setback for Maharashtra's Maha Vikas Aghadi (MVA) government, the Supreme Court of India (SC) recently protected rebel Shiv Sena MLAs from disqualification proceedings until July 12. This paves the way for a **floor test** to prove the confidence of the Assembly. The SC allows Maharashtra state to knock on its doors if the 'rebel' MLAs seek a no-confidence motion in order to verify the MVA's numbers in the legislature

### Background

- Deputy Speaker of the Maharashtra Assembly has served disqualification notices to 16 of the rebel camp MLAs, under the 10th Schedule of the Indian Constitution.
- This political battle reached the SC in response to the Deputy Speaker's disqualification notice.

### Petitioner's Key Arguments Before SC

- **Deputy Speaker Has Acted In A Biased Manner:**
  - ✓ Ordinarily, a member who has been elected as Speaker or Deputy Speaker resigns from the membership of his/her political party, but that has not happened in this case.
  - ✓ The post of the Assembly speaker fell vacant after Nana Patole of the Congress resigned from the post and became president of the Maharashtra Congress.
  - ✓ Since the Deputy Speaker's party (NCP) is supporting the "minority faction" of the Shiv Sena, his actions are biased.
- **Disqualification Notice In Violation Of SC Ruling:**
  - ✓ The notice to move a resolution for removal of Deputy Speaker, **under Article 179 (c)** of the Indian Constitution (removal of Speaker and Deputy Speaker of the Assembly), was submitted on June 21.
  - ✓ In the **Nabam Rebia case (2016)**, the apex court had *also* ruled that it would be "**constitutionally impermissible**" for a Speaker to adjudicate upon disqualification petitions under the 10th Schedule, *while a motion of resolution for his/her own removal from the office is pending.*

***Significance: This ruling gave a window to defecting legislators to stall or circumvent the 10<sup>th</sup> Schedule by seeking removal of the Speaker when disqualification proceedings are anticipated, thus effectively tying the hands of the Speaker.***

- ✓ The petitioner has claimed that the petition for disqualification of 16 MLAs was submitted to the Deputy Speaker after the notice for moving a resolution for his own removal was given.

### Have Legislators Used This Legal Route?

- Yes, since 2016, this legal route has been a **familiar playbook** for legislators cutting across states and political affiliations.

- **Uttarakhand:** In 2016, rebel MLAs of the Congress sought removal of Uttarakhand Assembly Speaker Govind Singh Kunjwal after shifting ranks to the BJP to stall anti-defection proceedings.
- **Tamil Nadu:** In 2018, AIADMK legislator S Karunas sent a notice to the Tamil Nadu Legislative Assembly Secretary, seeking removal of Speaker P Dhanapal at a time when the AIADMK leadership was mulling action against Karunas and three other MLAs for having pledged their support to T T V Dhinakaran.
- **Manipur:** In June 2020, the Congress in Manipur served a notice for the removal of Speaker Y Khemchand as nine of its MLAs defected to the BJP.

#### Procedure For Removal Of Speaker

- **Constitution Provisions:** Under **Article 179** of the Constitution, a Speaker or Deputy Speaker can be removed by a resolution of the Assembly passed by a majority of “**all the then members** of the Assembly”. The process begins with notice of at least 14 days.

**Interpretation:** In the 2016 Nabam Rebia ruling, the SC interpreted Article 179, specifically the term “**all the then members of the Assembly**”, to mean the composition of the house at the date/time of giving the notice for the removal of the Speaker.

- **No Change In Composition of Assembly:** This interpretation would mean that the composition of the Assembly cannot be changed from the date of issuing of a notice of the removal of the Speaker, and therefore the Speaker cannot make any decisions under the Tenth Schedule to change the composition of the House until the question of his removal is settled.



## India, Israel To Enhance Defence Ties

- With the intention to further strengthen the existing framework of the Indo-Israeli defence cooperation architecture, both the sides adopted the **India-Israel Vision on Defence Cooperation**.
- This document was signed at a meeting between Defence Minister Rajnath Singh and his visiting Israeli counterpart Benny Gantz.
- Cooperation between the countries would be in line with PM Modi’s Make in India vision.

#### Comprehensive 10-year Roadmap

- In October 2021, India and Israel had agreed to form a *task force* to formulate a comprehensive 10-year roadmap. This was formulated to identify new areas of cooperation as part of efforts to further advance the bilateral defence cooperation.
- This roadmap was agreed at the 15th India-Israel Joint Working Group (**JWG**) meeting on bilateral defence cooperation held in October 2021.
  - ✓ The JWG is the apex body between the Defence Ministries of the two countries to comprehensively review and guide all aspects of bilateral defence cooperation.

#### India-Israel Bilateral Relation

##### Historical Background

- Both countries gained their independence from the UK within months of each other. However, they headed in different directions for nearly four decades --
  - ✓ India as a leader in the **NAM** maintained close relations to the Arab world and the Soviet Union and Israel established close ties with the US and Western Europe.

- The two famous foreign policy decisions of India in relation to Israel at the time of Independence included:
  - ✓ India's participation in the *UN Special Committee on Palestine* and
  - ✓ Its decision on Israel recognition as a State. India had recognised Israel in September, 1950. Full-fledged diplomatic relations between the countries were established in January, 1992.

### Economic and Commercial Relations

- From US\$ 200 million in 1992 (comprising primarily of diamonds), merchandise trade diversified and reached US\$ 4.14 billion (excluding defence) during the period April 2020 – February 2021 in India's favour.
- India is Israel's **third-largest trade partner in Asia** and seventh largest globally.
  - ✓ India continues to be a 'focus' country for Israeli Government's increased trade efforts.
  - ✓ During April 2000 – March 2021, Israel's direct FDI into India was reported at US\$ 224.76 million.

### Agriculture

- Agricultural cooperation between the two sides is formalized through **three-year action plans**.
- The two sides are currently implementing the fifth phase of joint action plan (2021-23). The Fourth Action Plan (2018-2020) was aimed at increasing farmers' productivity and optimization of *water use efficiency*.
- The focus during the new work programme (2021-23) will be to convert the villages surrounding the Centres of Excellence (COEs) into Villages of Excellence (VOEs) through massive outreach programmes.
- 29 Centers of Excellence for Horticulture are fully active in 12 Indian states.

### Water Technologies

- Ongoing cooperation in this sector was formalized through an **MOU on Water Resources Management and Development Cooperation** signed in November 2016.
- During the visit of PM Modi to Israel in July 2017, both the sides signed **MoUs on National Campaign for Water Conservation in India**.
- Israeli company IDE has built several desalination plants in India. A 100 MLD (Million Litre per day) desalination plant set up by IDE at Nemelli in Tamilnadu was commissioned in 2013.
- Israeli drip irrigation technologies and products are now widely used in India.

### Defence & Security

- There are regular exchanges between the armed forces.
- Israel has been among the top four arms suppliers (along with US, Russia and France) to India with military sales worth around \$1 billion every year. Indian armed forces have inducted a wide array of Israeli weapon systems -
  - ✓ Phalcon AWACS (airborne warning and control systems) and Heron,
  - ✓ Searcher-II and Harop drones,
  - ✓ Barak anti-missile defence systems and Spyder quick reaction anti-craft missile system.
  - ✓ India is now finalising "Project Cheetah" to arm the Heron drones with laser-guided bombs with Israel's help.

### What Makes Israel A Good Arms Supplier To India?

- Israel has always been a '**no-questions-asked supplier**', i.e., it transfers even its most advanced technology without placing limits to its use.
- The export-oriented Israeli defence industry and its openness to establishing joint ventures **complement**

both 'Make in India' and 'Make with India' in defence.

- India suffers from many constraints in defence production and acquisition including lack of technical expertise, complex bureaucracy, lack of manufacturing infrastructure etc. Israel fills these shortcomings by **supplying ready-to-use critical technologies**, even on short notices.

### Cooperation in S&T

- India-Israel cooperation in S&T is overseen by the **Joint Committee on S&T**, established under the S&T Cooperation Agreement signed in 1993.
- During the visit of PM Modi in July 2017, a MoU for establishing **India-Israel Industrial R&D and Innovation Fund (i4F)** was signed. This MoU, with a contribution of US\$ 20 million from each side over 5 years, is playing an important role in jointly undertaking R&D projects.
- In December 2020, India and Israel signed an Agreement on cooperation in the fields of health and medicine.

### Culture and Education

- The relations between the two peoples go back to more than two millennia. India has welcomed Jews for several centuries and their contribution has enriched Indian culture.
- India and Israel signed a **Cultural Exchange Programme** (for the period of 2020-23) in August 2020 to facilitate bilateral cultural exchanges.
- There are approximately 1200 Indian students in Israel, mostly at the doctoral and post-doctoral levels.
- India offers Indian Council of Cultural Affairs (ICCR) scholarships to Israeli students every year for various courses in Indian institutions.

### Irritants In India-Israel Relationship

#### A. Palestinian Issue

- India does continue to walk a tightrope between its historical ties with Palestine and its newfound love for Israel.
- Last year, India's statement in the UNSC on the Israel-Palestine violence virtually held Israel responsible for the violence.
- India expressed its strong support to just Palestinian cause and **unwavering support for two-state solution**.

**B. Iran Issue:** Israel considers Iran an existential threat. India, on the other, has a historical relationship with Iran. It finds the cooperation useful for energy supplies, and an alternative route through Chabahar port to Afghanistan and Central Asia.

#### C. India, Israel And The Arab World Triangle

- While Israel has inherent differences with Arab countries, India has significant stakes there.
- However, the signing of **Abraham Accord** (peace deal between Israel and countries of Arab world such as UAE, Bahrain) provides the much-needed space for India to strengthen the relation with Israel as well as with the countries of Arab World.

**D. Bilateral Trade And Investment Still Below Potential:** Bilateral trade has not diversified much—diamonds and chemicals still make up for the large chunk of the pie.

#### E. Voting Pattern of India at UN

- India abstained on a UNHRC resolution in 2015, and criticized Israel for aerial Bombing on Gaza.
- In September 2020, the Economic and Social Council of UN has rebuked Israel for allegedly violating women's rights. **India voted against Israel on this matter.**

## Conclusion

- Cooperation in various areas ranging from technology to defence has led to the opening up of a new potential partnership between the *two-tech savvy democracies*: India and Israel.
- The agreement on enhancing partnership in futuristic defence technologies is an effort in the right direction.
- What is needed now is the identification of mutually beneficial technologies, followed by a formal collaboration between Israel's Directorate of Defence Research & Development and India's DRDO along with greater engagement between their respective innovation ecosystems.



# India & Vietnam Ink Pact To Boost Defence Ties

## Key Highlights

### A. Joint Vision Statement on India-Vietnam Defence Partnership Towards 2030

- This document will significantly enhance the scope and scale of existing defence cooperation.

### B. \$500 million Defence Line of Credit Extended to Vietnam

- The two ministers also agreed on *early finalisation of \$500 million Defence Line of Credit extended to Vietnam.*
- The implementation of the projects shall add substantially to Vietnam's Defence capabilities. It will also push the govt's vision of ***make in India, make for the world.***

### C. India and Vietnam-Inked MoU on Mutual Logistics Support

- It is the **first such major agreement which Vietnam has signed with any country.**
- India, in turn, has such reciprocal logistics pact with several countries like *US, Australia, Japan, France, South Korea and Singapore.*
- This pact will allow their militaries to use each other's bases for repair and replenishment of supplies.

### D. India's Help Towards Setting Up Of Language and IT Lab

- Indian Defence Minister also announced that India will gift two simulators and a monetary grant.
- It will be used towards setting up of Language and IT Lab at the Air Force Officers Training School for capacity building of the Vietnamese Armed Forces.

## India – Vietnam Relations

### Background

- India and Vietnam, with a long history of cultural and civilizational links and common roots in the struggle against colonial rule, share traditionally cordial bilateral relations.
- India was the Chairman of the International Commission for Supervision and Control formed, pursuant to the Geneva Accord of 1954, to facilitate the peace process in Vietnam.

### Relationship Elevated to Comprehensive Strategic Partnership

- India initially maintained Consulate-level relations with the then North and South Vietnams.

- It later established full diplomatic relations with unified Vietnam in January 1972. In 2022, India and Vietnam are celebrating the **50th anniversary of their diplomatic relations**.
- Relations between the two countries were elevated to the level of ‘Strategic Partnership’ in July 2007.
- In 2016, bilateral relations were further elevated to a “**Comprehensive Strategic Partnership**”.

### Trade and Economic Cooperation

- For FY 2021-22, bilateral trade posted a growth of 27% and reached US\$ 14.14 billion.
  - ✓ Indian exports to Vietnam reached US\$ 6.70 billion while Indian imports from Vietnam amounted to US\$ 7.44 billion.
- In FY 2021-22, for India, Vietnam was the 23rd largest trading partner globally and the 4th largest within ASEAN, following Singapore, Indonesia and Malaysia.
- India’s investments in Vietnam are estimated at around US\$ 1.9 billion including investments routed through third countries.
  - ✓ As of December 2021, India has 313 valid projects with total invested capital of US\$ 910.4 million in Vietnam, ranking 25th among countries and territories investing in Vietnam.
  - ✓ As of 2021, Vietnam has six investment projects in India with total estimated investment of US\$ 28.55 million, primarily in the areas of pharmaceuticals, IT, chemicals and building materials.

### Development Partnership

#### A. Quick Impact Projects (QIPs)

- Under the Mekong Ganga Cooperation (MGC) framework, India has been taking up QIPs, each valued at US\$50,000, in different provinces of Vietnam for development of community infrastructure.
- So far, since 2017, 27 QIPs have been completed in 23 provinces of Vietnam, while 10 new projects are under implementation in 10 provinces.

#### B. Capacity Building Cooperation, Training Programmes and Scholarships

As part of capacity building support under the Indian Technical and Economic Cooperation (ITEC) programme, India has offered short-term courses in Indian institutions to nearly 3000 Vietnamese participants over the years.

#### C. Cultural Conservation Projects in Vietnam

- India is providing technical assistance worth US\$ 2.25 million for conservation and restoration of ancient **Cham monuments**.
- It is being carried out at the World heritage Site of My Son in Quang Nam Province of Vietnam.

#### D. Humanitarian Assistance

Indian Naval Ship **INS Kiltan** undertook a visit to Ho Chi Minh City in 2020 to deliver flood relief materials for the people of Central Vietnam (**Mission Sagar III**). Mission Sagar-III is part of India’s Humanitarian Assistance and Disaster Relief (HADR) assistance to friendly foreign countries during the Covid-19 pandemic.

### Defence Partnership

- MoU on Defence Cooperation signed in 2009 and the Joint Vision on Defence Cooperation signed in 2015 provide the broad institutional framework.
- The recently signed Joint Vision Statement on India-Vietnam Defence Partnership towards 2030 and MoU on Mutual Logistics Support further strengthens the relationship.

- The well-established bilateral annual exchange framework includes Defence Policy Dialogue at the Deputy Ministerial level, Services Staff talks and High-level Meetings between the Coast Guards.
- Vietnam is interested in India's Akash (surface-to-air) systems, Dhruv advanced light helicopters and Brahmos missiles.
- India also participated in the **PASSEX Exercise** with the Vietnam People's Navy.

### Challenges In The Relationship

- **Creating A Balance With China** - Similar to other South East Asian countries, Vietnam also faces the challenge of creating a balance between India and China. Chinese actions in the South China Sea have pushed together Hanoi and New Delhi in a partnership. However, Vietnam remains concerned about provoking China.
- **Hurdles To Increased Military Ties** - The Indian military was currently on a war-footing for a possible two-front conflict with China and Pakistan, its ability to provide real-time military help to Vietnam was limited.
- **Challenges In Commercial Cooperation** - India's Oil and Natural Gas Corporation's international arm ONGC Videsh has for several years operated in waters claimed by both Vietnam and China.
  - ✓ India's greater role in exploring for oil and gas off the Vietnamese coast has Hanoi's blessing but opposition from Beijing.
  - ✓ Any future India-Vietnam cooperation would be complicated by commercial considerations such as financial viability and the risk of Chinese harassment of any oil operations in disputed waters.

### Conclusion

- Indio-Vietnamese ties are deep, including in the defence sector. Though there may be strong strategic rationale pushing the two countries together, there are also potentially clear limits to the relationship.
- As much as Hanoi needs greater support, it also has to worry about potential negative Chinese reactions.
- Hence, New Delhi needs to be careful not to push Vietnam too far, especially considering its own reluctance in being seen as ganging up against China.

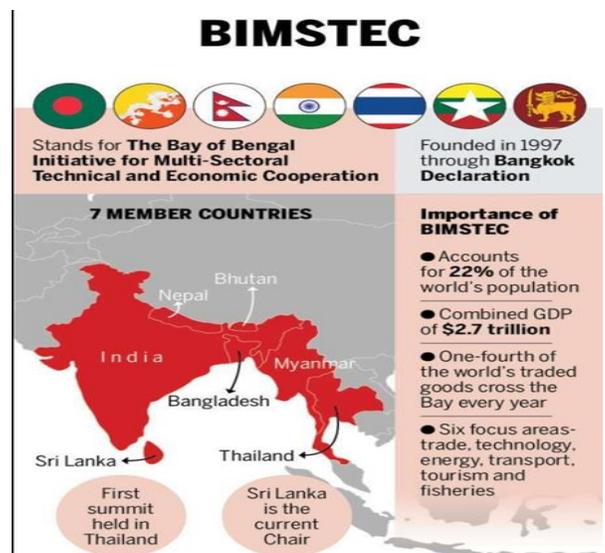


## 25th Founding Day of BIMSTEC

The 25th Founding Day of BIMSTEC was celebrated in Dhaka on June 6.

### BIMSTEC

- It is an **economic bloc with Permanent Secretariat at Dhaka, Bangladesh.**
- **Aim:** To **counter** the onslaught of **globalisation** by accelerating **regional growth** through mutual cooperation by utilising regional resources and geographical advantages.
- It is **sector-driven cooperative organisation** in which **6 sectors have been included** (see the figure beside).
- Under these 6 sectors, 14 priority areas have been identified. **Climate change was added as the 14<sup>th</sup> priority area of cooperation in 2008.**
- Among these priority areas, a member country chooses



which of the 14 priority areas it is willing to take lead.

- **India is lead country** for -- Transport & Communication, Tourism, Environment & Disaster Management, Counter-Terrorism & Transnational Crime.

Significance of BIMSTEC for India	Challenges
<ul style="list-style-type: none"> <li>• <b>Bridge-builder between the SAARC and the ASEAN</b> – Myanmar and Thailand are members of ASEAN while other member nations belong to SAARC.</li> <li>• <b>Neighbourhood First Policy</b> - BIMSTEC is an integral part of India's ongoing efforts to increase geo-economic cooperation among countries in the <u>region which it sees as part of its extended neighbourhood</u>.</li> <li>• <b>Potential game-changer for the landlocked northeastern states.</b></li> <li>• <b>Strategic Significance</b> - China has diverted its attention to the Bay of Bengal with greater assertion. The <u>Bay of Bengal acts like a funnel to the Malacca Strait</u>, a major trade route for China.</li> <li>• <b>Economic Significance</b> – 7 nations had robust annual economic growth in recent times and one-fourth of the world's traded goods cross the Bay every year.</li> <li>• <b>Resource rich region</b> - The Bay of Bengal has <u>huge untapped resources especially</u> - massive reserve of natural gas.</li> <li>• <b>In counterterrorism:</b> Close cooperation between India and BIMSTEC countries can strengthen the fight against terrorism and illicit drug trafficking.</li> <li>• <b>Attractive alternative to SAARC</b> - BIMSTEC <b>more naturally</b> lends itself to regional integration (physical connectivity as well as economic cooperation) than SAARC.</li> </ul>	<ul style="list-style-type: none"> <li>• <b>India and Bangladesh</b> have Teesta water sharing dispute and refugee's issue.</li> <li>• <b>Bangladesh and Myanmar</b> have problems in regard to the Rohingya Muslims as refugees.</li> <li>• <b>India and Sri Lanka</b> continue to have friction on the fishermen issue.</li> <li>• <b>Chinese Interference</b> in the backyard <ul style="list-style-type: none"> <li>✓ Growing Nepal – China economic and security cooperation</li> <li>✓ Growing friendship between Sri Lanka and China</li> <li>✓ Increased Chinese activities in Bangladesh</li> </ul> </li> <li>• Initiated by India, <b>MILEX 2018 was the first field training military exercise</b> as part of the BIMSTEC. <u>Nepal and Thailand only sent observers and did not participate.</u></li> <li>• <b>BIMSTEC seriously lags behind ASEAN</b> and other regional organisations <b>in terms of people-to-people contacts.</b></li> </ul>

### 5th BIMSTEC Summit

- In March 2022, the 5th BIMSTEC Summit was hosted in virtual mode by Sri Lanka, the current chair of BIMSTEC.
- The Summit's theme was "Towards a Resilient Region, Prosperous Economies, Healthy People".

### Key Highlights of Summit

#### A. Main Outcome-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, Bay of Bengal.
- The charter would provide rules, a framework, and long-term goals.
- This, in turn, will streamline the operations of BIMSTEC and allow the organisation to finally deliver on its potential.

#### B. BIMSTEC Master Plan For Transport Connectivity

- It 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.

### C. Other BIMSTEC Agreements Signed

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

### India's Stand At The Summit

#### 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.

#### 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 BIMSTEC & has a very important geography.

#### India to Lead Security Pillar of BIMSTEC

- The leaders of 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.**

#### 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.

### Conclusion

- In its 25 years of existence, BIMSTEC has proved to be a bridge of friendship connecting the people of South and South East Asia.
- With the adoption of three legal instruments and the connectivity master plan at Colombo, BIMSTEC is now ready to perform and deliver.



## XIV BRICS Summit

- The 14th BRICS Summit was hosted by China in *virtual format*. India was represented by PM Modi.
- **Theme of BRICS Summit** - "Foster High-quality BRICS Partnership, Usher in a New Era for Global Development".
- **BRICS Plus** virtual conference was also held as part of the main meeting with ministers from countries, including the UAE, Saudi Arabia, Egypt, Kazakhstan, Indonesia, Argentina, Nigeria, Senegal, and Thailand.

### About BRICS

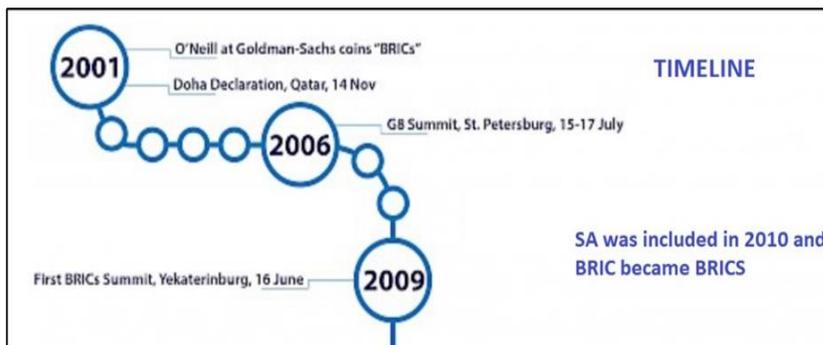
- BRICS brings together **5 major emerging economies** - Brazil, Russia, India, China and South Africa.

- BRICS as a platform comprises 41% of world population, 24% of world GDP and over 16% share in world trade.

- Headquarter: **Shanghai**

### Beijing Declaration

The participating members issued a joint statement in the form of Beijing Declaration. Key highlights of the declaration are as follows:



### Working In Solidarity to Combat COVID-19

- It supported the leading role of **WHO** in combating the pandemic, as well as acknowledged initiatives such as the COVAX and the ACT-A.
  - ✓ COVAX is the vaccines pillar of the Access to COVID-19 Tools (ACT) Accelerator.
  - ✓ The ACT Accelerator (ACT- A) is a ground-breaking global collaboration to accelerate the development, production, and equitable access to COVID-19 tests, treatments, and vaccines.
- It welcomed the convening of the BRICS High-Level Forum on Traditional Medicine.
- The declaration welcomed the virtual launch of the BRICS Vaccine R&D Center.
- It emphasized the urgent need for the establishment of the **BRICS Integrated Early Warning System** for preventing mass infectious diseases risks.

### Safeguarding Peace and Security

It welcomed the BRICS Joint Statement on "**Strengthen BRICS Solidarity and Cooperation, Respond to New Features and Challenges in International Situation**". It was adopted by BRICS Foreign Ministers in May 2022.

### On Ukraine

- The declaration expressed concern about the humanitarian situation in Ukraine and supported talks between Russia and Ukraine.
- The grouping is willing to support the United Nations' and the **International Committee of the Red Cross's (ICRC)** efforts to deliver humanitarian aid to Ukraine

### Promoting Economic Recovery

- It emphasized the importance of continued implementation of the **Strategy for BRICS Economic Partnership 2025** in all relevant ministerial tracks and working groups.
- The declaration took note of China's hosting the "Buy BRICS" online promotion event.
- It welcomed the establishment of **Digital Economy Working Group** by upgrading the E-commerce Working Group.
- It agreed to promote consumer protection in e-commerce by advancing the implementation of **BRICS Framework for Consumer Protection in E-commerce**.

### New Development Bank (NDB)

The declaration congratulated NDB on its relocation to its permanent headquarters building in Shanghai as well as the opening of NDB's regional office in India.

## Energy Security

- It emphasized the fundamental role of energy security in achieving sustainable development goals. In this regard, it welcomed the **BRICS Energy Report 2022**.
- It commended the holding of the BRICS Youth Energy Summit and other related activities.

## Food Security

- As BRICS countries produce around 1/3<sup>rd</sup> of the world's food, the members stressed their commitment to furthering agricultural cooperation.
- In this regard, it reiterated the importance of implementing the **Action Plan 2021-2024 for Agricultural Cooperation of BRICS Countries**.
- It also welcomed the *Strategy on Food Security Cooperation of the BRICS Countries*.

## Technological Cooperation

- It took note of the **BRICS Forum on Big Data** for Sustainable Development and support information exchanges and technical cooperation on AI technology.
- It welcomed **the establishment of the BRICS Joint Committee on Space Cooperation**.

### Iran, Argentina Apply To Join BRICS Bloc

- Iran and Argentina have applied to join BRICS mechanism.
- During the recent BRICS summit, leaders agreed to continue to discuss the possibility of admitting new countries to the grouping on the basis of full consultation and consensus.

### China's Position:

- Chinese President called on members to reject the "Cold war mentality" and oppose what he called the US and EU's "unilateral sanctions".
- The Chinese president also called for a *larger security alliance within BRICS*, underlining that Beijing would like to work with the grouping to operationalise the **Global Security Initiative (GSI)**.
  - ✓ Proposed by China in May 2022, the GSI aims to be an Asian security framework that replaces "confrontation, alliance and a zero-sum approach with dialogue, partnership and win-win results".

### Role of BRICS: An Analysis

- New Development Bank and the Contingency Reserve Arrangement are actually the flagship outcome of BRICS.
- BRICS, which started off primarily with an economic pillar, has now diversified considerably to include security, health, science and technology, culture and civil society.
- Role of BRICS has also been very important in the context of being a pressure group on the question of reform of multilateralism and also on the question of reform of global governance institutions.
- BRICS sees itself as a bridge between developing countries and developed world and takes up issues which are very relevant to the developing countries.

### Challenges Faced by BRICS

- Lack of a binding ideology
- Bilateral differences
- Diversity in terms of socio-cultural and political systems
- Economic slowdown faced by member countries
- China's overwhelming presence which reduces the space for other countries.

## Conclusion

- From India's perspective, participating in the BRICS platform allows it to shape global governance conversations as a rising power.
- Hence, India should strive towards maintaining cooperation within the BRICS bloc. Growing intra-BRICS cooperation will contribute to global stability, development and cooperation in a positive manner.



# 48th G7 Summit

48<sup>th</sup> G7 Summit was held at Elmau, Germany from 26-28 June 2022. Besides the member countries, the summit was joined by the Leaders of **Argentina, India, Indonesia, Senegal and South Africa**, as well as **Ukraine**.

## Key Highlights of The Summit

### Theme & Major Goals

- This year's theme was - **Progress Towards An Equitable World**.
- The summit had **5** major goals -- Strong alliances for a sustainable planet; Setting the course for economic stability and transformation; Enhanced preparedness for healthy lives; Sustainable investments in better future; Stronger together.

### Partnership for Global Infrastructure & Investment (PGII)

- At the 2021 Summit (47<sup>th</sup> Summit), G7 leaders had announced their intent to develop a values-driven, high-impact, and transparent *infrastructure partnership*.
- This was formally launched in the form of PGII at the recently concluded summit through which they aim to mobilise USD 600 billion over the next 5 years to narrow global investment gap..
- **Four Priority Pillars of PGII –**

Climate and Energy Security

Digital Connectivity

Gender Equality and Equity

Health and Health Security

- The US has already announced **investment worth \$30 million for a fund promoting food security in India** under the PGII.

### 2022 Resilient Democracies Statement

- India, along with G7 countries and four invited countries, signed the G7 joint statement on 'Resilient Democracies'.
- Through this statement, the participating countries expressed their commitment to:



Guard the freedom, independence and diversity of civil society actors

Protect the freedom of expression and opinion online and offline

### On Russia's War Of Aggression Against Ukraine

- G7 leaders resolved to stand with Ukraine for as long as it takes, providing the needed financial, humanitarian, military, and diplomatic support.

- They endorsed the ambitious and untried concept that **seeks price caps on Russian oil**.
  - ✓ Actually, higher crude oil and fuel prices allowed Russian revenues to climb in May despite its export volumes slipping due to sanctions.
  - ✓ Hence, the United States is pushing for a mechanism that **would cap the price other countries pay for Russian oil**. It seeks to leverage the West's financial and shipping influence over Russian oil exports.
  - ✓ The idea is to **tie financial services, insurance and shipping of oil cargoes** to cap on Russian oil price. So, if a shipper or importer wanted these services, they would have to commit to the Russian oil being sold for a set maximum price.
- G7 Leaders also agreed on a **ban on imports of Russian gold**.

### Food Security Around The Globe

- The participating leaders pledged to *spend \$4.5 billion this year to help ensure food security around the globe*.
- To protect people from hunger and malnutrition, and in response to **Russia's weaponisation of grain**, G7 leaders decided to increase global food and nutrition security through the Global Alliance on Food Security.

#### India at 48<sup>th</sup> G7 Summit

##### 1. Participation:

- India was represented by PM Modi at the summit. Although, India is not a member of G7, but it was called as a guest to attend the summit.
- At the G-7 summit in Germany, PM Modi participated in **two sessions** on:

Investing In A Better Future: Climate, Energy, Health

Food Security

##### 2. No Direct Reference on Ukraine

- Indian PM in his speech made no direct reference on Ukraine and he did not criticise Russia for its invasion.
- He said that G7 meeting is being held amid the atmosphere of global tension and urged to use the path of dialogue and diplomacy to resolve the crisis.

##### 3. Urged G7 to Use Indian Agricultural Talent In Its Member Countries

- India has immense agricultural manpower compared to the countries of the G7.
- Indian agricultural skills have helped give new life to traditional agricultural products like cheese and olive in some of the countries of G7.
- With the help of traditional talent of India's farmers, food security will be ensured to G7 countries.

##### 4. Stops Short Of Endorsing Partnership For Global Infrastructure And Investment (PGII)

- India stopped short of endorsing another initiative by the US and its allies, the PGII.
- India endorsed only two outcome documents pertaining to the G7 and the outreach countries together. These are:

Resilient democracy (statement)

The chair's summary on the Just Energy Transition Partnership

##### 5. Gift Diplomacy

- Continuing with his efforts to highlight India's soft power on the global stage, PM Modi gifted a variety of products to heads of governments at the G7 meet.

- Distinct artistic products identified with different UP regions featured heavily in the PM's gift choices.
  - ✓ E.g., a gulabi meenakari brooch and cufflink set to US President Joe Biden
    - Gulabi Meenakari is a GI-tagged art form of Varanasi in Uttar Pradesh.
    - A piece of pure silver is moulded into a base form, and the chosen design is embossed in the metal.
  - ✓ Pieces of black pottery from Nizamabad were gifted to Japanese PM.
  - ✓ To celebrate the shared Ramayana links between India and Indonesia, the PM gifted a lacquerware Ram Darbar to Indonesian President.
    - The GI-tagged lacquerware art-form has its roots in the temple town of Varanasi in UP.



### About G7: Origin

- The origin of G7 lies in the oil shocks of 1973 and the corresponding financial crisis.
- In order to address the situation after oil shock, the heads of the world's six leading industrial nations decided to hold a meeting in 1975.
- These six nations were - **the US, UK, France, Germany (West), Japan and Italy.**
- These countries were joined by Canada in 1976 and G7 came into existence.

### Current Members

- **US, UK, Canada, France, Germany, Italy and Japan** are the current members of this group.
- It can be said that the members of this group are the most developed and the advanced economies of the world.
- The European Union is also represented within the G7.

### Power of G7

- The G7 is **not based on a treaty** and has **no permanent secretariat or office**. The agenda of G7 is set by the presiding nation.
- It cannot pass any laws because it is made up of separate nations with their own democratic processes.
- However, decisions taken by G7 have global effects as the member countries are political and economic heavyweights.

### Purpose of G7

- To determine the course of multilateral discourse To shape political responses to global challenges.
- Basically, G7 provides a platform to discuss and coordinate solutions to major global issues, especially in the areas of trade, security, economics, and climate change.

### G7 & G8

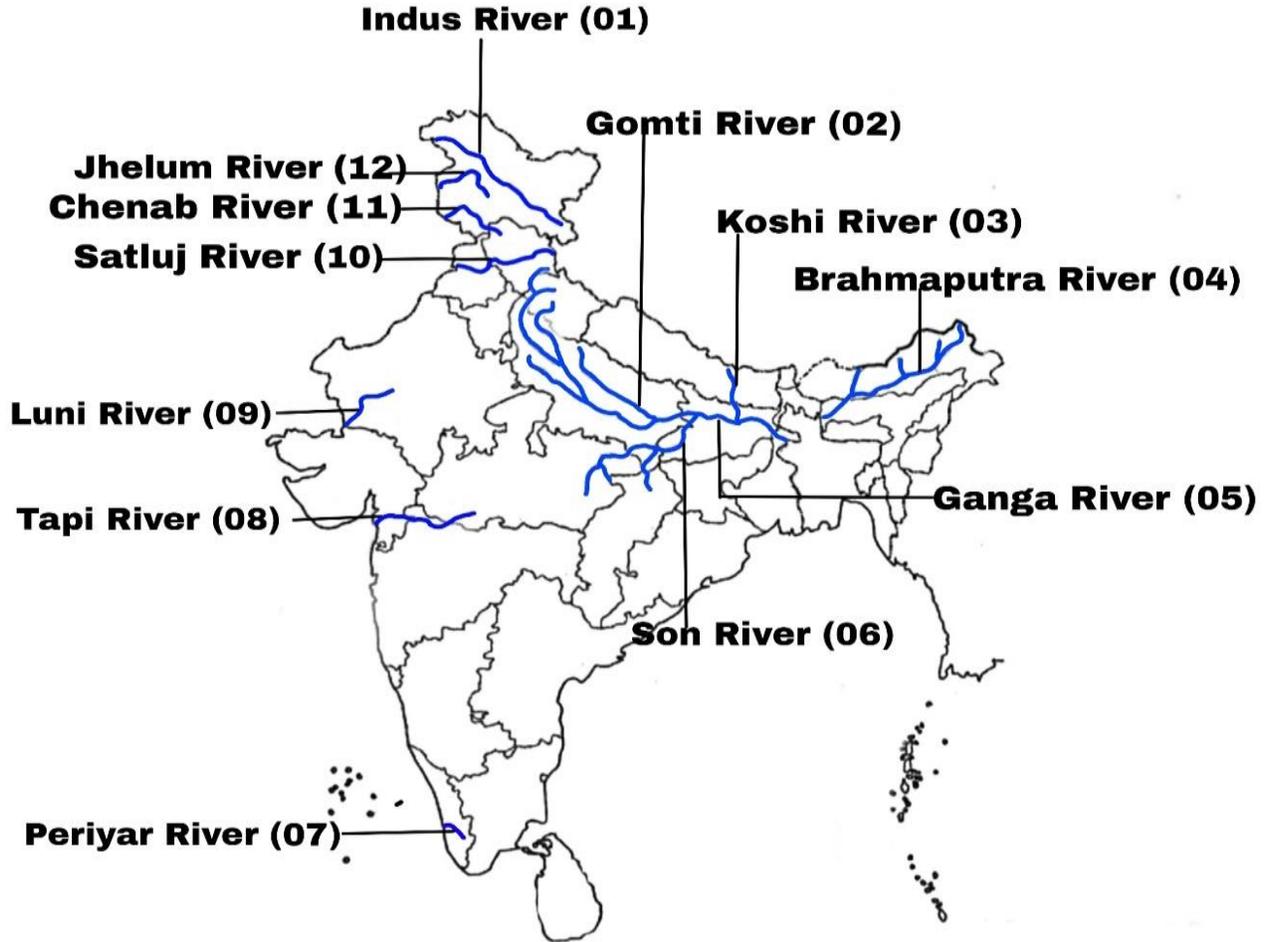
- In 1998, Russia was formally inducted in the group, which transformed G7 into G8.
- However, Russia annexed Crimea in 2014. As a result, it was suspended from the grouping. Hence, the group became G7 again in 2014.

### Significance of G7

- Economic Significance:** G7 nations account for close to 64% of global net wealth (\$317 trillion), 31 % of global GDP, and 10% of the world's population.
- Political Significance**
  - Political heavyweights are capable of shaping the response of multilateral challenges.
  - In 1999, it created the *Financial Stability Forum* in order to manage the international monetary system
- G7 & COVID-19 Pandemic**
  - 47th G7 summit (held in June 2021) focused on the recovery from ongoing COVID-19 pandemic.
  - It promised to distribute 1 billion vaccines to poorer countries.
- Developmental Significance**
  - G-7 provided \$300 million in 1997 to help build the containment of the reactor meltdown at Chernobyl.
  - G7 played crucial role in setting up a global fund to fight malaria and Aids in 2002.
  - In October 2020, G7 finance ministers backed an extension of a G20 bilateral debt relief initiative for the world's poorest countries.
    - ✓ It is also known as Debt Service Suspension Initiative (DSSI).
    - ✓ It means that bilateral official creditors are, during a limited period, suspending debt service payments from the poorest countries that request the suspension.

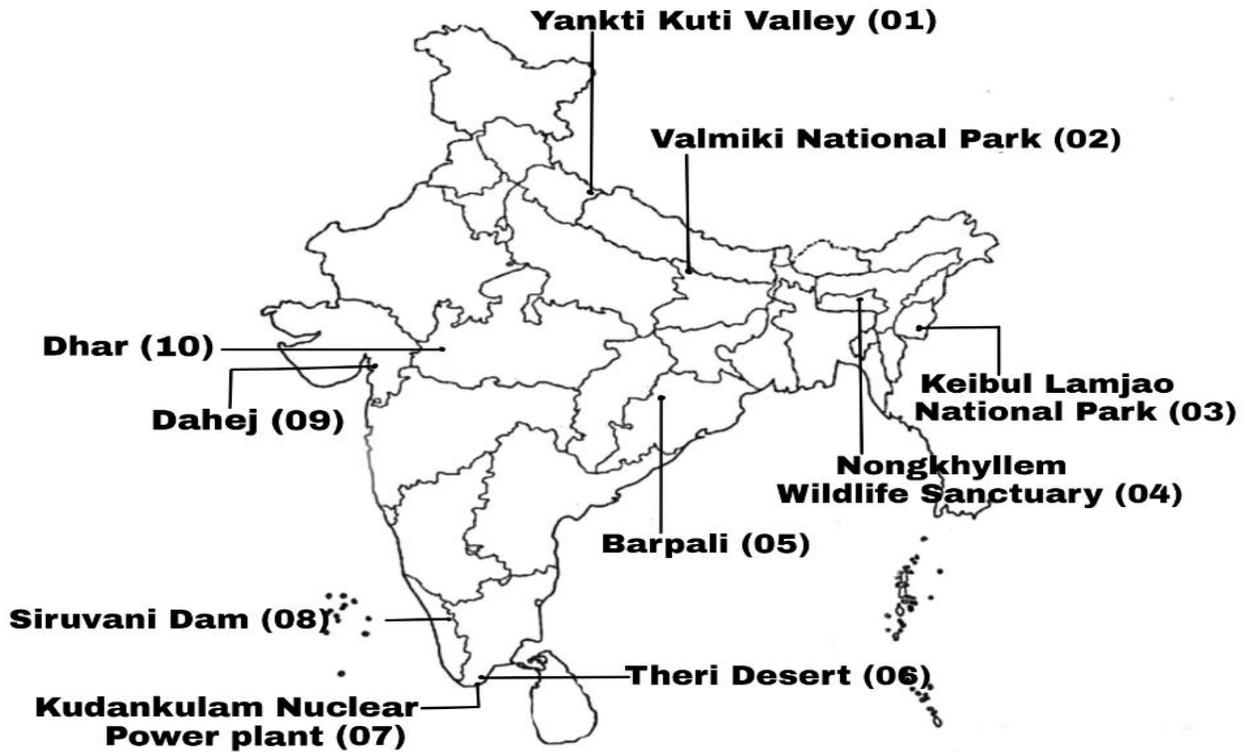
## MAPS: PLACES IN NEWS

### Indian Rivers



01	<b>Indus River</b>	It is a <b>trans-boundary river</b> of Asia. It rises near <b>Bokhar Chu glacier (Kailash Mountain Range) in Western Tibet</b> , flows northwest through the disputed region of Kashmir. It flows in north-west direction through Leh between Ladakh and Zaskar ranges; and bends sharply to the left after the Nanga Parbat massif, and flows south-by-southwest through Pakistan, before <b>emptying into the Arabian Sea</b> . <b>Tributaries:</b> Gilgit, Kabul, Kurram, Gomal, Shyok, Zaskar.
02	<b>Gomti River</b>	It is a tributary of Ganga. It is a <b>monsoon- and groundwater-fed river, originates from Gomat Taal</b> (formally known as Fulhaar jheel), Pilibhit, India. It extends 960 kilometres (600 mi) through Uttar Pradesh and <b>meets the Ganges near Saidpur</b> (Ghazipur district).
03	<b>Koshi River</b>	It is a trans-boundary river which flows through <b>China, Nepal and India</b> . It drains the northern slopes of the Himalayas in Tibet and the southern slopes in Nepal. From a major confluence of tributaries north of the Chatra Gorge onwards, the Kosi River is <b>also known as Saptakoshi for its seven upper tributaries</b> .
04	<b>Brahmaputra River</b>	It is a trans-boundary river which flows through <b>Tibet, India, and Bangladesh</b> . It originates from Chemayungdung glacier ( <b>kailash range near the Manasarovar Lake</b> ). It

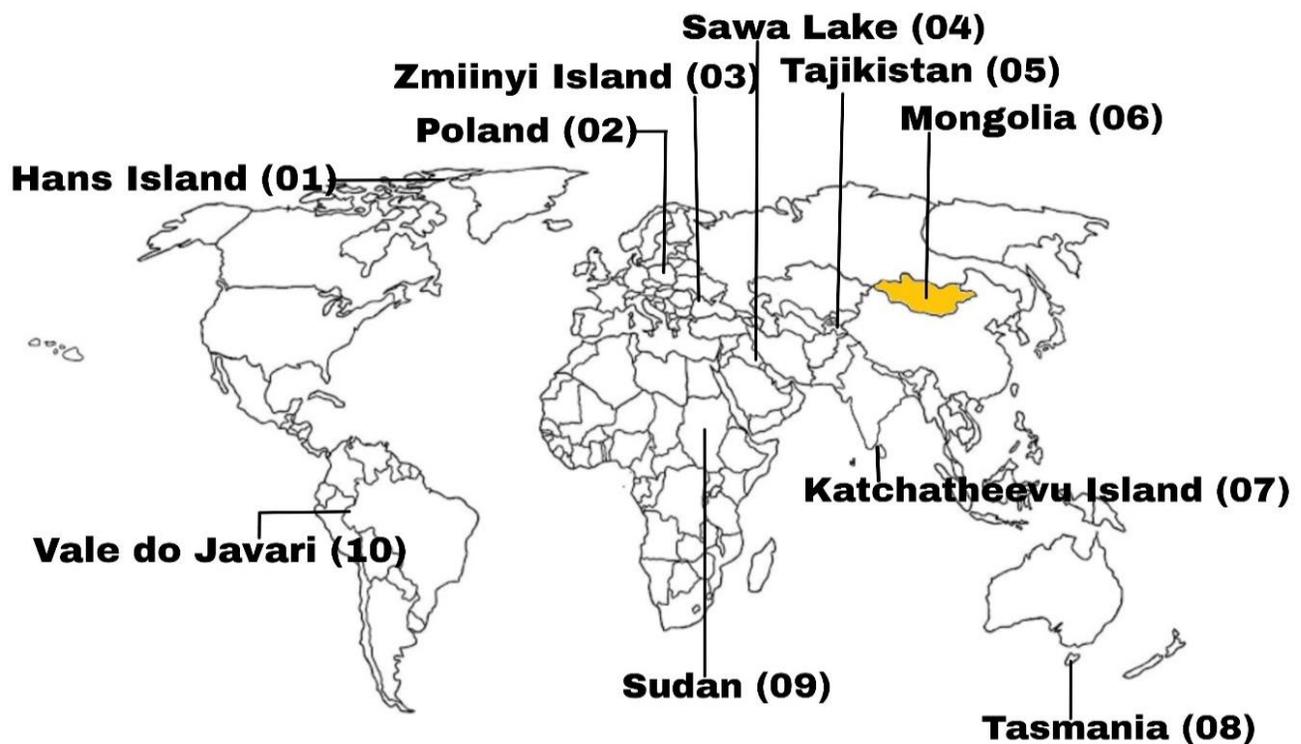
		enters India on reaching Namcha Barwa in Arunachal Pradesh and takes a U-turn. It flows southwest through the Assam Valley as the Brahmaputra and south through Bangladesh as the Jamuna. It <b>merges with the Ganges, popularly known as the Padma in Bangladesh, and becomes the Meghna and ultimately empties into the Bay of Bengal.</b> Tributaries: Dibang, Lohit, Sunansari, Kameng, Manas, Tista, Sonkosh, Dikhow, Kopili
05	<b>Ganga River</b>	It is a trans-boundary river of Asia <b>which flows through India and Bangladesh.</b> Total length is 2,525 km. Alaknanda (Formed due to confluence of Dhauli and Vishnu Ganga at Vishnu Prayag, Badrinath) and Bhagirathi (Originates from Gangotri glacier near Gomukh in Uttarkashi district) confluence at Dev Prayag and from there it is called Ganga. In <b>Bangladesh, it is known as the Padma.</b>
06	<b>Son River</b>	It is a <b>perennial river</b> which <b>originates near Amarkantak Hill</b> in Madhya Pradesh and finally <b>merges with Ganga</b> at Arrah in Bihar. Sone river is the <b>2<sup>nd</sup>-largest southern tributary of the Ganges' after Yamuna River.</b>
07	<b>Periyar River</b>	It is the <b>longest river and the river with the largest discharge potential in Kerala.</b> It generates a significant proportion of Kerala's electrical power via the <b>Idukki Dam.</b> This west flowing river also provides water for irrigation and domestic use. It is also known as " <b>Lifeline of Kerala</b> ".
08	<b>Tapi River</b>	It located to the south of the Narmada River which originates at Multai in Betul district of Madhya Pradesh and flows <b>westwards</b> before draining into Gulf of Cambay/Khambhat in the Arabian Sea in Surat, Gujarat. It flows <b>through the states of Maharashtra and Gujarat</b> before emptying into Arabian Sea. The Tapti River, together with the adjacently running Narmada River in the north, create the borders between North and South India. The Sahyadri Range or the Western Ghats Mountain Range begins south of the Tapi River close to the boundary of Maharashtra and Gujarat.
09	<b>Luni River</b>	It is the <b>a west flowing river that originates in Pushkar valley of the Aravalli Range</b> as two branches – Saraswati and Sagarmati which joins at Govindgarh. It passes through the southeastern portion of the Thar Desert, and <b>ends in the marshy lands of Rann of Kutch in Gujarat.</b>
10	<b>Satluj River</b>	It originates at lake Rakas near Mansarovar in Tibet. It is <b>also known as Satadru.</b> It is the <b>easternmost tributary of the Indus River.</b> The <b>Bhakra Dam is built around the river Sutlej</b> to provide irrigation and other facilities to the states of Punjab, Rajasthan and Haryana.
11	<b>Chenab River</b>	It is formed by the union of two headwaters, <b>Chandra and Bhaga,</b> which rise in the upper Himalayas in the Lahaul and Spiti district of Himachal Pradesh. It flows through the <b>Jammu region of J&amp;K and Punjab region of Pakistan,</b> before <b>ultimately flowing into the Indus River.</b>
12	<b>Jhelum River</b>	It <b>originates at Verinag</b> at the foothills of Pir Panjal and <b>flows through Srinagar and Wular lake in J&amp;K and then into the Pakistani province of Punjab.</b> It is the <b>westernmost of the five rivers of the Punjab region.</b> It is a <b>tributary of the Chenab River.</b>



01	<b>Yankti Kuti Valley</b>	It is <b>located in Uttarakhand</b> . It is the <b>last valley in Indian territory</b> before the border with Tibet. This valley runs along the north-west to south-east axis formed by the ' <b>Kuti Yankti River</b> ', which is one of the main water sources of Kali River.
02	<b>Valmiki National Park</b>	The forest department of Bihar has established an elephant rescue centre at Bihar's Valmiki Tiger Reserve. It is located in West Champaran District of Bihar. It is the <b>only national park and tiger reserve in Bihar</b> .
03	<b>Keibul Lamjao National Park</b>	The only floating National Park in the world, the Keibul Lamjao National Park located on the Loktak Lake is the last natural habitat of the <b>endangered 'Sangai'</b> or brow-antlered deer, the dancing deer of Manipur. It's the state animal of Manipur.  Loktak is the largest freshwater lake of northeast and is known for the patches and rings of biomass called <b>phumdis</b> . A phumdi is a carpet of dead and decaying flora, which floats on the surface of the lake—about a fifth of it is above the surface.
04	<b>Nongkhyllem Wildlife Sanctuary</b>	A new species of bamboo-dwelling bat was discovered in the forested patch of Nongkhyllem Wildlife Sanctuary, <b>situated in Meghalaya</b> .
05	<b>Barpali</b>	A post-Mauryan site discovered in <b>Barpali in Odisha</b> . Barpali is largely famous for renowned Odia Poet Swabhaba Kabi Gangadhar Meher, who was born here.
06	<b>Theri Desert</b>	There is a small desert <b>situated in Tamil Nadu</b> that consists of red sand dunes confined to the Thoothukudi district. The <b>red dunes are called theri in Tamil</b> and contain the sediments dating back to <b>Quaternary Period</b> (2.6 million years ago) and are made of marine deposits.

07	<b>Kudankulam Nuclear power plant (KNPP)</b>	Russia has supplied the first batches of more reliable and cost-efficient nuclear fuel for KNPP units. It is the <b>largest nuclear power station in India</b> , situated in Tamil Nadu. It is built in collaboration with <b>Atomstroyexport</b> , the Russian state company and <b>Nuclear Power Corporation of India Limited (NPCIL)</b> .
08	<b>Siruvani Dam</b>	It is a dam in <b>Palakkad District, Kerala</b> . The dam, constructed across the <b>Siruvani River</b> , is for supplying drinking water to the city of <b>Coimbatore in Tamil Nadu</b> . Muthikulam hill is situated on the eastern side of the dam.
09	<b>Dahej</b>	<b>India's first government desalination plant</b> only for industrial use was inaugurated at <b>Dahej</b> . It is a cargo port <b>situated on the South-west coast of Gujarat</b> in Bharuch district.
10	<b>Dhar</b>	A team of researchers <b>found titanosaurid sauropod egg in Dhar district</b> . It is a city located in Dhar district of Malwa region in <b>Madhya Pradesh</b> . Before Indian independence from Great Britain, it was the capital of the Dhar princely state.

### International Places In News



01	<b>Hans Island</b>	<b>Denmark and Canada</b> have struck a deal to settle an almost 50-year-old row over Hans island. The island is <b>within the territorial waters of both Canada and Denmark (Greenland)</b> . It is barren and uninhabited. It is in the centre of Kennedy Channel of Nares Strait.
02	<b>Poland</b>	India and Poland have signed a mutual legal assistance treaty on criminal matters. Poland is a <b>country in Central Europe</b> . The country is <b>bordered by Lithuania, Russia, Belarus, Ukraine, Slovakia, the Czech Republic, and Germany</b> . It also shares maritime boundaries with Denmark and Sweden.

03	<b>Zmiinyi Island</b>	It is also <b>known as Snake Island or Serpent Island</b> . It <b>belongs to Ukraine and is located in Black Sea</b> , near the Danube Delta.
04	<b>Sawa lake</b>	Recently, Lake Sawa has run dry. It is an endorheic basin (having no outflow to an external body of water) located in the <b>Iraq near to the Euphrates River</b> . This lake has no inlet or outlet, but it <b>draws water from the Euphrates</b> through a system of joint cracks & fissures which transport water to aquifers beneath it.
05	<b>Tajikistan</b>	Indian envoy handed over the Indian-Tajikistan Friendship Hospital (ITFH) in Bokhtar to the Tajikistan side. It is a <b>landlocked country</b> in Central Asia. Its <b>capital city is Dushanbe</b> . It is <b>bordered by Afghanistan, Uzbekistan, Kyrgyzstan and China</b> .
06	<b>Mongolia</b>	India has sent the holy Buddha relic for celebration of Mongolian Buddha Purnima. It is a <b>landlocked country</b> in East Asia, <b>bordered by Russia and China</b> . It is the world's largest landlocked country that does not border a closed sea.
07	<b>Katchatheevu Island</b>	It is an uninhabited island <b>administered by Sri Lanka</b> and was a <b>disputed territory claimed by India until 1976</b> . The island is located between Neduntheevu, Sri Lanka and Rameswaram, India. <b>In 1974 India ceded Katchatheevu to Sri Lanka</b> under the "Indo-Sri Lankan Maritime agreement" aimed at resolving the maritime boundaries in Palk Strait.
08	<b>Tasmania</b>	Tasmania is the 1 <sup>st</sup> region of the world to become carbon negative. It is an <b>island state of Australia</b> . It is located 240 km to the south of the Australian mainland, <b>separated from it by the Bass Strait</b> .
09	<b>Sudan</b>	As per UN, the tribe clashes in Sudan's war-ravaged Darfur region killed many peoples. It is a <b>country in Northeast Africa</b> . It shares <b>borders with the Central African Republic, Chad, Egypt, Eritrea, Ethiopia, Libya, South Sudan and the Red Sea</b> . Its capital is Khartoum and its most populated city is Omdurman.
10	<b>Vale do Javari</b>	A British journalist and Brazilian indigenous affairs expert went missing from Vale do Javari. It is one of the <b>largest indigenous territories in Brazil</b> . It is <b>named after the Javari River</b> . Besides the Javari it is transected by the Pardo, Quixito, Itaquai and Itui rivers.  The area is <b>home to 14 different indigenous tribes</b> , with nearly 6,000 inhabitants. These tribes are known to reject contact with the outside world. The Brazilian government has made it <b>illegal for non-indigenous people to enter the territory</b> .

# SOCIAL ISSUES

## India's Life Expectancy Inches Up 2 Yrs To 69.7

- The Abridged Life Tables report for the period of 2015-19 has been released by the Sample Registration System (SRS).
- Abridged Life Tables report presents the life tables for India and bigger States/Union Territories.
  - ✓ A life table summarizes the mortality experience of a population during the period of study.
  - ✓ It states the probabilities of death and survival of a hypothetical group or cohort at different ages.

### 4 Major Source Of Vital Statistics In India

Sample Registration System (SRS)

Civil Registration System (CRS)

Indirect estimates from decennial census

Indirect estimates from NFHS

### About Sample Registration System (SRS)

- It is the most regular source of demographic statistics in India.
- It is based on a system of **dual recording** of births and deaths in fairly representative sample units spread all over the country.
- The field investigation consists of continuous enumeration of births and deaths in selected sample units by resident part-time enumerators, generally anganwadi workers and teachers; and an independent retrospective survey every six months by SRS supervisors. The data obtained by these two independent functionaries are matched.
- The **office of the Registrar General & Census Commissioner**, which works under the home ministry, is responsible for the release of SRS.
- It was initiated on a pilot basis by the Registrar General of India in a few states in 1964-65. It became fully operational during 1969-70.

**Function:** The SRS provides annual estimates of

- Population composition, Fertility, Mortality, and Medical attention at the time of birth/death which give some idea about access to medical care

### Key Highlights Of The Report

- **India's Life Expectancy At Birth**
  - ✓ India's life expectancy at birth increased to 69.7 in the 2015-19 period.
  - ✓ However, it is well below the estimated global average life expectancy of **72.6 years**.
- **Difficulty In Raising Life Expectancy At Birth Faster**
  - ✓ It has taken almost ten years to add two years to life expectancy.
  - ✓ A look at life expectancy at age one and at age five in this period suggests high infant and under-five mortality.
  - ✓ This could be the reason India finds it difficult to raise life expectancy at birth faster.
- **Over a 45-year period, India had added about 20 years to its life expectancy at birth**

<b>C'GARH HAS LOWEST LIFE EXPECTANCY</b>			
	Male	Female	Total (in %)
Delhi	74.3	77.5	75.9
Kerala	72.3	78	75.2
J&K	72.6	76.1	74.2
Himachal Pradesh	69.9	77.1	73.1
Punjab	71.1	74.7	72.8
Maharashtra	71.6	74	72.7
Tamil Nadu	70.6	74.9	72.6
West Bengal	71	73.2	72.1
Uttarakhand	67.6	73.9	70.6
Andhra Pradesh	68.9	71.8	70.3
Gujarat	67.9	72.8	70.2
Haryana	67.7	72.6	69.9
Odisha	68.5	71.1	69.8
Karnataka	67.9	71.3	69.5
Jharkhand	70.2	68.8	69.4
Bihar	69.6	68.8	69.2
Rajasthan	66.8	71.3	69
Assam	66.8	68.3	67.5
Madhya Pradesh	65.2	69.1	67
Uttar Pradesh	65	66.2	65.6
Chhattisgarh	63.7	66.9	65.3
<b>India</b>	<b>68.4</b>	<b>71.1</b>	<b>69.7</b>

- ✓ India's life expectancy at birth increased from 49.7 in 1970-75 to 69.7 by 2015-19.
- ✓ Odisha has had the highest increase of over 24 years, from 45.7 to 69.8 years followed by Tamil Nadu, where it increased from 49.6 to 72.6.

### • Huge Rural-Urban Variation

- ✓ Within India, there are huge variations across states and between urban and rural areas.
- ✓ Kerala is the only state where rural life expectancy was higher than urban life expectancy for both men and women.
  - In Uttarakhand that was the case among women.
- ✓ Bihar and Jharkhand remained the only states where male life expectancy was higher than for women in both urban and rural areas.

TOP 5 PERFORMERS				
	Male		Female	Total
Delhi	74.3		77.5	<b>75.9</b>
Kerala	72.3		78	<b>75.2</b>
J&K	72.6		76.1	<b>74.2</b>
Himachal	69.9		77.1	<b>73.1</b>
Punjab	71.1		74.7	<b>72.8</b>
BOTTOM 5 PERFORMERS				
Chhattisgarh	65.3		63.7	<b>66.9</b>
UP	65.6		65	<b>66.2</b>
MP	67		65.2	<b>69.1</b>
Assam	67.5		66.8	<b>68.3</b>
Rajasthan	69		66.8	<b>71.3</b>

Life expectancy at birth in years

### • Life expectancy at birth of different countries (as per UN's Human Development Report, 2019)

- ✓ Bangladesh and Nepal now have higher life expectancy at birth of 72.1 and 70.5 respectively.
- ✓ Japan has the highest life expectancy of 85. Norway, Australia, Switzerland and Iceland had a life expectancy of 83.

## Govt Cracks Whip On Misleading Ads

To protect people from being exploited or affected by misleading advertisements, the Central Consumer Protection Authority (CCPA) has notified new guidelines for stopping them across all platforms — regardless of form, format or medium.

- The Central government has notified stricter norms related to mass advertising in **print, television and social media** under the Consumer Protection Authority (Prevention of Misleading Advertisements and Necessary Due Diligence for Endorsement of Advertisements) Guidelines 2022.

### Major Highlights Of The Guidelines Include

#### • Accountability of Celebrities

- ✓ Celebrities endorsing products or services can be held responsible and face action for appearing in misleading promotions.
- ✓ Celebrities endorsing misleading ads can be fined up to ₹10 lakh by the consumer protection authority.
- ✓ For repeat offences, the authority can impose a fine of up to ₹50 lakh and a jail term of up to five years.
- ✓ These guidelines come at a time when several popular actors and top cricketers have been endorsing gaming and gambling apps, and chewing tobacco.

#### • Set Criteria

- ✓ An advertisement will be considered non-misleading and valid only when it meets a set of criteria laid down in the new rules.
- ✓ These include “truthful representations” that don't “exaggerate accuracy, scientific validity or practical usefulness or capability or performance”.

### 'ENDORERS NEED TO DO DUE DILIGENCE'

<p><b>Misleading advertisements are those, which:</b></p> <ul style="list-style-type: none"> <li>&gt; Falsely describes a product or service</li> <li>&gt; Gives a false guarantee to, or likely to mislead the consumers</li> <li>&gt; Deliberately conceals important information</li> </ul>	<p><b>Bait advertisements:</b> Where goods, products or services are offered for sale at low prices to attract consumers</p> <p><b>Surrogate or indirect advertising:</b> Advertisements for goods, products or services whose advertisement is prohibited by law</p> <p><b>Free claims advertisements:</b> Only those where consumers need to pay only for collecting or paying for delivery of items</p>
WHAT'S BANNED	
<ul style="list-style-type: none"> <li>&gt; Misleading &amp; surrogate advertisements</li> <li>&gt; Advertisements that condone or encourage practices detrimental to children's physical or mental wellbeing</li> <li>&gt; Claims that consumption of a product helps enhancing physical or mental ability</li> </ul>	<ul style="list-style-type: none"> <li>without valid scientific evidence</li> <li>&gt; Advertisements targeting children that develop negative body image</li> <li>&gt; Advertisements giving impression that advertised products are better than natural or traditional food</li> </ul>
DISCLAIMERS BY MANUFACTURERS & ADVERTISERS	
<ul style="list-style-type: none"> <li>&gt; Disclaimers must be in same language &amp; font size as the main ads</li> </ul>	<ul style="list-style-type: none"> <li>&gt; In audio-visual ads, voice over must be clear &amp; not quick ones</li> <li>&gt; Owners/ promoter in companies need to disclose their stake</li> </ul>
<p><b>Responsibility of endorsers:</b> Endorsers need to do due diligence to gain adequate information of the product</p>	

- **Ban on Surrogate Advertising**

- ✓ The new guidelines ban surrogate advertising, a practice where a seller promotes a product whose advertisement is not allowed by disguising it as another product.
- ✓ Liquor ads commonly indulge in such practices — under the guise of selling soda, CDs, and even holiday packages.

- **Ban On Certain Advertisements For Children:**

An advertisement for junk foods, including chips, carbonated beverages and such other snacks and drinks shall not be advertised during a programme meant for children or on a channel meant exclusively for children.

### Central Consumer Protection Authority (CCPA)

- It is a **statutory body** constituted under Section 10 of the **Consumer Protection Act, 2019**.
- **Mandate:** To protect the rights of the consumer by cracking down on unfair trade practices, and false and misleading advertisements that are detrimental to the interests of the public and consumers.
- **Concerned Ministry:** Ministry of Consumer Affairs, Food and Public Distribution

### Powers & Functions of CCPA:

- To recall goods or withdrawal of services that are “dangerous, hazardous or unsafe”;
- Pass an order for refund the prices of goods or services so recalled to purchasers of such goods or services;
- Discontinuation of practices which are unfair and prejudicial to consumer’s interest;
- Impose penalties on manufacturers/endorsers/publishers of misleading advertisements.

### Consumer Protection Act, 2019

- It replaced the **Consumer Protection Act, 1986**, and seeks to widen its scope in addressing consumer concerns.
- The new Act recognises offences such as providing false information regarding the quality or quantity of a good or service, and misleading advertisements.
- It also specifies action to be taken if goods/services are found “dangerous, hazardous or unsafe”.
- The Act came into force in July 2020 and it will empower consumers and help them in protecting their rights through its various notified rules and provisions



### Modern Times Watches Keep An Eye On Workers

Various organisations have written letter to National Commission for Safai Karamcharis (NCSK) over the increasing surveillance of sanitation workers. These workers are forced to wear GPS watches to keep an eye on them.

### GPS Watch: A New Tool Of Suppression

- **Coercion Involved:**
  - ✓ Sanitation workers are forced to wear these watches under the threat to reduction in salary.
  - ✓ Several times, the GPS watches showed wrong locations and the workers had to explain and provide proofs regarding their whereabouts. This has made these workers a slave.
- **Against Privacy, Dignity And Autonomy Of The Workers**
  - ✓ While privacy is not an absolute right, any State intrusion into privacy has to satisfy the thresholds of legality, necessity, and proportionality. This was laid down by the Supreme Court in the Right to Privacy decision.
  - ✓ However, the use of these tracking devices fails to satisfy these thresholds as there is no anchoring legislation or legal framework
- **Tracking location is not a solution to ensure that work has been done:** Just by tracking workers’ location, it cannot be ensured that the work has been done. A worker might go to his or her place of work and just loiter.

- NCSK was established as an institution to investigate the conditions of Safai Karamcharis (waste collectors) in India and make recommendations to the Government.
- It is currently a **non-statutory body under the Ministry of Social Justice and Empowerment**.
- The NCSK was established in the year 1993 as per the provisions of the NCSK Act 1993 initially for the period upto 31.3.1997.
  - Hence, initially **NCSK was established as a statutory body**.
- Later the validity of the Act was initially extended up to 2002 and thereafter up to 2004.
  - The NCSK Act ceased to have effect from 29.2.2004.
- After that the tenure of the NCSK has been extended as a non-statutory body from time to time through resolutions.
- The tenure of the present Commission was up to March 2022. However, it was extended further for a period of three years.
- The NCSK has been assigned the work to monitor the implementation of the Prohibition of Employment as Manual Scavengers and their Rehabilitation Act, 2013

### Need For NCSK

- ✓ The Government has taken many steps for the upliftment of Safai Karamcharis.
- ✓ However, the deprivation suffered by them in socio-economic and educational terms is still far from being eliminated.
- ✓ As per the NCSK (2020 data), a total of 631 people have died in the country while cleaning sewers and septic tanks in the last 10 years.
- ✓ Although manual scavenging has been almost eradicated, sporadic instances do occur.
- ✓ In 2018, 29,923 people were engaged in manual scavenging in Uttar Pradesh, making it the highest in any State in India.

### New Insurance Covers Don't Need IRDAI's Nod

- IRDAI extended the "Use and File" procedure to all health insurance products, facilitating faster customer access to health policies.
- The "Use and File" procedure allows insurers to launch a product first and then file its details with the regulator. Until now the IRDAI required prior approval for launching products.
- This helps in avoiding a longer waiting duration in offering innovative insurance solutions to customers in order to help address the dynamic environment.
- The "Use and File" is a system that is used by non-life regulators globally.

### About Insurance Regulatory and Development Authority of India (IRDAI)

- It was set up as autonomous body under the IRDA Act, 1999.
- **Objective:** To protect the interests of policyholders, to regulate, promote and ensure orderly growth of the insurance industry and for matters connected therewith or incidental thereto.
- IRDA is the apex body that supervises and regulates the insurance sector in India.
- **Nodal Ministry:** Ministry of Finance

### Religious Freedom Report Is Biased: India

India has rejected its criticism in a US State Department report on religious freedom, saying it is unfortunate that "vote bank politics is being practised in international relations".

### About International Religious Freedom Report

- The Department of State submits an annual Report to Congress on International Religious Freedom in compliance with the International Religious Freedom Act of 1998.
- The report borrowed from media and government accounts to document attacks against religious minorities.

- This report, also known as the **International Religious Freedom Report**, describes the status of religious freedom, government policies violating religious belief and practices of groups, religious denominations and individuals.
- It also highlights U.S. policies promoting religious freedom in nearly every country and territory throughout the world.
- Additionally, it recommends, develops and implements policies and programs to address the mentioned concerns.
- Further, identify and denounce regimes that persecute on the basis of religion and assist NGOs globally in promoting religious freedom.

### **In Context Of India**

The 'India section' of the report claimed that the Union government had failed to release data on communal violence for 2021.

- **FCRA Act:**
  - ✓ NGOs in India continue to criticise the 2020 amendments passed to FCRA as “constraining civil society”.
  - ✓ The 2020 amendment had reduced the amount of foreign funding that NGOs, including faith-based organisations, could use for administrative purposes.
  - ✓ The report claimed that FCRA licenses of 5,789 NGOs, including numerous faith-based organisations, lapsed after the government said the organisations did not apply for renewal in time.
- **Cow Vigilantism:**
  - ✓ “25 states” applying partial to full restrictions on bovine slaughter, making special note of Madhya Pradesh’s laws on cow vigilantism.
  - ✓ It highlights incidents of cow vigilantism against non-Hindus based on allegations of cow slaughter or trade in beef.
- **Religious Conversion Law:**

10 of 28 states in India, including Arunachal Pradesh, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Madhya Pradesh, Odisha, Rajasthan, Uttar Pradesh, and Uttarakhand, have laws restricting religious conversion.
- **Attacks On Minority Communities:**
  - ✓ Attacks on members of the minority communities, including killings, assaults, and intimidation, took place in India throughout 2021.
  - ✓ Hindu and Sikh minorities were allegedly targeted by terrorists in Jammu and Kashmir last year.

### **Study Reveals Child Artists Work For More Than 12 Hours A Day**

- A recent study reveals that a child below the age of 15 in the entertainment industry in India works for more than 12 hours a day.
- The report titled '**Child Artists in India**' by **Child Rights and You**, a non-governmental organisation, highlights that casting agencies are violating the **Child and Adolescent Labour (Prohibition and Regulation) Act (CALPRA)** that prohibits engagement of children in all occupations.
- While it is clearly mentioned in CALPRA, 1986, that no child shall be allowed to work for more than five hours in a day, and for not more than three hours without rest. The study has found that the work shift stretches to 12-13 hours for six days a week by production houses because guardians often do not interfere in the scheduling.
- The provisions of CALPRA also state, atleast 20% of the income earned by the child from the production or event is to be directly deposited in a fixed deposit account in a nationalised bank in the name of the child

which may be credited to her/him on attaining majority. However, the study states the money is being utilised completely on the families.

### Child Labour in India

- The term “child labour” is often defined as work that deprives children of their childhood, their potential and their dignity, and that is harmful to their physical and mental development.
- There are around 12.9 million children in India, engaged in work between the ages of 7- 17 years
- Rural India has the highest percentage of child labour, accounting for 80% of the total burden in India. The highest number of child labourers work in Uttar Pradesh.
- Apart from industrial and agricultural tasks, many are made to work as maids, baby sitters by the privileged.

### Child Labour (Prohibition and Regulation) Amendment Act, 2016

- The Child Labour (Prohibition and Regulation) Amendment Act, 2016 amended the original Child Labour (Prohibition and Regulation) Act of 1986.
- The Amendment Act provides for complete prohibition on employment or work of children below 14 years and also prohibits employment of adolescents (14-18 years) in hazardous occupations and processes.
- A child is permitted to work only to help family, in family enterprise or as child artist after school hours or during vacations.
- The offences under the Act have now been made **compoundable and cognizable** notwithstanding the provisions of the Criminal Procedure Code.
- It provides for setting up of the **Child and Adolescent Labour Rehabilitation Fund** in which all the amounts of penalty have to be realised.
- After strengthening the legislative framework through amendment in Child Labour Act, Government has framed the **Child Labour (Prohibition & Regulation) Amendment Rules, 2017** which specifies the duties and responsibilities of State Governments and District Authorities to ensure effective enforcement of the provisions of the Act.

### Norms To Protect Rights Of Kids Working On OTT Platforms

The National Commission for the Protection of Child Rights (NCPCR) has published draft guidelines to regulate child protection within the entertainment industry.

#### Key Highlights

- **Increases The Scope Of The Guidelines**  
The **Guidelines to Regulate Child Participation in the Entertainment Industry** were issued by the Commission in 2011. However, the recent draft increases the scope of the guidelines to cover
  - ✓ TV programmes including but not limited to reality shows, serials, news and informative media, movies;
  - ✓ Content on OTT platforms, content on social media, performing arts, advertising
  - ✓ Any other kind of involvement of children in commercial entertainment activities.
- **Stringent Penal Provisions** for violating the guidelines, including imprisonment.
- **Mandatory Registration Of Child Artists** with District Magistrates.  
Producers will also have to run a disclaimer saying measures were taken to ensure there has been no abuse, neglect or exploitation of children during the entire process of the shooting.
- **Presence Of At Least One Parent Or Legal Guardian Or A Known Person** during a shoot.  
For infants, a registered nurse needs to be present along with the parent or legal guardian.
- **Producer Needs To Ensure Child’s Education Under The RTE Act**

S/he also needs to ensure adequate and nutritious food, water to the children during the process of production and medical facilities.

- **Financial Protection**

At least 20% of the income earned by the child from the production or event shall be directly deposited in a fixed deposit account in a nationalised bank in the name of the child which may be credited to the child on attaining majority.

- **Content Created By The Child Or His Family/Guardian** shall be treated as children working in a family enterprise as provided under Section 3(2)(a) of the Child Labour and Adolescent Labour Act, 1986.

- **Regulation Of Number Of Shifts**

- ✓ A child shall only participate in one shift per day, with a break after every three hours.
- ✓ A minor, especially below the age of six years, shall not be exposed to harmful lighting, irritating or contaminated cosmetics.

- **Prohibits Children Being Cast In Certain Roles Or Situations** that are inappropriate.

- ✓ Consideration has to be given to the child's age, maturity, emotional or psychological development and sensitivity.
- ✓ A child cannot be exposed to ridicule, insult or discouragement, harsh comments or any behaviour that could affect his/her emotional health.
- ✓ Children cannot be shown imbibing alcohol, smoking or using any other substance or shown to be indulging in any sort of antisocial activity and delinquent behaviour.
- ✓ No child can be engaged in any situation involving nudity.

- **Provisions Of Different Acts Protecting Children Are Included** in the guidelines such as Juvenile Justice Act 2015, Child Labour Amendment Act 2016, Protection of Children from Sexual Offences Act 2012, Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021, etc.

### Need For Such Guidelines

- **To Fix The Accountability**

- ✓ Children are now being used in videos across social media and in content on OTT platforms which had not been covered by the existing guidelines.
- ✓ Also, parents, who are using children to make money, have to be held accountable.

- **To Protect Children From Grave Risk Of Exploitation**

- ✓ The children in the industry are at grave risk of exploitation because they lack the legal right to the earnings they generate, or safe working conditions and adequate protections via labour laws, etc.
- ✓ Participating in an adult-oriented industry, children are often exposed to unsuitable, anxiety inducing, and at times, dangerous operational hazards.
- ✓ Apart from the industry-specific risks, the children are also susceptible to a plethora of other crimes against children such as sexual exploitation, child trafficking, bonded labour, etc.

- **To Ensure A Healthy Work Environment For Children** with minimal physical and psychological stress.

### National Commission for Protection of Child Rights (NCPCR)

- NCPCR is a statutory body established by the **Commission for Protection of Child Rights (CPCR) Act, 2005**.
- It was established to ensure that all Laws, Policies, Programmes, and Administrative Mechanisms are in consonance with the Child Rights perspective as enshrined in the Constitution of India and also the **UN Convention on the Rights of the Child**.
- It works under the administrative control of the Ministry of Women & Child Development.

### Composition of the commission

- A chairperson who, is a person of eminence and has done outstanding work for promoting the welfare of children;
- Six members, out of which at least two are woman, are appointed by the Central Government. These members must have experience in child related fields.

## Agnipath" scheme

- Defence Minister recently announced the "Agnipath" scheme, for recruitment of youth in the armed forces for four years.
- The process of recruitment has planned an intake of about 46,000 young men and women in 2022. Under the scheme, around 45,000 to 50,000 soldiers will be recruited annually, and most will leave the service in just four years.
- This will be the **only form of recruitment** of soldiers into the three defence services hereon and the soldiers recruited under the scheme will be called Agniveers.

## Mode of Induction

- **Enrolment:** Enrolment to **all three services** will be through a **centralised online system**, with special rallies and campus interviews at recognised technical institutes such as the Industrial Training Institutes, and the National Skills Qualifications Framework (NSQF)
- **Eligibility criteria:** The new system is only for personnel **below officer ranks**.
- **Recruitment:** Recruitment will be carried out on an 'All India All Class' basis with the eligibility age ranging from **17.5 to 21 years**, with medical and physical fitness standards in accordance with existing norms.
- **Qualification:** The required educational qualification will be **Class X-XII**.
- **Reselection:** For those who are re-selected, the initial four-year period will not be considered for retirement benefits.
- **Permanent Commission:** Up to 25% of each batch will be enrolled as regular cadre as under permanent commission & would be required to serve for a further minimum period of 15 years.

## Post-selection plan

- **Training:** Once selected, the aspirants will go through **training for 6 months** and then will be deployed for three and a half years.
- **Remuneration:** During this period, they will get a starting salary of Rs 30,000, along with additional benefits which will go up to Rs 40,000 by the end of the four-year service.
- **Annual package:** The "Agniveers" will received an annual package of ₹4.76 lakh in the 1<sup>st</sup> year to ₹6.92 lakh in 4<sup>th</sup> year, apart from risk and hardship and other allowances as applicable.
- **Contribution:** The recruits will have to contribute 30% of their monthly emoluments to Seva Nidhi, with a matching contribution made by the government.
- **Tax free grant:** Under the "**Seva Nidhi**" package (which is exempt from Income Tax), they will receive about ₹11.71 lakh, including contribution and interest, on completion of service.
- **Post-retirement benefits:** There will be no entitlement to gratuity and pensionary benefits under the scheme.
- **Life insurance:** The "Agniveers" will be provided **non-contributory life insurance** cover of ₹48 lakh during their service.
- **Insurance in case of life lost:** In case of death attributable to service, apart from over ₹1 crore, which will include the "Seva Nidhi" package, full pay for the unserved period will be given.
- **Disability:** In the case of disability attributable to service, a provision of up to ₹44 lakh based on the percentage of disability, apart from full pay for the unserved period, including "Seva Nidhi" with interest as applicable, has been made.

*Refer The Recitals- May 2022 for more details*

# ECONOMY AND INFRASTRUCTURE

## India 7th in FDI inflows: UNCTAD

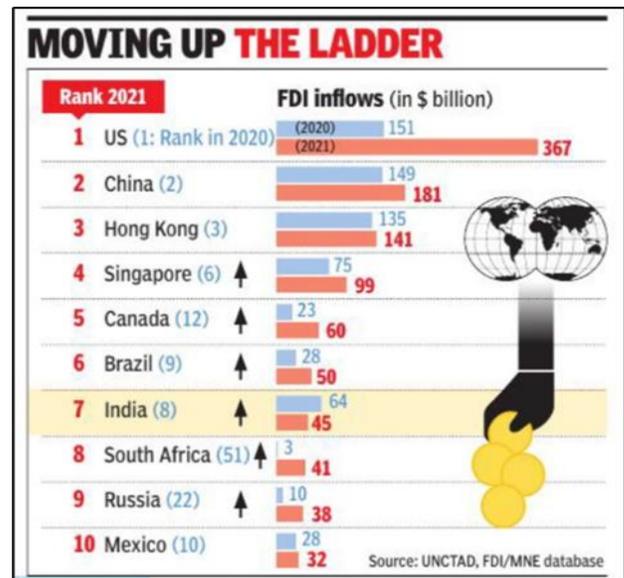
- India's rank jumped one notch to **7<sup>th</sup> position** among top recipients of foreign direct investment (FDI) in 2021.
- This was revealed by latest World Investment Report, released by United Nations Conference on Trade and Development (UNCTAD).

### Major Highlights of The Report

- The Report focuses on trends in FDI worldwide, at the *regional and country levels* and emerging measures to improve its contribution to development (See).
- The global FDI flows recovered to pre-pandemic levels in 2021, growing 64% to \$1.6 trillion.
- It foresees that the growth momentum of 2021 cannot be sustained and that global FDI flows in 2022 will likely move on a downward trajectory, at best remaining flat.

### India's Scenario

- Among the top 10 host economies for FDI, **only India saw a decline in its FDI inflows** to \$45 billion in 2021 from \$64 billion in 2020.
- India's FDI inflows in 2021 were the lowest since 2018, while outflows were up by 43% at around \$16 billion.



## United Nations Conference on Trade & Development (UNCTAD)



- It is a **permanent inter-governmental body** established by the United Nations General Assembly in 1964.
- It is responsible for dealing with development issues, particularly international trade.
- Framing policies in various domains such as trade, technology, finance, aid, and transport are the most important priorities of UNCTAD.
- The Conference ordinarily meets once in four years. The **second UNCTAD Conference took place in New Delhi, India in 1968.**
- Headquarters:** Geneva, Switzerland, **Members:** 195 Countries

### Reports Published by UNCTAD:

Trade and Development Report

Trade and Environment Review

World Investment Report

Least Developed Countries Report

### Foreign Investment (FI)

- Foreign investment is of two types viz., Foreign Direct Investment and Foreign Portfolio Investment.
- The former comprises investment by foreign companies (generally MNCs) in manufacturing goods (consumer goods and capital goods), construction, infrastructure, services like banking, insurance, aviation, shipping and a host of others.
- Portfolio Investment comes mainly by way of investment in a country's stock market by foreign investors who invest in shares, bonds, debentures, including govt bonds and mutual funds to make capital gains.
- In a major policy change, the government laid down that in accordance with global practice **if an investor has a stake of 10% or less in a company, it will be treated as FII, while a stake of more than 10%, will be treated as FDI.**

## How Does FDI Enter In India?

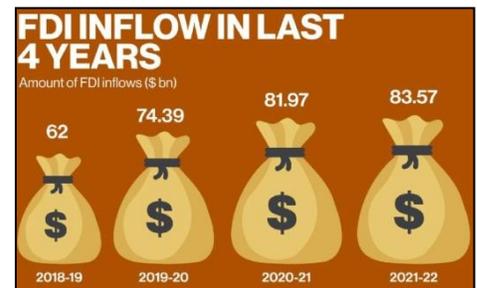
- In India, it is governed by the FDI Policy announced by the Government of India and the provisions of the Foreign Exchange Management Act (FEMA), 1999.
- FDI enters in India through either of the two routes:
  - ✓ **Automatic route** - The non-resident or Indian company does not require prior nod of the RBI or government of India for FDI.
  - ✓ **Government-approval route**-The government's approval is mandatory. The company will have to file an application through Foreign Investment Facilitation Portal, which facilitates single-window clearance.

	FDI	FII
1	FDI is when foreign company brings capital into a country or an economy to set up a production or some other facility. FDI gives the foreign company some control in the operations of the company	FII is when a foreign company buys equity in a company through the stock markets. Therefore, in this case, FII would not give the foreign company any control in the company
2	FDI involves in the direct production activity & also of medium to long term nature	FII is a short term investment mostly in the financial markets & it consist of FII
3	It enables a degree of control in the company	It does not involve obtaining a degree of control in a company
4	FDI brings-long term capital	FII brings short-term capital
5	Any investment above 10% treated as FDI	Allowed to invest up to 10% of the paid-up capital
6	More stable	less stable
7	Only targets specific enterprise	It increases capital availability in general
8	Difficult entry and exit	Easy entry-exit
9	Investment inflows in the primary market	Investment inflows in the secondary as well as primary market
10	Critical driver of economic growth	Gives impetus to the equity market of the country

## Sectors In Which FDI Is Prohibited

There are a few industries where FDI is strictly prohibited under any route. These industries are:

- o Atomic Energy Generation
- o Any Gambling or Betting businesses or Lotteries (online, private, government, etc.)
- o Investment in Chit Funds
- o Nidhi Company
- o Agricultural or Plantation Activities (although there are many exceptions like horticulture, fisheries, tea plantations, Pisciculture, animal husbandry, etc.)
- o Housing and Real Estate (except townships, commercial projects, etc.)
- o Trading in transferable development rights (TDR's)
- o Cigars, Cigarettes, or any related tobacco industry



## Facts Stated By Commerce And Industry Ministry

- The Commerce and Industry Ministry revealed that India has recorded the highest ever annual FDI inflow of \$83.57 billion during FY22. It overtook last year's FDI by \$1.60 billion despite military operation in Ukraine and COVID-19 pandemic.
- Sectoral Performance**
  - ✓ **Computer software & hardware** attracted maximum inflows, followed by **services sector & automobile industry**.
  - ✓ India is rapidly emerging as a preferred country for foreign investments in **manufacturing sector**. FDI equity inflow in manufacturing sectors has increased by 76% in 2021-22 (USD 21.34 billion) compared to 2020-21 (USD 12.09 billion).
- Top Investors (country-wise)**  
Singapore is at the top with 27% followed by the **US** (18%) and **Mauritius** (16%) during the last fiscal.
- Major Recipient States Of FDI Equity Inflow**
  - ✓ **Karnataka** is the top recipient state with **38% share** of the total FDI Equity inflow reported during the FY 2021-22.

✓ It was followed by **Maharashtra (26%)** and **Delhi (14%)**.

## Liquid Nano Urea

The Prime Minister has recently inaugurated the **country's first liquid nano urea plant** at Kalol in Gujarat.

### Urea Usage in India

- Urea is a **chemical nitrogen fertiliser**, white in colour, which artificially provides nitrogen, a major nutrient required by plants.
- Urea forms around 80% of the total nitrogenous fertilisers consumed in India and is used excessively leading to imbalance in fertiliser usage.
- India is the **second biggest consumer of Urea globally** but it is dependent on imports to meet its requirement.
  - ✓ In FY22, India imported 10.16 MT of urea, mainly from China, Oman, UAE, Egypt and Ukraine, priced at \$6.52 billion.
- A 50-kilogram bag of imported urea costs Rs 3,500. However, the farmer gets the bag for Rs 300 due to government subsidy.
- The total fertiliser subsidy bill is expected to reach to Rs 2.5 lakh crore this financial year, up from Rs 1.62 crore in the previous fiscal.
- Around 30-50% of nitrogen from urea is utilised by plants and the rest gets wasted due to quick chemical transformation.
- Excess urea causes environmental pollution, harms soil health, delayed maturity of the crop, production loss and makes plants more susceptible to disease and insect infestation.

### Liquid Nano Urea (LNU)

- LNU is essentially **urea in the form of a nanoparticle**. The size of a nano nitrogen particle varies from 20-50 nm. (A nanometre is equal to a billionth of a metre).
- The product has been developed at Indian Farmers Fertiliser Cooperative's (IFFCO) Nano Biotechnology Research Centre (**NBRC**) at Kalol.
- LNU is packaged in a half-litre bottle priced at Rs 240, and carries no burden of subsidy currently.
- Around 2-4 ml of nano urea has to be mixed in a litre of water and sprayed on crop leaves at active growth stages.
- Liquid nano urea has a shelf life of a year, and farmers need not be worried about caking when it comes in contact with moisture.

### Advantages of LNU

- **More Efficient:** While conventional urea has an efficiency of about 25%, the efficiency of LNU can be as high as 85-90%.
- **Better Utilisation:** Conventional urea fails to have the desired impact on crops as it is often applied incorrectly, and the nitrogen in it is vaporised or lost as gas. A lot of nitrogen is also washed away during irrigation.
  - ✓ Due to the ultra-small size and surface properties of nano urea, it gets absorbed by the plants when sprayed on their leaves. Upon penetration, these nanoparticles reach plant parts where nitrogen is required and release nutrients in a controlled manner.
- **Cost Reduction:** Nano urea is cheaper as a 500 ml bottle of the liquid will replace at least one bag of conventional urea.
  - ✓ This will reduce the input cost of the farmers and increase their incomes.

- ✓ Furthermore, due to its small size, it will significantly bring down the cost of logistics and warehousing.
- ✓ Subsidy Reduction due to being cheaper.
- Apart from reducing the country's subsidy bill, it will reduce the unbalanced and indiscriminate use of conventional urea, increase crop productivity, and reduce soil, water, and air pollution.

## Prime Minister's Employment Generation Programme

The government has extended the Prime Minister's Employment Generation Programme (PMEGP) for five years from 2021-22 to 2025-26, with an outlay of Rs 13,554.42 crore. In addition, multiple modifications have also been made to the scheme.

### Background

- Launched in 2008, PMEGP is a **credit linked subsidy programme**, in which the **beneficiaries can get subsidy on the total project cost**.
- The objective was to **generate employment opportunities** through establishment of micro enterprises in **rural as well as urban areas**.
- PMEGP was formed by **merging two schemes** - Prime Minister's Rojgar Yojana (PMRY) and Rural Employment Generation Programme (REGP) which were in operation till 2008.
- Since its launch, about **7.8 lakh micro enterprises** have been assisted with a **subsidy of Rs 19,995 crore** generating estimated sustainable **employment for 64 lakh persons**.
- About **80% of the units assisted are in rural areas** and about **50% of units are owned by the Scheduled Caste (SC), Scheduled Tribe (ST) and women categories**.

### Details of the scheme

- It is a **central sector scheme** administered by Ministry of Micro, Small and Medium Enterprises (MoMSME).
- It allows entrepreneurs to set up factories or units by depositing a small part (margin money) of the total project cost with banks, which would fund the units. After a factory runs successfully for three years, the banks return the margin money.
- It is implemented by the **Khadi and Village Industries Commission (KVIC)** functioning as the **nodal agency at the national level**.
- At the **state level**, it is implemented through State KVIC Directorates, State Khadi and Village Industries Boards (KVIBs), District Industries Centres (DICs) and banks.
- In such cases KVIC routes government subsidy through designated banks for giving money to the beneficiaries/ entrepreneurs directly into their bank accounts.
- **Eligibility: Any individual above 18 years of age, who has passed class 8, can apply** for the scheme and **only new projects are considered** for sanction under the PMEGP.
  - Self-help groups that have not availed benefits under any other public scheme, societies, production co-operative societies, and charitable trusts are also eligible

### Modifications In The Scheme

- The **maximum project cost** has been increased from the existing Rs 25 lakh to **Rs 50 lakh** for manufacturing units and from the existing Rs 10 lakh to **Rs 20 lakh** for service units.
- The **definition of village industry and rural area** for PMEGP has been modified — areas falling under Panchayati Raj institutions to be accounted under rural area, whereas areas under municipality to be treated as urban areas.
- All implementing agencies have been allowed to receive and process applications in all areas irrespective of the rural or urban category.
- PMEGP applicants under aspirational districts and transgender will be treated as **special category applicants** and entitled to a higher subsidy.
- **Higher Rate Of Margin Money Subsidy —**
  - ✓ For general category applicants, subsidy is 15% of the project cost in urban areas and 25% of the project cost in rural areas.
  - ✓ For special category applicants: 25% of the project cost in urban area and 35% of the project cost in rural areas, for special category applicants including, SC, ST, OBC, women, transgender, physically disabled, North Eastern Region (NER), aspirational and border district applicants.

**Margin money** refers to the subsidy under the scheme. It is the amount that the government contributes to the business under the scheme.

## Benefits

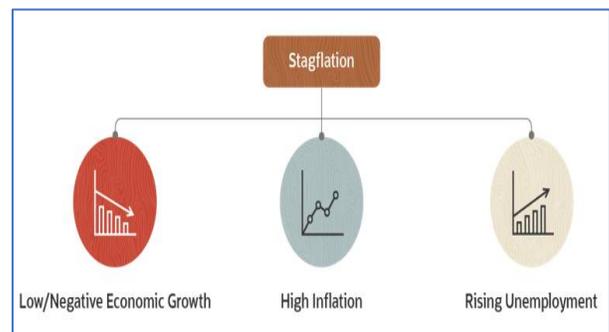
It is expected to create employment opportunities for about 40 lakh persons in 5 financial years.

## Issues

- According to MSME experts, the scheme does not have a great track record, as in 13 years, only 7.8 lakh micro enterprises were created, by spending nearly Rs 20,000 crore.
- Also, 64 lakh employment in 13 years out of 11 crore people employed in the MSME sector is not a very attractive record.
- From 2015-16 to 2019-20, public sector banks have allotted Rs 10,169 crore, out of which Rs 1,537 has turned out to be Non-Performing Assets (NPAs).
- Normally all central schemes are given definite annual targets, but this scheme was not driven by any such target, due to which the programme lost momentum.
- Thus, only financial support is not enough. The government has to focus on the micro segment with better technology and marketing support. Moreover, awareness about the scheme is another challenge that needs to be addressed.

## Stagflation

- Financial experts across the world fear that the persistent high inflation over the past few months globally may eventually lead to stagflation. Stagflation is a combination of **stagnant growth** and rising **inflation**.
- Most economists typically focus on the three key macroeconomic indicators to assess the health of an economy - **Economic output** measured by GDP, the **level of unemployment** and **inflation**
- The challenge for policymakers is to facilitate conditions in which output grows at a healthy pace, helping businesses in the economy to create jobs and thus keeping unemployment low.
- Most crucially, all this must happen in an atmosphere when prices remain relatively stable (stable inflation). However, in the real world, high economic growth generally leads to higher inflation.
- The most difficult problem for policymakers is when inflation runs high even as economic output either stagnates or, worse, shrinks. The slowdown in economic activity, in turn, leads businesses to reduce jobs and the resultant situation is termed as stagflation.



## Past Example

- The most famous case of stagflation happened in the early and **mid-1970s** when OPEC (Organisation of Petroleum Exporting Countries), decided to cut supply of oil, which led to a steep increase in oil prices.
- On the one hand, the rise in oil prices reduced the productive capacity of most western economies that heavily depended on oil, thus reducing economic growth.
- On the other hand, the oil price rise also led to inflation and commodities became more costly.
- The net result was stagflation - lower growth, higher unemployment, and higher inflation.

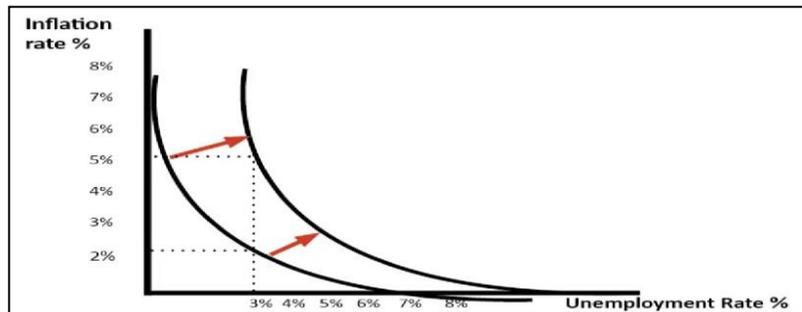
## Factors For Current Concerns Of Stagflation

- The pandemic had caused the first major recent economic slowdown worldwide.
- The measures taken to address the slowdown, including substantial increase in liquidity in most of the advanced economies, led to a sharp rise in inflation.

- While the Fed (in US) and the Bank of England are among central banks that have started raising interest rates to reduce the inflation, the ongoing war in Ukraine has caused a fresh **supply shock**.
- It has become difficult to contain inflation, because the current inflation is not linked to demand factors (which can be controlled by regulating credit).
- In fact, it is almost entirely caused by supply factors that are far harder to manage.

### Stagflation and Phillips Curve

- The traditional Phillips curve suggests there is a trade-off between inflation and unemployment.
- A period of stagflation will shift the Phillips curve to the right, giving a worse trade-off, which indicates stagflation (higher inflation and higher unemployment).



According to a report published by the RBI in its monthly bulletin, India does not face any risk of stagflation. The commentary in the bulletin is from central bank officials and it is not an official view of RBI.

### Key Highlights Of The Bulletin

- **Indications Of Improvement Of Long-Term Growth Prospects**
  - ✓ Going by the prices at which govt. bonds are traded in the secondary market, there are indications of improvement of long-term growth prospects & the recovery momentum is strong.
  - ✓ However, the bulletin calls for maintaining liquid reserves as portfolio outflows can rise to 7.7% of GDP in a worst-case scenario.
- **No Threat Of Potential Stagflation In India**
  - ✓ The World Bank caution on the risk of stagflation with potentially harmful consequences for low and middle-income countries.
  - ✓ However, as per the bulletin, India is better placed than many other countries in terms of avoiding the risks of a potential stagflation.
  - ✓ With growth rate of 8.7% in 2021-22, India's GDP surpassed its pre-pandemic (2019-20) level by 1.5%, recovery remains robust in 2022-23 so far and domestic economic activity is gaining strength.
- **Uncertainty In Global Economic Condition**
  - ✓ Global economic conditions continue to deteriorate due to increasing commodity prices and financial market volatility.
  - ✓ The war against inflation would entail significant monetary tightening, complicating the growth-inflation outlook.
- **Challenges Of Emerging Markets**
  - ✓ Emerging market economies grapple with the global trade slowdown, capital outflows and **imported inflation**.
  - ✓ Some abatement of supply chain pressures and relaxation in lockdown measures by key industrial hubs have emerged as silver linings.

### Maharashtra Becomes Top Sugar Producer

- After a five-year gap, Maharashtra has overtaken Uttar Pradesh (UP) to regain its position as India's top sugar producer. Maharashtra's output for the 2021-22 crushing year (October-September) is 138 lakh tonnes (lt). This is an all-time-high, beating the previous 107.21 lt (2018-19).

- The total sugar produced by the UP in 2021-22 accounts for 105 lt.
- Output in Maharashtra, Karnataka and Gujarat have shown a remarkable improvement from the drought-affected levels of 2019-20, a year that actually saw UP's output touching a high of 126.37 lt.
- Karnataka will produce a record 60 lt sugar this year, while Gujarat's 12 lt would be its best since the 12.35 lt of 2010-11.

### Factors For Growth In Maharashtra

- The first factor is the **good rainfall** Maharashtra has been receiving since the 2019 southwest monsoon season (June-September). The filling up of reservoirs and recharged groundwater aquifers motivated farmers to plant more area under sugarcane, which is a 12-18 months duration crop.
- The second is **higher yields** from farmers taking extra care of their crop. Improved water availability, has also pushed farmers to increase the planting of 'adsali', an 18-month cane yielding more than the regular 12-month 'suru' and 15-month 'pre-seasonal' crops.
- Another factor is a huge jump in **unregistered cane cultivation**. While the sugar commissioner's office has estimated this year's area at 12.4 lh, millers estimate it to be at least one lh higher.

### Factors for Decline in UP

- An estimated 12.60 lt equivalent of sugar from cane crushed by mills got **diverted for making ethanol** this year, compared to 7.19 lt in 2020-21, 4.81 lt in 2019-20 and 0.31 lt in 2018-19.
  - ✓ In fact, UP has become India's largest ethanol producer, while also achieving the highest blending-in-petrol ratio among all states.
- Further, **crop loss from excess rains and water-logging** in many low-lying cane-growing areas of eastern UP, has negatively impacted production.
- About 87% of UP's cane area is being planted under a single variety, Co-0238. While this variety, helped to significantly boost cane yields and sugar recovery in UP from 2013-14, it has become **susceptible to red rot fungal disease**.

### Sugarcane Cultivation

- Sugarcane is a member of the **grass family** with a hard, thick stem.
- It is a tropical and sub-tropical plant, therefore, requires warm weather to reach maturity. Areas having **temperature of 20° to 26°C** and an **average rainfall of 150 cm** are suitable for its cultivation.
- **Moist clay-loam** with good drainage is the best soil for cane, but it also grows well in alluvium & light-clay soil.
- Sugarcane cultivation also needs sufficient capital and labour.

### Committee on Hybrid Securities

Recently, Securities and Exchange Board of India (SEBI) has set up an advisory committee on hybrid securities, chaired by K V Kamath.

#### Mandate Of The Committee

- The committee will advise Sebi on issues related to development and regulation of primary and secondary markets of hybrid securities in the country.
- Further, it will identify hybrid securities in the context of

#### Hybrid Security

- A hybrid security is a **single financial product that combines different types of financial securities**, or has features of multiple kinds of securities.
- Typically, this means that the security has **aspects of both debts (bonds) and equity (stocks)**.
- Thus, the security will have the *guaranteed payment nature of a bond* while also having the potential for *capital appreciation of a stock*.
- They are **bought and sold** on an exchange or through a brokerage
- The most common type of hybrid security is a **convertible bond** that has features of an ordinary bond but is heavily influenced by the price movements of the stock into which it is convertible.
- **Real Estate Investment Trusts (REITs) and Infrastructure Investment Trusts (InvITs)** are also classified as hybrid securities.
  - **REIT** comprises a portfolio of **commercial real assets**, a major portion of which is already leased out. It **allows individual investors to invest using this platform**. The money collected from individual investors is invested in income-generating real estate.
  - **InvITs** comprise a portfolio of **infrastructure assets**, such as highways and power transmission assets.
- It enables direct investment of money from individual and institutional investors in infrastructure projects to earn a small portion of the income as return.

the infrastructure financing needs of the Indian economy.

- It will also be responsible for making suggestions to facilitate greater retail participation in hybrid securities while ensuring protection of interest of investors.

#### Difference Between Bond & Debenture

	BOND	DEBENTURE
<b>Meaning</b>	It is a financial instrument showing the indebtedness of issuing body towards its holders.	A debt instrument used to raise long term finance.
<b>Collateral</b>	It is generally secured by collateral	It may be secured or unsecured.
<b>Interest Rate</b>	Low	High
<b>Issued by</b>	Government Agencies, financial institutions, corporations, etc.	Companies
<b>Risk factor</b>	Low	High
<b>Priority in repayment at the time of liquidation</b>	First	Second

#### Extra Mile

- Optionally fully convertible debentures (OFCDs) are **debt securities** which allow an issuer to raise capital and in return the issuer pays interest to the investor till the maturity.
- It can be converted into shares at the expiry of a certain period at a predetermined price, if the debt holder (investor) wishes to do so.

#### Network Planning Group (NPG)

- The Network Planning Group (NPG) recently held its 20th meeting, during which it discussed on various agendas on **logistic capacities and PM GatiShakti**.
- Department for Promotion of Industry and Internal Trade (DPIIT) stated that all logistics and connectivity infrastructure projects, entailing an investment of over ₹500 crore, will route through the network planning group (NPG) constituted under PM GatiShakti initiative.
- NPG consists of heads of the *network planning wing of respective infrastructure ministries*. It will assist the empowered group of secretaries (EGOS), which is headed by the cabinet secretary.
  - ✓ EGOS consists of Secretaries of 18 Ministries as members and Head of Logistics Division, under the DPIIT, as member convenor.
- All the departments will have to approach the NPG first for approval before making a DPR (detailed project reports) at the planning stage.

#### Bharat Gaurav Scheme

The Indian Railways recently began **India's first privately-run train** under Bharat Gaurav scheme, from Coimbatore in Tamil Nadu to Shirdi in Maharashtra.

#### Scheme Details

- Under Bharat Gaurav, trains can be procured from railways on lease and operated on any circuit of their choice.
- From **individuals to societies, trusts, groups, tour operators and even state governments** can apply to take these trains and run them on special tourism circuits based on a theme.

- The **IRCTC runs such theme-based tourist trains**, for instance, the *Ramayana Express*, which goes on a tour of several places connected to Lord Ram.
- In fact, if the operator finds it feasible, then it can even **purchase rakes** from Indian Railway production units and run them.
- The **tenure** of the arrangement is a **minimum of two years and maximum of the life of the coach**.
- The operator has **freedom to decide route, the halts, services provided, and, most importantly, the tariff**.
- The operator can name the circuit, the train and sell advertisement space. It can carry out branding on the exterior and interior of the train.
- However, it has to be ensured that things that are not allowed by railway laws are also not carried out on these trains. For instance, the operator cannot serve alcohol.
- Moreover, these trains cannot be used as ordinary transport trains between an origin and destination.

### Indian Railways' Role

- It will provide staff to drive the trains, guards and also maintenance staff on board for the coaches. Other staff like housekeeping and catering etc, will be deployed by the operator.
- It will also ensure that its entire infrastructure is in place to safely & efficiently host the train in its network.
- It will also give these trains **priority in its paths**, like the Rajdhani's and premium trains, so that these trains are not held up or sidelined to make way for regular trains.

### Indian Railway Innovation Policy

The Indian Railways recently announced an innovation policy - "**StartUps for Railways**" to utilise technologies developed by Indian start-ups to improve its operational efficiency and safety.

#### Background

- In the month of May, field units were asked to provide problem areas. In response, about 160 problem statements were received.
- To start with, **11 problems statements** like rail fracture, headway reduction, automation of track inspection activities, use of remote sensing, geomatics and GIS for bridge inspection etc. have been taken up for **phase 1** of this program.
- These will be presented before the start ups to find innovative solutions. About ₹50 crore has been earmarked to fund such start-ups annually.

#### Details Of The Policy

- Startups will get support from Railways in the form of **50% capital grant, assured market, scale and ecosystem**.
- A **grant up to Rs. 1.5 Crore** to the innovator on equal sharing basis with provision of milestone-wise payment.
- Complete process from floating of problem statement to development of prototype is online, to make it transparent and objective.
- Trials of prototypes will be done in Railways. Enhanced funding will be provided to scale up deployment on successful performance of prototypes.
- Developed Intellectual property rights (IPR) will remain only with the innovator.
- Assured developmental order to innovator.
- De-centralization of complete product development process at divisional level to avoid delays.

## Benefits

- The policy would be mutually beneficial to the Indian Railways and the startups.
- Newer and cheaper technological solutions would help the Railways to provide safety and better services to the passengers.
- It will bring scale and efficiency in the field of operation, maintenance and infrastructure creation through participation of very large and untapped startup ecosystem.

## World Competitiveness Index 2022

- The Institute for Management Development has released the World Competitiveness Index 2022.
- The **IMD's** World Competitiveness Yearbook (WCY), first published in **1989**, is a comprehensive *annual report* and worldwide reference point on the competitiveness of countries.
- It analyzes and ranks **63 countries** according to how they manage their competencies to achieve long-term value creation.
- The ranking is based on **four factors**:



- Each of these factors is divided into **5 sub-factors**, which are further divided into 333 criteria.

## Key Findings

- **Denmark** has moved to the top of the list from the third position last year, while Switzerland slipped from the top ranking to the second position.
- Top-performing **Asian economies** are **Singapore (3rd)**, Hong Kong (5th), Taiwan (7th), China (17th) and Australia (19th).
- China slipped one spot this year, reversing its strong upward trend of recent years, signalling a poor economic recovery worsened by its zero-COVID strategy.
- The three most important trends impacting businesses in 2022 are inflationary pressures (50%), geopolitical conflicts (49%) and supply chain bottlenecks (48%) with COVID being the fourth (43%).

## Findings from India

- India has witnessed the sharpest rise among the Asian economies, with a six-position jump from 43rd to 37th rank. After a stable but stagnant five years, 2022 witnessed significant improvement in the competitiveness of the Indian economy
  - ✓ Largely due to gains in Economic performance (from 37th to 28th).
  - ✓ Government efficiency: It has improved from 46th in 2021 to 45th in 2022.
  - ✓ Business efficiency: It saw a huge improvement from 32nd rank in 2021 to 23rd in 2022.
  - ✓ Infrastructure: Saw no change at 49
- The **domestic economy** has experienced a significant rise from 30th to 9th position in a year.
- The **labour market**, a key sub-factor in the business efficiency parameter, moved up from 15th to 6th, while management practices and business attitudes and values also made major leaps.
- **Top 5 attractive factors** of India's economy for business are –



- Making major improvements in retrospective taxes in 2021 has helped India to restore the trust of the business community.
- Its **re-regulation** of a number of sectors, including drones, space and geo-spatial mapping, also played a role in the country's good performance.
- **Challenges** faced by India include *managing trade disruptions and energy security, maintaining high GDP growth post the pandemic, skill development and employment generation, asset monetisation and resource mobilisation for infrastructure development.*

### Direct Tax Collections Grow By 45%

- The figures of Direct Tax collections for the Financial Year 2022-23, show that net collections are at Rs 3,39,225 crore, compared to Rs 2,33,651 crore in FY 2021-22 – an increase of 45%.
- The Net Direct Tax collection mainly includes Corporation Tax (CIT) at Rs. 1,70,583 crores and Personal Income Tax (PIT) including Security Transaction Tax (STT) at Rs. 1,67,960 crores.

### Significance of Direct tax

- **Equity:** Direct taxes are based on the principle of ability to pay, so the equity or justice in the allocation of tax burden is well secured
- **Progressive:** Since direct taxes can be designed with fine gradation and progressiveness, they can serve as an important fiscal instrument of reducing the *gap of inequalities* in income and wealth thereby maintaining social equality.
- **Productive:** Revenue from direct taxes increases or decreases automatically with the change in the national income or wealth of the country.
- **Certainty:** Compared to indirect taxes, direct taxes are more exact and precise in estimating the revenue. Further, in direct taxes, the taxpayer knows how much he has to pay and the State can estimate the yields correctly.
- **Economy:** Being collected annually in lump-sum, the administrative cost of such collection will be minimum as compared to the indirect taxes, which are collected at short intervals (usually, quarterly), and which involve a high cost of collection. Further, chances of tax evasion are also minimised when they are collected at source (TDS/TCS).
- **Educative** It creates a civic sense among the taxpayers and because of the direct burden of taxes they become conscious and keep vigil on how the public income is spent by the government.
- **Anti-inflationary:** The excessive purchasing power during inflation can be mopped up from the community through increased direct taxes.

### Virtual Digital Assets: Norms Laid Out For Tax Deduction

- The Central Board of Direct Taxes (CBDT) has recently issued detailed guidelines on the tax deducted at source (TDS) rule for virtual digital assets (VDAs) such as crypto-currencies.
- It lays out the various scenarios on how the tax will be applicable and who will bear the onus to deduct it.
- With the addition of **Section 194S** to the Income-tax Act via the Finance Act of 2022, **1% TDS will be levied on transfers of VDAs** beginning July 1, if the value of transactions exceeds Rs 10,000 in a year.
- The government (in the Budget 2022-23) has proposed to issue a Digital Rupee or **Central Bank Digital Currency (CBDC)**, in the fiscal year 2022-23.

HOW WILL DIGITAL/VIRTUAL ASSETS BE TAXED	
<ul style="list-style-type: none"> <li>■ Any income from transfer of such assets will be taxed at 30%</li> <li>■ No deduction permitted while calculating income, except cost of acquisition</li> <li>■ Loss from such transfer can't be set off against any other income</li> <li>■ 1% TDS applicable on</li> </ul>	<ul style="list-style-type: none"> <li>■ payment for such transfer (on amount above a specified threshold)</li> <li>■ Gift of these assets taxable in the hands of recipient</li> </ul>



### Guidelines Laid Down By CBDT

- In various cases, the CBDT has defined who is responsible for deducting the tax.
  - ✓ **For example**, if a VDA transfer occurs on or through an exchange and the VDA being transferred is not owned by the exchange, tax may be deducted by the exchange when it pays the seller.
  - ✓ This mainly deals with situations where the transfer of a VDA is being made against money.
- The CBDT has also provided examples of cases in which a VDA is transferred in exchange for another VDA.
  - ✓ **For example**, if two different cryptocurrencies, such as Bitcoin and Ether, are exchanged, both parties are considered buyers and sellers.
  - ✓ As a result, both will have to pay tax on the cryptocurrency transfer.
  - ✓ In these cases, the guidelines also allow exchanges that facilitate such transactions to deduct tax.
- Additionally, the CBDT has defined **four primary VDAs** - Bitcoin, Ether, USD Tether and USD Coin, for the purpose of tax deduction on lesser-known cryptocurrencies.

### First Impression On These Guidelines

- In general, the responsibility for deducting TDS has been placed on the exchanges, which will increase their regulatory and compliance burden.
  - ✓ The exchanges must also disclose these transactions in their tax returns and keep a proper trail.
- However, both buyers and sellers would benefit from this. Because they can enter into contracts with the exchange for passing the responsibility to deduct tax on their behalf in VDA-to-VDA transfers or otherwise.
- However, several of CBDT's recommendations, particularly those concerning documents required (agreements, challans, undertakings etc.) to be maintained between transacting parties, may be impractical.

### National Anti-profiteering Authority

- The National Anti-profiteering Authority (NAA) has held global cosmetics giant L'Oreal guilty of not passing the benefit of reduction in tax rate to consumers of Rs 186 crore.
- NAA has ordered the company to deposit the sum with 18% interest in Consumer Welfare Fund.
- (NAA) is the **statutory mechanism under GST law** to check the unfair profiteering activities by the registered suppliers under GST law.
- Its core function is to ensure that the benefits of reduction in GST rates done by the GST Council and of the Input tax credit (ITC) are passed on to the recipients, by appropriate reduction in the prices by the suppliers.

### Credit Lines Stopped On Non-Bank Prepaid Instruments

- RBI recently issued a notification disallowing non-bank prepaid wallets and prepaid cards from loading credit lines into these platforms. This comes after a boom in credit instruments such as fintech-driven credit cards and buy-now-pay-later (BNPL) wallets.
- Companies like Slice, Uni, OneCard, typically tie up with banks or NBFCs and offer credit lines into their prepaid wallets.

#### Prepaid Payment Instruments (PPIs)

- RBI defines PPIs as payment instruments that facilitate the buying of goods and services, including the transfer of funds, financial services, and remittances, for the value stored within or on the instrument.
- PPIs are in the form of payment wallets, smart cards, mobile wallets, magnetic chips, vouchers, etc. As per the regulations, banks and NBFCs can issue PPIs.

#### Credit Line

- A credit line is a **preset borrowing limit** that allows an individual or a business, access to credit at any time, as per need.
- It can be utilised by the customer till the limit offered does not exceed. It is like a **flexible loan** instead of a lump-sum loan where a fixed amount is borrowed.

## NIPUN

- Recently, an innovative project for **skill training of construction workers** called NIPUN i.e. **National Initiative for Promoting Upskilling of Nirman workers** was launched.
- It is an initiative of the **Ministry of Housing & Urban Affairs (MoHUA)** under its flagship scheme - Deendayal Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM)
- It aims to train over **1 lakh construction workers**, through fresh skilling and upskilling programmes.
- The **National Skill Development Corporation (NSDC)**, the nodal agency under the Ministry of Skill Development & Entrepreneurship (MSDE), will be the **implementation partner** for NIPUN.
- NSDC will be responsible for the overall execution of training, monitoring and candidate tracking.

### Implementation Details

The project implementation is divided into **three parts**:

1. Training through **Recognition of Prior Learning (RPL)** at construction sites.  
Approximately 80,000 construction workers will be trained through industry associations under the RPL certification, co-branded with MoHUA.
2. Training through **fresh skilling** by Plumbing and Infrastructure Sector Skill Council (SSC).
  - ✓ About 14,000 candidates will receive fresh skilling
  - ✓ The courses are aligned with **National Skills Qualifications Framework (NSQF)** and will be imparted at accredited and affiliated training centres.
3. **International placement** through industries/ builders/ contractors.  
NSDC will place approximately 12,000 people in foreign countries such as the Kingdom of Saudi Arabia, UAE and other GCC countries.

### Benefits

- NSDC will provide trainees with **Kaushal Bima**, a three-year **accidental insurance** with coverage of Rs 2 lakhs.
- Trainees will also get to learn digital skills such as cashless transactions and the BHIM app, orientation about entrepreneurship, and Employee Provident Fund (EPF) facilities.
- NIPUN will enable Nirman workers to be more proficient and skilled. It will help them to adopt future trends in the construction industry by increasing their capabilities and diversifying their skill sets.
- It will create a future labour force for the construction industry which will boost innovation and large-scale development in the country.

### DAY-NULM

- It is a **Centrally Sponsored Scheme**, being implemented since 2014-15, with the aim to reduce poverty and vulnerability of urban poor households.
- It enables them to access self-employment and skilled wage employment opportunities, leading to significant improvement in their livelihoods on a sustainable basis.

### NIPUN Bharat Mission

The Ministry of Education has launched a National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN Bharat), for ensuring that every child in the country necessarily attains foundational literacy and numeracy (FLN) by the end of Grade 3, by 2026-27. It was launched in 2021 as part of the National Education Policy (NEP) 2020.

## Gold Importer And Exporter Countries

Importer Country	Exporter Country
The world's 5 biggest importers of gold are Switzerland, <i>India</i> , United Kingdom, China and Hong Kong	The world's 5 biggest exporters of gold are Switzerland, United Kingdom, Hong Kong, United Arab Emirates and the United States of America.

### Gold Reserves In India

- According to National Mineral Inventory data, India has 501.83 million tonnes of gold ore reserves.
- The largest reserves of gold ores are located in **Bihar (44%)**, followed by Rajasthan (25%), Karnataka (21%), West Bengal (3%), Andhra Pradesh (3%), Jharkhand (2%).
- At present, the **Hatti gold mine in Karnataka** is the largest gold mine in India. Gold in Kolar Gold Fields is almost exhausted or undegraded.

### About World Gold Council (WGC)

- It is a non-profit association of the world's leading gold producers.
- Headquartered in London, it was established to promote the use of and demand for gold through marketing, research and lobbying.

## Dutch Disease

- Recently, a research paper titled "*40 years of Dutch Disease literature: lessons for developing countries*" was published.
- Dutch Disease in economics refers to a phenomenon in which **a country witnesses uneven growth across sectors due to the discovery of natural resources**, especially large oil reserves.
- When a country discovers natural resources and starts exporting them to the rest of the world, it causes the exchange rate of the currency to appreciate significantly.
- Currency appreciation, in turn, discourages exports from other sectors while encouraging the import of cheaper alternatives.

### Origin Of The Term

- While the idea was first proposed by economists Peter Neary and Max Corden in 1982, the term 'Dutch disease' was first used by **The Economist** in 1977 to describe the decline of the manufacturing industry in the Netherlands.
- In the **1960s**, the Netherlands discovered gas reserves in the North Sea. The subsequent export of oil and the appreciation of the Dutch currency made Dutch exports of all non-oil products less competitive on the world market.
- Unemployment rose from 1.1% to 5.1% and capital investment in the country dropped. Following this, over the years, *the country witnessed a downfall in the industrial sector*.

### Combating Dutch Disease

#### Fiscal Policy

- Fiscal policy can prevent the adverse effects of Dutch disease, as it is important to control the boom following the discovery of natural resources.
- Rising income due to the export of natural resources should be adjusted with cautious spending on public welfare.
- Further, revenues from taxation should be used efficiently to compensate for adverse effects of the disease.

### Promoting Spending Policies

- Public spending such as concentrating on imports of tradables rather than non-tradables would help to slow the impact of the disease.
- Private spending in order to improve the productivity of private firms would also help to reduce the impact.

### Monetary Policy

- The choice of an appropriate monetary policy is important for macroeconomic management in commodity-exporting countries.
- With the discovery of natural resources, the country sees a huge inflow of money, especially foreign currency. This tends to affect the equilibrium in the money and exchange rate markets.
- Thus, Dutch disease can be prevented if the central bank raises the banking system reserve's requirement, which decreases domestic credit.

### **Black Swan Event**

- Recently, a RBI study shared the possibility of capital outflows of around \$100 billion from India in case of a major global risk scenario or a **black swan event**.
- A black swan is a **rare, unpredictable event** that comes as a surprise and has a significant impact on society or the world.
- These events have **three distinguishing characteristics**:

- They are extremely rare and outside the possibility of regular expectations
- They have a severe impact after they hit
- They seem probable in hindsight when possible explanations appear

- The theory was first proposed by author and investor **Nassim Nicholas Taleb** in 2001, and later popularised in his 2007 book – **The Black Swan: The Impact of the Highly Improbable**.

### **Confederation of Indian Industry (CII)**

- It is a **non-government, not-for-profit, industry-led and industry-managed organization**.
- It works to create and sustain an environment conducive to the development of India, partnering industry, Government and civil society, through advisory and consultative processes.
- It was founded in 1895, it is **headquartered in New Delhi**.
- It is registered under **Societies Registration Act, 1860** of India.

### Transfer Of IAS Officers Due To Misuse Of Powers

- Senior IAS officer couple has been transferred from their posts in Delhi to two different places when a report was published that they were walking along with their dog on the tracks of Thyagraj Stadium (Delhi) at a time when young athletes should have been practicing there.
- This is a case of **VIP culture and bureaucratic privileges**. It is against the public interest and the code of ethics of civil services.

### Statutory Provision

- The All-India Services (AIS) Conduct Rules 1968 and the Civil Services (CS) Conduct Rules 1964 govern the conduct of All India service cadre and Central services cadre officers respectively.
- **Rule 3 of AIS Conduct Rules** says that every member of the service shall at all times maintain absolute integrity and devotion to duty and shall do nothing which is unbecoming of a member of the service.

### Rule 3(2B) says that-

- Every member of the service shall **not misuse his position** as civil servant and not take decisions in order to derive financial or material benefits for himself, his family or his friends;
- Declaration of any private interests relating to his public duties and take steps to resolve any conflicts in a way that protects the public interest.
- The officer should **not place himself under any financial or other obligations to any individual or organization which may influence him in the performance of his official duties.**
- Act with fairness and impartiality and not discriminate against anyone, particularly the poor and the under-privileged sections of society;
- Refrain from doing anything which is or may be contrary to any law, rules, regulations and established practices;

### Problems In Indian Bureaucracy

- Colonial legacy of VIP culture in bureaucracy.
- Inequality and unfair use of limited resources in the country.
- Trust deficit between citizens and administration due to VIP culture giving a bad name to the system.
- Attitudinal problems in some civil servants as they link their service to status, which militates against public interest.
- Prevalence of **'oral orders' instead of 'written orders'** by superior officers to their juniors.
- Culture of impunity in case of violation of AIS/CS Conduct rules gives entitlement in a section of officers.

### Way Forward

- Adoption of AIS/CS conduct rules religiously by civil servants.
- Transparent mechanism to hold civil servant accountable in case of violation of rules.
- Superior officers should issue oral directions in unavoidable situations only and they should confirm it in writing immediately thereafter.
- Creating awareness among public to have check on erring public officials.
- Civil servants should lead by example as they are seen as role models in the society. They should behave responsibly in both public well as private life. It is not possible to have rules and regulations to guide every action, conscience should guide them in their act.

## Frequent Transfers Of Civil Servants -Most Vexatious Governance Problems Facing India

The Civil Services Board (CSB) is a panel, headed by the Cabinet Secretary at the national level and Chief Secretaries at the state level, formed to regulate transfers and postings of higher-ranking civil services officers in the country. The **Department of Personnel Rules 2016** made it mandatory for all states to setup such boards, following the recommendations of the **Hota Committee (2004)**, **2nd ARC** and Supreme Court (SC) judgement in **T S R Subramanian v. Union of India case, 2013**.

Benefits Of CSB	Issues Involved With CSB
<ul style="list-style-type: none"> <li>• If the officials have a <i>fixed tenure</i>, they will be able to provide better administration. They will also feel safe and try to stick to the rules instead of pleasing political bosses which can ensure good governance in the country.</li> <li>• Every official requires 3-6 months to get into the routine at his/her new place of posting. If they stay there for two years, it would mean better delivery and stable tenure to people.</li> <li>• It helps putting an end to <u>frequent and arbitrary transfers of civil servants</u>, which is a major reason for the declining morale of civil servants and sometime goes against the principles of public interest.</li> <li>• It will also help bring the <u>neutrality and objectiveness</u> in the functioning of civil servants.</li> </ul>	<ul style="list-style-type: none"> <li>• <u>Recommendatory nature</u>: The governments may amend, modify or reject the recommendation of the CSB for the reasons to be recorded in writing.</li> <li>• <u>Lack of Compliance</u>: Only 20 states have formed a CSB so far, latest being Punjab in 2020. States such as Madhya Pradesh and Tamil Nadu have not complied with the mandatory rules on setting up the board.</li> <li>• Conflict of Interest as the board is to be headed by the bureaucrats.</li> <li>• If the tenure of bureaucrats is fixed, it may create functional and administrative problems. The officers may overstep the authority and jurisdiction of the state government. It may make them less answerable and accountable to legislators.</li> <li>• With the fixed tenure rule, the political executives feel their influence has been reduced to nothing, since all the powers to examine a recommendation for a transfer lies with the CSB.</li> <li>• The bureaucrats feel the urge to go to courts for effective implementation of guidelines in letter and spirit. E.g. Haryana had the CSB in place but the guidelines are not followed there</li> </ul>

## Regulation of Social Media Intermediaries

The Minister for MeitY has proposed a government appointed **Appeals' Committee**, as a fresh draft of amendment to IT Rules 2021, to look into **complaints of 'content moderation' against social media companies**. However, he has further added that the government is 'open' to self-regulation of social media companies if tech-giants were to handle users' grievances and appeals in a satisfactory manner.

### Need For New Proposal Of Appointing Appeals' Committee

- Lack of accountable and responsible system of self-regulation by social media intermediaries.
- De-platforming or removing a person from a social media platform by the social media intermediaries without giving him/her opportunity to explain their action is violative of principle of natural justice and Article 14 (right to equality) of Indian Constitution.

### Working of the Committee

- The Grievance Appellate Committee is set up to provide an alternative to a user to file an appeal against the decision of the Grievance Officer rather than directly going to the court of law.
- These committees will be empowered to review and possibly reverse content moderation decisions taken by social media companies like Facebook, Twitter and YouTube.

- The Committee has to dispose of the appeals within 15 days of receiving them and its decision will be binding on the intermediaries or the large social media companies concerned.
- Intermediaries have to acknowledge suspension, removal or blocking of any user account or any complaint from its users in the nature of request for removal of information or communication link within 24 hours.

### Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021 for social media



- **Removal of Content from Social Media:** The new guidelines will make it mandatory for platforms to aid in identifying the “originator” of “unlawful” messages.
  - The rules lay down 10 categories of content that the social media platform should not host.
  - The rules stipulate that upon receipt of information about the platform hosting prohibited content from a court or the appropriate government agency, it should remove the said content within 36 hours.
- **Related to Safe Harbour Mechanism:** Social media intermediaries will **enjoy legal immunity (safe harbour) from 3rd party content on their platform under section 79 of IT Act** if they observe due diligence as mentioned below.
- **Categorisation of social media:** As Social Media Intermediaries (SMI) and Significant Social Media Intermediaries.
  - Social media intermediaries, with registered users in India above a notified threshold, have been classified as SSMLs.
- There shall be ‘**grievance officer**’ appointed by all kind of social media intermediaries (SMI) to deal with complaints. He shall acknowledge the complaint within 24 hours of complaint and resolve it within 15 days from receipt.

### Significant Social Media Intermediaries (SSMI) shall have additional due diligence

- They will be required to appoint a **chief compliance officer resident in India**, who will be responsible for ensuring compliance with the rules.
- They will be required also to appoint a **nodal contact person for 24x7** coordination with law enforcement agencies.
- The platforms will need to publish a **monthly compliance report** mentioning the details of complaints received and action taken on the complaints, as well as details of contents removed proactively by the significant social media intermediary.

### Penalties for Companies Violating these Guidelines

- In case an intermediary fails to observe the rules, it would lose the safe harbour, and will be liable for punishment “under any law for the time being in force including the provisions of the IT Act and the Indian Penal Code”.

- The Ministry has not specified the composition of the committee.
- The draft also proposes to place additional responsibilities on grievance officers.
  - ✓ It suggests that if a user complains about content which is “patently false”, infringes copyright, and threatens the integrity of India, among other things, a grievance officer will have to expeditiously address it within 72 hours.
  - ✓ Current rules require these officers to address all content-related complaints within 15 days.

### Concerns Regarding New Proposal

- The Appeals’ Committee will give the government overriding power over the decision of social media intermediaries’. This will pose a threat to free speech on social media.
- The Appeals’ Committee will be facing practical difficulties in dealing with large number of complaints due to giant user base and heavy content flow.

Social media regulation is still an evolving issue. The government should consult all stakeholders before taking any call on this issue.

### National Air Sports Policy 2022

- Ministry of Civil Aviation (MoCA) has launched National Air Sport Policy 2022 (NASP 2022). The policy lays out the vision of making India as one of the *top sports nations*.
- Air sports encompasses various sports activities **involving the medium of air** such as air-racing, aerobatics, aero-modelling, hang gliding, paragliding, para motoring and skydiving etc.

## NASP 2022

- It has been drafted with the help of multi-stakeholder approach involving policy makers, air sports practitioners and public at large.
- **Coverage:** The policy is set to include a set of **13 air sports** such as: aerobatics, aero modelling, model rocketry, ballooning, drones, gliding, powered gliding, rotorcraft, hang gliding, parachuting, and para motoring among others.
- There will be **four-tier** governance structure for air sports in India –
  - i) **Air Sports Federation of India (ASFI)** as the apex governing body
  - ii) **National associations** for individual air sports or a set of air sports
  - iii) **Regional or State and Union Territory level units** of the national air sports associations
  - iv) **District-level** air sports associations
- **Role of ASFI**
  - ✓ The ASFI will be an autonomous body under the **Ministry of Civil Aviation**. It will be chaired by the **Secretary, Ministry of Civil Aviation**, who will nominate up-to three eminent experts related to air sports as members of the ASFI governing council.
  - ✓ It will present India at the Fédération Aéronautique Internationale (World Air Sports Federation) and other global platforms related to air sports.
  - ✓ It will provide governance over all aspects of air sports, including regulation, certification, competitions, awards, and penalties.
  - ✓ The National Air Sports Associations will be accountable to ASFI.
- **Reporting Of An Accident**

The policy also stated that a person, or an associated person, involved in an accident will inform the concerned air sports association in writing, along with a copy to the ASFI, no later than 48 hours after an incident.
- **Provision Of Penal Action**
  - ✓ Inability to enforce adequate safety standards by an air sports association may lead to penal action by the ASFI against such association. This includes financial penalties, suspension or dismissal.

## Other Enabling Features Which The Policy Will Ensure

- Adoption of *best international practices* in safety.
- Establishment of good quality of infrastructure, equipment, instructors and services.
- Simple, stakeholder-friendly and effective governance structure.
- Enhance participation and success of Indian sportspersons in global air sports events.
- Promotion of design, development and manufacturing of air sports equipment in India in line with the Aatmanirbhar Bharat Abhiyan.

## Benefits of NASP

- It will create an **environment of adventure, thrill and sports** in India.
- It will help in **leveraging the energy of youth** of the country which accounts 70% of India's population.
- It will **promote widest diversity of air sports** in the country due to geographical expanse, diverse topography, and fair-weather conditions
- It will also **attract air sports enthusiast** for training and practice from all over the world and particularly from the countries where harsh winter prevent them from practice during winter months.
- It will help in expanding the market size, revenue collection and generating employment. India can target of generating 1 lakh jobs in this sector.

- It is expected that the economic multiplier benefits in terms of travel, tourism, support services and local infrastructure development will be over three times.

NSAP will not only provide a safe, affordable, accessible, enjoyable and sustainable air sports ecosystem in India but will also help India become air sports hub by 2030.

## Enforcement Directorate

Several political personalities are being probed by Enforcement Directorate due to money laundering and economic offence cases.

### Enforcement Directorate (ED)

- ED is a multi-disciplinary organization and a law enforcement agency. It is **mandated with investigation of economic offences and violation of foreign exchange laws.**
- ED was established as *'Enforcement Unit' under Dept. of Economic Affairs* for handling exchange control laws under Foreign Exchange Regulation Act (FERA) 1947. It was renamed as 'ED' in 1957. The administrative control of ED was transferred to *Dept. of Revenue in 1960.*
- In 1973, a new FERA was enacted. The control of ED was transferred to *Department of Personnel and Training (DoPT) for a brief period.* Later, it was again transferred to **Dept. of Revenue.**
- Post LPG reform, in 1999, FERA was replaced by the *Foreign Exchange Management Act (FEMA).* ED is entrusted with enforcement of FEMA now.
  - ✓ ED also enforces the Prevention of Money Laundering Act, 2002 (PMLA) and the Fugitive Economic Offenders Act, 2018 (FEOA).
- ED is also **sponsor agency under Conservation of Foreign Exchange and Prevention of Smuggling Activities (COFEPOSA) Act 1974.** It is empowered to sponsor cases of preventive detention with regard to *contraventions of FEMA.*
- ED renders cooperation with foreign countries and multi-lateral organization in matters related to money laundering and restoration of assets.

#### Fugitive Economic Offender (FEO)

- An FEO is defined by The Fugitive Economic Offenders (FEO) Act, 2018.
- As per the act, a person is declared as a fugitive economic offender if:
  - An arrest warrant has been issued against him for any specified offences where the **value involved is over Rs 100 crore,** and
  - He has left the country and refuses to return to face prosecution
- The Act aims to provide for measures to deter fugitive economic offenders from evading the process of law in India by staying outside the jurisdiction of Indian courts.

#### Process of declaring a person as FEO

- To declare a person an FEO, an application is to be filed in a Special Court (designated under the Prevention of Money-Laundering Act, 2002).
- The Special Court will require the person to appear at a specified place at least six weeks from issue of notice.
- Proceedings will be terminated if the person appears.

#### What happens if a person is declared FEO?

- Upon declaration as an FEO, properties of a person may be confiscated and vested in the central government, free of encumbrances (rights and claims in the property).
- Further, the FEO or any company associated with him may be barred from filing or defending civil claims.



### Concerns Regarding ED

- Questions are being raised on impartiality and credibility of ED as a law enforcement agency.
- Governments' administrative control on ED.

- Lack of resources with ED to deal with large number of cases.
- Dismal records of conviction rate.

### Way Forward

- Appointment of Director of ED through a **collegium system** with representation from opposition party and judiciary.
- Other officer should also be appointed in light of SC judgement in **Prakash Singh Case 2006**.
- There should be more financial and functional autonomy for ED.
- There should be parliamentary oversight on functioning of ED.

The need of hour is to keep the trust in ED and its credibility intact. The agency must function independently both on paper and in principle without any political agenda and motives.

### One Constituency One Candidate (OCOC)

Chief election commission has asked the Ministry of Law and Justice to **limit the seats from which a candidate can contest to just one**. It has also recommended to **ban on exit poll and opinion poll**. As per **Section 33(7)** of the Representation of People’s Act (RPA) 1951, one candidate can contest from a maximum of two constituencies.

### Concerns Due To Contesting From Multiple Constituencies

- **Section 70 of RPA bars candidates to represent from two constituencies in Lok Sabha or state Assembly.** Hence the idea of contesting from two constituencies seems illogical.
- It creates automatic vacancies in the constituencies leading to by-elections.
- By-elections are also huge waste of taxpayers’ money and time.
- At times, Influential Politician contest from two constituencies to dilute the votes of other contestants thus leading to exploitation of section 33(7).

### Constitutionality of Sec 33(7)

The constitutional validity of Section 33(7), RPA, 1951 has been upheld by the Allahabad High Court in **Raja John Bunch v. Union of India 2014**.

- The court observed that **Article 101 of the Constitution does not contain any prohibition or restriction on a person contesting an election or filing a nomination from more than one constituency.**
- The court observed that **there is nothing inconsistent between Section 33(7) and Article 101.**

Arguments In Favour Of OCOC	Arguments Against OCOC
<ul style="list-style-type: none"> <li>• It will help save administration time along with tax payers’ money and time.</li> <li>• Political parties will put effort to bring best candidate on the platform.</li> <li>• <b>Effective representation</b>, being essential to a democratic system, <i>is undermined</i> by the system of multiple elections. The supreme power is lost from the hands of people, rested in those who are in power.</li> <li>• Brings equality amongst the voters in India.</li> <li>• It also favors the idea of “fair elections”, as the economically weaker candidates, would not have enough to contest from multiple constituencies, and hence the wealthier candidate gets more chances of winning.</li> </ul>	<ul style="list-style-type: none"> <li>• There can be unnecessary emergence of multiple political parties.</li> <li>• It can lead to Parochialism resulting in narrow interest making regional interest over national interest.</li> </ul>

### Recommendation of Election Commission

- It has recommended amending **section 33(7)** so as to allow one candidate to contest from only one seat.

- As per another recommendation of Election Commission, if a candidate will vacate a seat which he or she has won, the candidate securing second highest vote should be announced as winner.
- Another recommendation - A proper regulation for bearing the expense of by- election should be implemented if a candidate winning from two constituencies will vacate one seat.

#### Historical Background for Contesting of election

- **Prior to 1996, Section 29A of RPA 1951 has no limit** on the number of constituencies a candidate can contest. This created a huge burden on financial burden.
- It was amended in 1996 and the number of constituencies was limited to two only.
- 255<sup>th</sup> report of Law Commission also recommended to amend section 33 (7).
- A petition had been filed in Supreme Court challenging Section 33(7) of the RPA 1951.

#### SC Judgement on Death Penalty

SC has given an important judgement on administration of death penalty in **Manoj & Others v. State of MP Case (2022)**. The judgement is significant as it highlights the need of substantive fairness through procedural reforms in determining punishment.

#### Background

- Criminality is not just a terrible decision made by individuals in the exercise of their free will but it is a result of complex web of biological, psychological and social factors.
- Death penalty in India has been crime centric. However, in **Bachan Singh Case (1980)** the constitution bench laid down a framework for the sentencing judges to take into account of factors relating to both 'crime' and 'accused' and assign them appropriate weight.
- The judges are required to weigh "**mitigating**" and "**aggravating**" factors if a case is fit for death sentence and also determine if the option of life imprisonment is "**unquestionable foreclosed**".

#### Concerns Regarding Death Penalty

- There exists confusion in judiciary on the requirements of framework of Bachan Singh case and its implementation.
- There are procedural gaps in large number of cases in awarding death penalty sentence.
- More weightage is given to 'aggravated factors' relating to crime rather than 'mitigating factors' relating to 'accused'.
- Lack of discussion on bringing socio-economic profile of death row prisoners as mitigating factors in the court room.

#### Highlights of SC judgement in Manoj & Others v. State of MP

- Certain **procedural threshold** must be met for sentencing to be fair.
- It rejects the idea once again that death sentences can be determined solely on the basis of crime.
- It must be established by the state and the sentencing judges that there is no probability of reformation of the accused before sentencing him death penalty.
- It recognised that the aspects of the accused's life, both pre-offence and post offence in prison are relevant.
- It asks courts to call for reports from the probation officer as well as prison and independent health experts before awarding a death penalty.
- The state must present the material that speaks to a wide range of factors including mitigating factors.
- It is the right of the accused to present mitigating factors and rebut the state in the court of law.

The recent judgment of the SC recognises 'reformation of the convicted person' as integral to the Indian criminal justice system, especially death penalty sentencing.

## Falling Trust on News

The findings by Reuters Institute Digital News Report 2022 show that the percentage of people having **trust on news is reduced**.

### Highlights Of The Report

- The trust in news has fallen with **Finland remained highest** level of overall trust (69%), while news trust in the **US has fallen by a future three percentage points and remain lowest (26%)**.
- There is **rise in consumption of news through social media** especially people below 30-year-old. **TikTok has become the fastest -growing network, reaching 40% of 18- 24-year-old with 15% using the platform for news.**
- **India is one of the seven countries** that are in the minority where trust in the news has **increased (with 41% trusting news overall)**. In India 58% read the news while 15% watch the news.
  - ✓ India is a strongly mobile-focused market.
  - ✓ 72% of the survey respondents accessed news through smartphones and 35% did so via computers.
  - ✓ Also, 84% of the Indian respondents sourced news online, 63% from social media, 59% from television, and 49% from print.
  - ✓ YouTube (53%) and WhatsApp (51%) were the top social media platforms for sourcing news.
- Trust in the News is still higher than before Covid times but lesser than in 2015.
- A total of 46 countries were surveyed including 11 in Asia, 5 in South America, 24 in Europe and 3 in North America and Africa comprising half of the world population.
- There is rise in **selective news avoidance**.
- Smartphones being the preferred mode of access, direct access to apps and websites were becoming less important over time.

### Concerns Related To The Report

- The major concern of the report is that it is done via online survey. It implies that the participant was only English-speaking young Indians, thus the data does not represent whole India.
- The findings are not necessarily nationally representative, especially for countries with lower internet penetration.

#### Selective News Avoidance

It is a behavior that leads many people to actively limit their exposure to news. Latest data shows that in countries like Brazil, UK the increase of selective news avoidance is maximum. Major reason for selective news avoidance are -- Repetitiveness of the news, Negative effect on mood, Worn out by the news, and Trust issues.

News is considered as guardian in modern society. It is important to rebuild trust in news; and news organizations should cater to citizen by being neutral and fair in reporting news.

## Amrit Sarovar Mission

Union Government has asked the Ministry of Railways and National Highways Authority to use the soil/silt excavated from ponds/tanks in all districts across the country under the Amrit Sarovar Mission for their infrastructure projects.

### About Amrit Sarovar Mission

- It is a mission to conserve water for the future. It was launched in April 2022.
- It aims at developing and rejuvenating 75 water bodies in each district of the country as a part of celebration of Azadi ka Amrit Mahotsav.

- Mission Amrit Sarovar is to be completed by 15<sup>th</sup> of August 2023. Around 50,000 Amrit Sarovar may be constructed in the country.
- Each of Amrit Sarovar will have approx. area of 1 acre with a water holding capacity of 10,000 cubic meters.
- The mission works through the states and Districts, by refocusing on various scheme such as Mahatma Gandhi NREGS, 15<sup>TH</sup> Finance Commission Grants, Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) sub scheme such as Har Khet Ko Pani etc.
- **Implementation:** The site of Amrit Sarovars will be approved by special Gram Sabha, which will also name Panchayat Partinidhi, who will on its behalf supervise development of Amrit Sarovar.
- **Technical partner:** Bhaskaracharya National Institute for Space Application and Geo-informatics (BISAG-N)
- One of the main focal point is **People's participation** in the Mission. Local freedom fighter, their family members, Martyr's family members, Padma Awardee and citizens of the local area wherein an Amrit Sarovar is to be constructed, will be engaged at all stages.
- On every 15th August, National Flag hoisting will be organized on every Amrit Sarovar site.
- The mission has been launched with a whole Government Approach with following Ministries/Departments namely -
  - ✓ Ministry of Rural Development (Department of Rural Development/ Department of land resources)
  - ✓ Ministry of Jal Shakti (Department of Drinking Water and sanitation/ Dept. of Water Resources)
  - ✓ Ministry of Culture
  - ✓ Ministry of Panchayati Raj
  - ✓ Ministry of Forest, Environment and Climate Change

### Critical Information Infrastructure (CII)

- The Information Technology Act of 2000 explicitly defines **Critical Information Infrastructure** as a computer resource, the incapacitation or destruction of which shall have debilitating impact on national security, economy, public health or safety.
- The government, under the Act, has the power to declare any data, database, IT network or communications infrastructure as CII to protect that digital asset.
- National Critical Information Infrastructure Protection Centre (**NCIIPC**) is the nodal agency to protect nations CII's.
- MeitY has declared IT resources of ICICI Bank, HDFC Bank and UPI managing entity NPCI as 'critical information infrastructure'.

#### National Critical Information Infrastructure Protection Centre

- It is an organisation of the Government of India created under the Section 70A of the Information Technology Act, 2000 (amended 2008) in 2014.
- It is a unit of the National Technical Research Organisation (**NTRO**) and therefore comes under the Prime Minister's Office (PMO).
- NCIIPC has broadly identified the following as 'Critical Sectors':

Government

Strategic & Public  
Enterprises

Power &  
Energy

Banking, Financial  
Services & Insurance

Telecom

Transport

# INTERNATIONAL RELATIONS

## Israel, UAE Sign Free Trade Deal, First With An Arab Country

Aimed at boosting trade between the two Middle Eastern nations, Israel signed a free trade agreement with the United Arab Emirates (UAE). This was Israel's first big trade accord with an Arab state.

### Background

- The UAE agreed to normalize relations with Israel in a U.S.-brokered deal in 2020, the so-called **Abraham Accords** that Israel eventually concluded with four Arab nations.
- Since then, the two countries have boosted cooperation in a number of economic sectors.
- In December 2021, Israel's PM Naftali Bennett made the first official visit to UAE.

### Key Highlights Of Free Trade Deal

- The trade agreement defined tax rates, imports and intellectual property. This would encourage more Israeli companies to set up offices in the UAE, particularly in Dubai.
- This deal would remove tariffs on 96% of goods, including food, agriculture, cosmetics, medical equipment and medicine.
- Experts predict the *Comprehensive Economic Partnership Agreement*, as the accord is known, would boost bilateral trade to more than \$10bn a year within five years.

### Significance of This FTA

#### Strengthening Of Relationship While Creating Opportunities

- The free trade zone agreement is expected to strengthen bilateral trade, to break down obstacles, and to advance new economic opportunities.

#### Towards A Shared Path

- This agreement will strengthen the common belief that the only way to build durable and sustainable economies in the complex world is together.
- This agreement proves that cooperation and dialogue are the best way to transform challenges to opportunities.

#### Significant for UAE

- The UAE is the second largest economy in Arab world, with market imports worth hundreds of billions of dollars.
- Significant weight is placed on technology products and advanced solutions, where Israel holds a relative advantage.

### Israel-UAE Peace Deal

- In September 2020, the UAE and Israel have signed an agreement to normalise their relationship.
- The deal, known as **Abraham Accord**, was brokered by the United States of America.
  - ✓ After Egypt's peace treaty with Israel in 1979, followed by Jordan's in 1994, this makes the UAE only the third Arab country to normalise relations with Israel.

### Key Highlights Of The Deal

- The deal promises to **establish normal relations** between the two countries. This includes business relations, tourism, direct flights, scientific cooperation, and, in time, full diplomatic ties at the ambassadorial level.

- An important component of the deal is **enhanced security cooperation** against regional threats, especially from *Iran and its proxies*.
- Israel, on its part, has agreed to suspend declaring sovereignty over territories it occupies in the West Bank.

### Why This Deal Took Place?

#### 1. Iran Factor

- Israel insists that concerns emanating from Iranian nuclear programme are an existential threat for country.
- On the other hand, the UAE has long accused Iran of playing the sectarian card to destabilise the Gulf Arab states.
- The UAE and Iran also have a long-standing territorial dispute, with Iran's occupation of the islands of Greater Tunb, Lesser Tunb and Abu Musa a sore issue.
  - ✓ These islands were occupied by Shah of Iran in November 1971, just two days prior to the UAE gaining independence from Britain.

#### 2. Islamism Or Political Islam

- It is a transnational concept often backed by the Muslim Brotherhood.
- Certain Gulf Arab rulers view Islamism as an existential threat to their dynastic monarchies.
- This has led to the formation of an unofficial partnership of conservative Middle Eastern governments.
- Israel, with its formidable intelligence capabilities, is now being admitted in this unofficial partnership as an associate member.

#### 3. Ambitions of UAE

- UAE has ambitions globally, and beyond. It has just become the ***first Arab country to send a mission to Mars***.
- Israel is by far the most technologically advanced country in the Middle East, with cutting-edge inventions.
- If this alliance works out, it could propel UAE to a new level of prosperity and international prestige.

### Significance Of This Deal For India

- This deal provides India an unexpected opportunity to play a bigger role in a region which is its strategic backyard. India already enjoys a very good relationship with UAE and Israel.
- Keeping this in mind, India should ramp up defence and security relations with UAE.
  - ✓ Israel is already a very close defence partner.
  - ✓ India should restart joint exercises with UAE, and even Saudi Arabia.
- India can also use its good relationship to ensure that any future deal on a regional security framework gives adequate space to Iran.
- Recently, China has indicated its willingness to play a larger role in this region, and is close to both UAE and Israel and, increasingly, Saudi Arabia.
- India should make its moves before this market and this extended neighbourhood comes under the Chinese sphere of influence.

### India Sends Diplomats To Kabul For Talks With Taliban

For the first time since the Taliban's capture of power in Kabul, India sent a team led by a senior diplomat to Afghanistan. This delegation was sent for meetings with senior members of the Taliban and to oversee humanitarian relief efforts.

## Background

- After the Taliban takeover in August, 2021, in the light of the deteriorating security situation in Afghanistan, India decided to bring back all its personnel.
  - ✓ India shuttered its embassy in Kabul in August 2021 and its consulates in Herat, Kandahar, Jalalabad and Mazar-e-Sharif in the months and years before the Taliban takeover.
- India, like other countries, has not recognised the Taliban setup in Afghanistan. However, it is taking very cautious approach in dealing with Taliban.
  - ✓ As part of its cautious approach to the Taliban, India has been supportive of the humanitarian requirements of the Afghan people.
- Against this backdrop, the Indian delegation made the current visit.

## Key Highlights Of This Visit

### A. Visited Key Sites Built With The Help Of India

- The Indian team visited the Indira Gandhi Children's Hospital in Kabul, which has distributed India-made COVID-19 vaccines in the recent past.
- The team visited Habibia High School, which was renovated with assistance from the Government of India.
- They also visited the Chimtala Electricity Sub-station, which was built by the *Power Grid Corporation of India* for electricity supply to Kabul.
- These initiatives were undertaken during the two decades of non-Taliban rule in Kabul that began in 2001.

### B. Indian Team included woman official

This is being interpreted as a subtle reminder to the Taliban to ensure equitable treatment for women in Afghanistan.

## Response of Taliban

- The Taliban has been hosting several international delegations from countries like Pakistan, the U.A.E., Iran, and others. This was the first visit from the Indian side.
- The Taliban has **specifically asked the Indian delegation to reopen its diplomatic mission in Afghanistan**.

## Significance Of This Visit

- The visit acquires significance as India has refused to recognise the Taliban administration in Afghanistan. So far, it has urged the international community to go slow in recognising the Taliban.
- The Indian delegation's visit is the culmination of quiet engagement with the Taliban.
  - ✓ In August 2021 the then Indian Ambassador to Qatar met with the chief of the Taliban's political office, Sher Mohammed Abbas Stanekzai, in Doha.
  - ✓ This meeting was to ensure the safe return of Indian nationals stranded in Kabul.

## India's Stand On Afghanistan After Taliban Takeover

### India in chair, UNSC Adopts Resolution on Taliban

- Under India's presidency, UNSC adopted resolution 2593. The resolution said the territory of Afghanistan is not to be used to threaten any country or shelter terrorists.

### Participated in UN High-Level Meeting on the Humanitarian Situation in Afghanistan

- In Sept' 2021, India participated in the UN High-Level Meeting on the Humanitarian Situation in Afghanistan.
- In this meeting, India called for normalisation of regular commercial operations of Kabul airport which could help the flow of relief material to Afghans.

- It also stressed upon the need to ensure non-discriminatory distribution of humanitarian assistance across all sections of the Afghan society.

### Hosted Delhi Regional Security Dialogue on Afghanistan

- India hosted the Delhi Regional Security Dialogue on Afghanistan in November 2021. It was held at the level of National Security Advisors (NSAs) and was chaired by NSA Ajit Doval.
- The NSAs from seven other regional countries attended the meeting.

### Continued Humanitarian Aid

- Although, India closed its embassy in Afghanistan, it continued with the humanitarian aid. It was widely acclaimed by the world leaders including Taliban leaders.
- India has dispatched several shipments of humanitarian aid consisting of 20,000 tonne of wheat, 13 tonne of medicines, 500,000 doses of Covid-19 vaccines and winter clothing.
- In a signal of New Delhi's continuing commitment to the war-torn country, **India allocated ₹200 crore as aid for Afghanistan in its budget for 2022-23**. The amount will be used to meet expenses related to projects that India has been implementing in Afghanistan.

### India's Contribution in Afghanistan

- These includes projects in critical areas such as power, water supply, road connectivity, health care, education and agriculture.
- Indian development ventures covered *all 34 provinces of Afghanistan*.
- India provided 75,000 tonnes of wheat to Afghanistan to strengthen food security during Covid-19 pandemic.
- India was the largest regional donor to Afghanistan with pledges totalling almost \$3 billion.

### U.S. Supreme Court Overturns Abortion Right

- The US Supreme Court took the dramatic step of **overturning** the landmark 1973 Roe vs Wade ruling.
- The 1973 Roe vs Wade ruling has been the basis for **legal abortions** across America for nearly half a century.
- By erasing abortion as a constitutional right, the ruling restored the **ability of states** to ban it. *Now states are free to enact their own laws on this matter.*

### Roe v. Wade Ruling (1973)

- The **ruling had struck down laws that made abortion illegal in several states**, and ruled that abortion would be allowed up to the point of foetal viability.
  - ✓ Foetal viability is the time after which a foetus can survive outside the womb.
  - ✓ **Foetal viability was around 28 weeks (7 months) at the time of the 'Roe' judgment.**
  - ✓ However, experts now agree that advances in medicine have brought the threshold down to 23 or 24 weeks (6 months or a little less). Newer studies show this could be further pegged at 22 weeks.
- The Court ruled that the **Constitution of the U.S.** protects a pregnant woman's **liberty to choose to have an abortion** without excessive government restriction.
- These judgements recognised the concept of personal liberty as enshrined in the **14th Amendment** against government interference with intensely personal decisions.

### Key Highlights

- **Upheld a Republican-backed Mississippi law**
  - ✓ The court upheld a Republican-backed Mississippi law that bans abortion after 15 weeks.

- The Mississippi law allows abortions only when there is a medical emergency or a severe foetal abnormality.
- It does not have an exception for pregnancies resulting from rape or incest.
- ✓ Abortion rights — which have been available to women for over two generations — will now be determined by *individual States*.
- **Constitution Makes No Reference To Abortion**
  - ✓ The top US court held that the Constitution makes no reference to abortion, and no such right is implicitly protected by any constitutional provision.
  - ✓ The Conservative justices held that the Roe decision was wrongly decided because the US constitution makes no specific mention of abortion rights.

### Criticism Faced By Court

- **Infringes Upon The Rights Of Women Over Their Own Bodies**
  - As per the experts, decision will turn women into second class citizens.
  - They estimated that 36 million women who live in about 30 states that will be affected by the ruling.
- **Verdict Came Along Ideological Lines**
  - With court's six conservative justices, including five men, voting in favour of the Mississippi abortion law.
  - The three liberal justices (including two women) dissented.

### Abortion laws in India

- Abortion in India is controlled by the Medical Termination of Pregnancy (MTP) act 1971.
  - ✓ Initially, the MTP act said that abortion can be permitted up to 20 weeks of pregnancy.
  - ✓ Through an amendment in 2021, the ceiling for abortions was raised to 24 weeks.
    - However, this was done only for special categories of pregnant women such as rape or incest survivors etc. that too, with the approval of two registered doctors.
  - ✓ In case of foetal disability, there is no limit to the timeline for abortion.
    - However, this is allowed by a medical board of specialist doctors set up by the governments of states and union territories.
- In 1994, the PCPNDT (Pre-Conception and Pre-Natal Diagnostic Techniques) Act was enacted to prevent misuse of the MTP Act.

### Ukraine And Moldova Granted Coveted EU Candidate Status

- The EU agreed to grant **coveted EU candidate status to Ukraine and Moldova**, thereby putting these countries on a path toward EU membership. However, it could take Ukraine & Moldova more than a decade to eventually join the bloc.
- Also, Georgia, another ex-Soviet state, was told by EU that it would get the same once it has fulfilled more conditions

### Countries aspiring to gain membership of EU

- 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.
- At present, there are five candidate countries which are willing to join the EU.
  - **Turkey** applied in 1987 but the membership process has long been on ice.
  - **North Macedonia, Montenegro, Albania and Serbia** applied to join between 2004 and 2009.
  - Albania and North Macedonia fulfilled the conditions to begin accession talks in 2020, with a view to joining in 2025.
  - But negotiations have been **blocked by Bulgaria** in an obscure row over whether the language spoken in North Macedonia is a regional variant of Bulgarian or not.

## What Does EU Membership Mean for Ukraine

- In March 2022, Ukrainian President Volodymyr Zelenskyy had signed an **official request** for Ukraine to join the European Union.
- Ukraine's membership can help the country militarily, as EU members are bound by a mutual defence clause.
- This clause requires other members to **help a country if it's a victim of armed aggression on its territory**.
- Moreover, 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**.

## Conditions for Joining EU

### Obligation

- **Article 49** of the EU treaties state that any European nations that seek to join the bloc, must be committed to respecting and promoting the EU's fundamental values set out in **Article 2**.
- These include respect for freedom, democracy, equality, the rule of law, etc.

### Consideration

- After the application is received, the EU members judge the suitability of the nation on the basis of these terms

### Specific criteria

- The European Council meeting in Copenhagen in 1993 set out more specific criteria called the **Copenhagen Criteria**.
- Copenhagen Criteria includes 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*.

## Process of Joining EU

- **First stage:** The country is given the status of an official candidate. Ukraine completed the first stage of application.
  - ✓ The application in this regard is **submitted to European Council**, which asks the **European Commission to assess** the country's ability to meet **Copenhagen** criteria.
  - ✓ If the Commission agrees that the applicant country meets the 'Copenhagen criteria', the European Council then agrees upon a **negotiating mandate**.
- **Second stage:** The formal membership negotiations with the candidate begin, which involves the adoption of EU law into national law, and the implementation of judicial, administrative, economic and other reforms, called the **accession criteria**.
- **Third stage:** Once the negotiations are completed and the candidate has met all the accession criteria, they can join the EU. Membership is put to a final vote of the existing member states.

## European Union

- EU is a unique economic and political union between 27 European countries that together cover much of the continent.
- The predecessor of the EU was created in the aftermath of the Second World War.
  - ✓ The first steps were to foster economic cooperation by creating **European Economic Community (EEC)** in 1958.
  - ✓ Initially economic cooperation was ensured between six countries: Belgium, Germany, France, Italy, Luxembourg and the Netherlands.
  - ✓ Later, 22 other members joined and a huge single market (also known as the 'internal' market) has been created.
  - ✓ On 31 January 2020 the United Kingdom left the European Union.

- What began as a purely economic union has evolved into an organization spanning policy areas, from climate, environment and health to external relations, security, justice and migration.

### EU Member States And Institutions

- The unique feature of EU is that, although all the Member States 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**, which represents EU's citizens and is directly elected by them;
  - ✓ **European Council**, which consists of the Heads of State or Government of the EU Member States;
  - ✓ **The Council**, (also called the Council of the European Union) which represents the governments of the EU Member States; and
  - ✓ **European Commission**, which represents the interests of the EU as a whole.



### Euro and Schengen Area

- The euro is the single currency of the EU as a whole. However, the **euro area currently comprises only 19 Member States**.
  - o While Denmark has an opt-out and the remaining countries do not yet meet the criteria for joining.
- 22 Member States are members of the **Schengen area**, which **enables passport-free movement**, with five (Romania, Bulgaria, Croatia, Cyprus, Ireland) maintaining their own border controls.

### Constitutional Amendment In Sri Lanka To Cut Power Of President

Sri Lankan Cabinet has approved the **21st Amendment to the Constitution** aimed at empowering Parliament over the executive President. The bill will now be tabled in the Parliament soon.

#### Key Highlights of 21<sup>st</sup> Amendment

##### A. Likely To Reduce The Presidency To A Ceremonial Position

- The amendment is likely to reduce the Presidency to a ceremonial position.
- It will retain the powers of the President on all three-armed forces.
- Almost all other key powers pertaining to governance and cabinet ministers will be handed over to the Prime Minister.

- In essence, the bill seeks to abolish the presidential system of governance. The presidential system of governance is in existence in Sri Lanka since 1978.

#### B. No Personal Discretion Of President

- According to the proposal, President has no personal discretion in appointing or dismissing the Prime Minister.

#### C. Seeks To Annul The 20th Amendment And Restore The 19th Amendment

- The 20<sup>th</sup> Amendment was adopted in 2020. It had abolished the 19<sup>th</sup> Amendment and gave President Gotabaya Rajapakse an unfettered power.
- By doing so, the amendment wants to curb the powers of the President and empower Parliament.

#### D. Other Reforms

- This amendment aims at barring the dual citizens from contesting elections to hold public office.

### Previous Constitutional Amendments in Sri Lanka

#### 19th amendment

- It was introduced in 2015 which curtailed the powers of the President and strengthened the role of Parliament.
- **Changes made by 19th Amendment**
  - › Reduced the terms of President and Parliament from six years to five years.
  - › Re-introduced a two-term limit for a person as President.
  - › Ensured revival of Constitutional Council and the establishment of independent commissions.
  - › Power of President to dissolve Parliament only after four and a half years
  - › Prevented dual citizens from contesting elections

#### 20th Amendment to Sri Lanka's Constitution

- The 20th amendment (20A), which replaced the 19th Amendment (19A) had again enhanced the executive powers of the President in an unprecedented way.
- The 20th amendment:
  - › Abolished the independent constitutional council for a Parliamentary Council.
  - › Gave electoral rights to dual citizens.
  - › Reduced the Prime Minister's role to a ceremonial one.
  - › Abolishes the binding limitations on presidential powers in relation to key appointments to independent institutions through the Constitutional Council.
  - › It gave sweeping powers to the President to appoint individuals to key institutions.



### Partners in the Blue Pacific (PBP)

- The United States, Australia, Japan, New Zealand and the United Kingdom launched an **informal group** aimed at boosting **economic and diplomatic ties with Pacific Island nations**.
- This group is known as **Partners in the Blue Pacific (PBP)**.
- It will seek to support **Pacific regionalism** and strengthen economic ties between the *Pacific islands and the rest of the world*.
- The areas where PBP aims to enhance cooperation include “**climate crisis, connectivity and transportation, maritime security and protection, health, prosperity, and education**”
- This group will commit more resources to the Indo-Pacific as China seeks to boost economic, military and police links with Pacific Island nations hungry for foreign investment.

### Increasing Chinese Presence In The Region

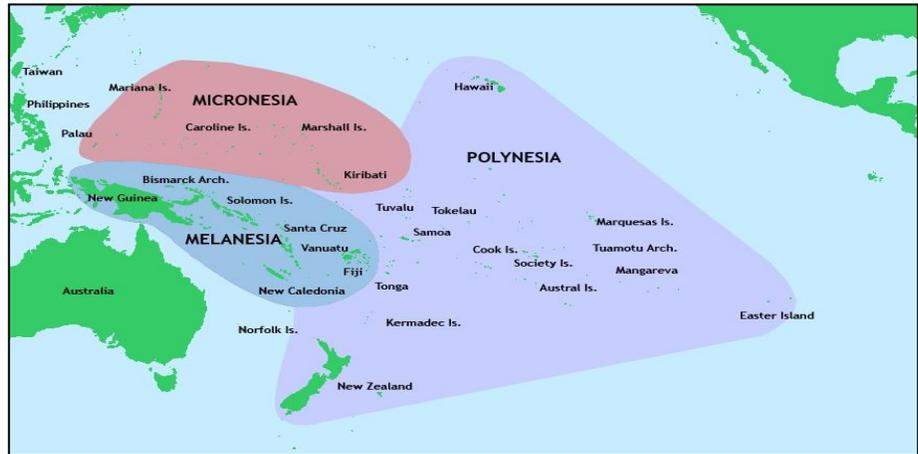
- In April 2022, China announced the signing of a security pact with the Solomon Islands. Under the agreement, the two sides will conduct cooperation in various areas such as:
  - ✓ maintenance of social order,
  - ✓ protection of the safety of people's lives and property,

- ✓ humanitarian assistance and natural disaster response
- In May 2022, China pushed for a sweeping common cooperation agreement with 10 Pacific nations covering everything from security to fisheries.
- Officials from the United States, Australia, Japan and New Zealand expressed concerns about these proposed agreements.
- They fear that it could open the door to a Chinese naval base in the country and hence pose serious risks to a free and open Indo-Pacific.

### Pacific Island Nations

Islands of the Pacific Ocean are commonly named as Pacific Island Nations.

- As shown in the map, Pacific Island Nations consist of three major groups of islands named as Polynesia, Micronesia and Melanesia.



- ✓ North of Equator and east of Philippines are the islands of Micronesia.
- ✓ The great arc of islands located north and east of Australia and south of the Equator is called Melanesia.
- ✓ In the eastern Pacific, largely enclosed within a huge triangle formed by the Hawaiian Islands to the north, New Zealand to the southwest, and Easter Island (Rapa Nui) far to the east, are the islands of Polynesia.

### Strategic Importance Of Pacific Region

- In its 2019 strategy report, the US Department of Defence called the Indo-Pacific the single most consequential region for America's future.
- Spanning a vast stretch of globe from the west coast of United States to the western shores of India, the region is home to world's most populous state (China), most populous democracy (India), largest Muslim-majority state (Indonesia), and includes over half of the earth's population.
- Among the 10 largest standing armies in the world, 7 reside in the Indo-Pacific; and 6 countries in the region possess nuclear weapons.
- Nine of world's 10 busiest seaports are in the region, and 60% of global maritime trade transits through Asia.
- Roughly one-third of global shipping passing through the South China Sea alone.

### Bangladesh Opens Its Longest Bridge

- Bangladesh inaugurated the long-awaited **Padma Bridge**, the country's biggest development project since its birth in 1971.
- The main bridge is 6.15 km long — 9.83 km in all, including the road and rail via ducts at the two ends and 21.65 m wide.
- It is high enough for the largest vessels to pass underneath.
- It connects to Shariatpur and Madaripur, linking the southwest of the country, to the northern and eastern regions.

- This bridge is expected to give the nation's development index a big boost and connect India directly to Dhaka, through road, rail and ports.
  - ✓ The distance of Dhaka from the Indian border at Benapole by road will now be reduced by 70km and travel time by 4.30 hours.
  - ✓ It will also reduce the Kolkata-Dhaka train journey time by half.
- The Padma Bridge, connecting India, Nepal, China, Myanmar, Singapore and Thailand, will be a **major link of the Trans Asian Highway Network**.

### India, Bangladesh Flag Off New Jalpaiguri-Dhaka Mitali Express

- India and Bangladesh jointly flagged off a new passenger train – **Mitali Express**.
- The new **bi-weekly** Mitali Express will connect New Jalpaiguri in North Bengal with Dhaka in Bangladesh through Haldibari in India and then Chilahati in Northern Bangladesh.
- The new passenger service, Mitali Express, will give a **boost to both countries' tourism** since it connects Bangladesh with north Bengal as well as the northeastern region of India.
- It will also provide an **access to Nepal to Bangladeshi citizens** via India by rail.

### Aegean Island Dispute

- Turkey and Greece have a long-standing rival claim over the Aegean Sea's Island and Territory.
- Turkey has accused Greece of building a military presence in violation of the **1923 Treaty of Lausanne** and the **1947 Paris Treaty**, which guarantee the Aegean islands' unarmed status.
- In 1995, Greece ratified the 1982 United Nations Convention on the Law of the Sea (UNCLOS), which provides a legal framework to recognize the limits of maritime zones of coastal nations. Turkey did not sign it as it did not favor its interest in the Aegean Sea.

### The Northern Ireland Protocol Bill

- The current UK government has come up with a new legislation, the Northern Ireland Protocol Bill.
- The bill would enable U.K. to override provisions of the Brexit deal that concern trading arrangements in Northern Ireland — the Northern Ireland Protocol (NIP).
- This has been opposed by the European Union as it violates international law.

### The Northern Ireland Protocol (NIP)

- Northern Ireland is the only part of the U.K. that shares a land border with the EU, as the Republic of Ireland (or Ireland) is an EU member-state.
- Brexit created two problems:
  - ✓ Since, Republic of Ireland is still a member of union, EU has to preserve the sanctity of EU.
  - ✓ Ireland, being a part of UK, was to be treated as a domestic market for UK.
- The NIP was agreed as a solution to avoid customs check at the actual customs border — on the island of Ireland, between Northern Ireland and the Republic of Ireland. It instead shifted the customs border to that between Northern Ireland and Great Britain (England, Scotland and Wales).
- That is because, unlike Northern Ireland, Great Britain won't have to follow EU rules in future.
- As per the NIP, goods flowing into Northern Ireland would be checked at this 'sea border' before entering the island, and Northern Ireland would continue to follow EU rules in product standards.
- The main irritant for the U.K. in the current version of the NIP was the **creation of unacceptable barriers to trade within the U.K. internal market** — between Great Britain and Northern Ireland.

## SUMMITS AND ORGANISATIONS

### 12th Ministerial Meeting of WTO

- The 12th Ministerial Meeting (MC12) of World Trade Organization (WTO) members concluded with **first major deal in nearly 9 years**.
- In 2013, at the Bali Ministerial Meet, members had signed WTO's first trade deal on a *peace clause* on public stockholding for food security purposes and trade facilitation agreement.

### Outcome of 12<sup>th</sup> Ministerial Meeting of WTO

#### Limited Patent Waiver For Covid-19 Vaccines

- The members agreed on a *waiver of certain procedural obligations under the TRIPS Agreement*.
- This will allow for **swift manufacture and export** of COVID-19 vaccines without the consent of patent owner.
- The demand to include *diagnostics and therapeutics* in the agreement was not agreed upon this time. WTO members will decide on the same after six months.

#### An Agreement To Discipline Fisheries Subsidy

- The agreement on ***harmful fisheries subsidies*** was achieved. It includes a strong prohibition of subsidies contributing to *illegal, unregulated and unreported (IUU)* fishing with unprecedented transparency provisions.
- It also includes an *absolute prohibition of subsidies* for fishing on the ***unregulated high seas***.
- Also, there is provision on ***overfished stocks***. It will bring sustainability rules for subsidies regarding most vulnerable stocks in the first phase of the agreement.
  - ✓ For the agreement regarding subsidies on overcapacity and overfishing to enter into force, negotiations on **UN SDG 14.6** need to be concluded.
    - **SDG 14.6:** By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to IUU fishing and refrain from introducing new such subsidies, recognizing that effective special and differential treatment for developing and least developed countries should be an integral part of the WTO fisheries subsidies negotiation.

#### Food Security and Agriculture

- In a joint Declaration on Food Security, WTO members committed to avoiding **unjustified export restrictions on food**. They also agreed to improve transparency on any export restrictions.
- Moreover, a decision was taken to **completely exempt humanitarian purchases** for the World Food Programme from export restrictions. However, internal food security concerns will take precedence and a country will be free to decide according to this priority.
- On Agriculture, members were not able to overcome their differences on a work programme for agriculture.

#### Extended A Moratorium On Applying Duties To Electronic Transmissions

- The meeting had reached an agreement to extend a moratorium on applying duties to electronic transmissions until the next ministerial meeting.
- Extension of moratorium was backed by major players like the US, the UK and the EU.
- They argued that letting it expire would undermine a global recovery already threatened by spiralling prices.

- The agreement specified that the moratorium would expire in March 2024, should the next conference be postponed.

### India's Response

India listed several gains from the meet and sought to position itself as a key proponent of many of the moves.

On Fisheries Deal	Patent waiver	Moratorium on Customs duty on e-commerce transactions
<ul style="list-style-type: none"> <li>o The agreement on fisheries subsidies is a compromise deal.</li> <li>o It dropped several contentious provisions that were not acceptable to several countries.</li> <li>o Many countries, including India, did not want their ability to provide subsidies curtailed in any manner.</li> <li>o On the other hand, now, over-fishing by China will face discipline</li> </ul>	<ul style="list-style-type: none"> <li>o India had called for a <u>TRIPS waiver for vaccines, therapeutics, and diagnostics to fight Covid-19 and future pandemics.</u></li> <li>o In October 2020, India, South Africa, and 63 co-sponsors had made the TRIPS waiver proposal. <ul style="list-style-type: none"> <li>▪ This proposal was to help middle- and low-income nations get access to Covid-19 vaccines and drugs.</li> </ul> </li> <li>o However, the discussions reached a deadlock in the TRIPS Council, the body responsible for monitoring the operation of the agreement.</li> <li>o Current agreement validates India's position to some extent. <ul style="list-style-type: none"> <li>▪ The current deal <b>did not include</b> <u>therapeutics and diagnostics.</u></li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>o India was officially opposed to extending the moratorium, citing loss of revenue to developing countries.</li> <li>o India agreed to an 18-month extension of the moratorium in exchange of protection of its right to extend subsidies to its fishermen. <ul style="list-style-type: none"> <li>▪ Contentious clauses on fisheries were removed from the text at the last minute.</li> </ul> </li> </ul>

### India: A More Active Player At MC 12

- India put forth aggressive draft texts in all pillars of WTO negotiations rather than being reactive, as in the past.
- India brought the members together to a unanimous agreement on fisheries, health, the future of WTO reforms, digital technology, food, and environment.
- The voice of the poor and the vulnerable got strengthened globally by India's principled stand at the WTO.

### Special ASEAN-India Foreign Ministers' Meeting

- India hosted ASEAN Foreign Ministers and Secretary General for a Special ASEAN-India Foreign Ministers' Meeting (SAIFMM) to **commemorate 30 years of ASEAN-India Dialogue Relations.**
- In recognition of this milestone, year 2022 is being celebrated as ASEAN-India Friendship Year.
- The Ministers reviewed the status of ASEAN-India Partnership and set out the path for the coming decade.
- The leaders also addressed the Ministerial Session of 12<sup>th</sup> edition of Delhi Dialogue (DDXII) which focuses on 30 years of ASEAN-India relations with the theme '**Building Bridges in the Indo-Pacific**'.
- ✓ Launched in 2009, Delhi Dialogue is India's premier annual Track 1.5 Dialogue.
- ✓ Track 1.5 dialogues are conversations that include a mix of government officials (who participate in an unofficial capacity) and non-governmental experts
- ✓ It aims to strengthen ASEAN-India relations in the context of contemporary global and regional scenario.

## World Of Work Summit In Geneva

- Union Minister For Labour & Employment participated in High Level Panel discussion in Geneva.
- The discussion was organised by the International Labour Organisation (ILO) under the World of Work summit.
  - ✓ The summit was organized by the International Labour Conference (ILC).
  - ✓ ILC is the ILO's highest decision-making body. It is often called the International Parliament of Labour.
- Theme of Discussion: ***"Tackling multiple global crises: promoting human centered recovery and resilience"***.

### About ILO

- Established in 1919, as part of the **Treaty of Versailles**, ILO is a **specialized agency** of United Nations to set labour standards, develop policies and devise programmes promoting decent work for all women and men.
- It is the **only tripartite U.N. agency** which brings together governments, employers and workers of 187 member States.
- **Headquarter** - Geneva, Switzerland
- **Parent organization:** Economic and Social Council of the United Nations
- It is also a member of the **United Nations Development Group (UNDP)**, a coalition of UN organization aimed at helping meet the Sustainable Development Goals.
- **Members** - The ILO has 187 member states (186 Countries + The Cook Islands)
- **Key Reports Published by ILO** - World Employment and Social Outlook; Global Wage Report

## Major Economies Forum on Energy and Climate (MEF)

- The Union Minister for Environment, Forest and Climate Change represented India at the virtual meeting of the Major Economies Forum on Energy and Climate (MEF).
- Hosted by U.S. President, the meeting aimed at galvanising actions that are to strengthen energy security and tackle the climate crisis thereby building momentum for COP27.
- The Indian Minister called upon the members of MEF to launch a global movement on LIFE i.e. **Lifestyle for Environment**.
  - While addressing the world leaders at CoP 26 in Glasgow (November 2021), PM Modi appealed to world leaders to make lifestyle change a global movement by shunning mindless consumption and adopting mindful utilisation of resources.
  - In this regard, he coined the term **LIFE** i.e., **Lifestyle For Environment**.

# DEFENSE AND SECURITY

## China Blocks India-US Bid To List Pak-Based LeT Dy Chief As Global Terrorist

- China blocked a joint India-US proposal to list Pakistan-based top LeT militant *Abdul Rehman Makki* as a 'global terrorist' under a UNSC sanctions committee.
- China blocked the move by placing a "technical hold" on the proposal.
  - ✓ Placing a technical hold effectively blocks the proposal to designate Makki as a terrorist until it is withdrawn.
  - ✓ This measure (Technical hold) can last for up to six months at a time under the Security Council's procedures.

## Past Instances When China Blocked Such Proposals

- In the past, China blocked proposals to designate *JeM chief Masood Azhar* at the UN sanctions committee at least four times by using technical holds.
- At the time, Beijing had contended that this was done as more information was required about Azhar's activities.
- China finally relented in Azhar's case by lifting the technical hold in May, 2019. Beijing caved in because of mounting international pressure. Also, it wanted to improve its ties with New Delhi in the wake of the 2017 border standoff at Doklam.

## Application of Sanctions by UN Security Council

- Under **Chapter VII** of the *United Nations Charter*, the UN Security Council can take action to maintain or restore international peace and security. The **application of sanctions** is one of the possibilities the Council has in this respect.
- Sanctions measures, under *Article 41 of the UN Charter*, encompass a broad range of enforcement options that do not involve the use of armed force.
- The measures can range from economic and trade embargoes to more targeted measures against specific individuals, companies or entities, such as the freezing of funds and travel bans.

## Sanctions Regimes

- Currently, the **UNSC has 14 active sanctions regimes** which focus on supporting political processes in armed conflicts, nuclear non-proliferation and counter-terrorism.
- Sanctions regimes are enacted via a UN Security Council resolution.

## Sanctions Committee

- Each sanctions regime is administered by a sanctions committee that consists of all 15 members (5 permanent member and 10 non-permanent members) of the Security Council. This requirement effectively gives a veto to all 15 members of the committee.
- These sanctions committees ensure the implementation of the sanctions and can decide by consensus to adopt targeted sanctions against specific individuals, enterprises or entities.
- UNSC Al-Qaeda and ISIL Sanctions Committee or 1267 sanctions committee is one of them.

## Exercises/ Operations

<b>Operation Sankalp</b>	<ul style="list-style-type: none"><li>• It was launched by Indian Navy in the <b>Persian Gulf</b> and <b>the Gulf of Oman</b> as a measure to assure the safety and security of the Indian vessels.</li><li>• After the attacks on merchant ships in the Gulf of Oman in June 2019, Indian Navy</li></ul>
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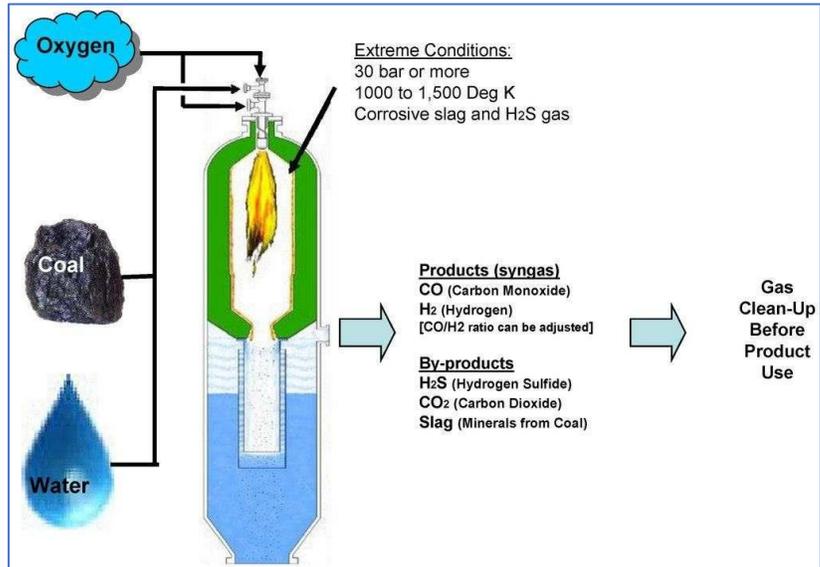
	<p>had commenced this operation.</p> <ul style="list-style-type: none"> <li>Indian Navy's stealth Frigate, INS Talwar is presently deployed for <b>Operation Sankalp</b> commemorating the 3rd continuous year of Indian Navy's presence in the Gulf for protection of India's Maritime Interests.</li> </ul>
<b>Ex Khaan Quest - 2022</b>	<ul style="list-style-type: none"> <li>A <b>Multinational Peacekeeping exercise</b> "Ex Khaan Quest 2022" featuring participation from military contingents from <u>16 countries</u> was held in Mongolia.</li> <li>The exercise was designed to improve peacekeeping capabilities, enhance the core UN doctrine of peace keeping competencies.</li> <li>It also provided a platform to strengthen military-to-military relationships.</li> </ul>
<b>Ex SAMPRITI-X</b>	<ul style="list-style-type: none"> <li>As part of ongoing India Bangladesh bilateral defence cooperation, a joint military training exercise Ex SAMPRITI-X was conducted at Jashore Military Station in Bangladesh.</li> <li>The aim of the exercise was to strengthen interoperability between the two armies and to understand each other's tactical drills and operational techniques.</li> </ul>
<b>Joint Border Operation Friendship Border 2022</b>	<ul style="list-style-type: none"> <li>The <b>8<sup>th</sup> meeting of the heads of border services</b> of the member states of <b>Shanghai Cooperation Organization</b> (SCO) was held in New Delhi under chairmanship of India.</li> <li>The Plan for the preparation and conduct of the <b>Joint Border Operation Friendship Border 2022</b> was reviewed and approved. <ul style="list-style-type: none"> <li>✓ It is an initiative by China to conduct a "joint border operation" in <b>2023</b> of all member countries of SCO.</li> <li>✓ The border operation is called "<b>Solidarity-2023</b>" and will be organised by <b>China</b>.</li> </ul> </li> </ul>
<b>RIMPAC</b>	<ul style="list-style-type: none"> <li>Rim of the Pacific (RIMPAC) is one of the largest biennial multilateral Naval Exercises, which is led by US.</li> <li>The RIMPAC started in 1971 as an annual exercise by the US, Australia, and Canada, but from 1974, maritime exercise became a biennial event.</li> <li>India first participated in RIMPAC in 2014.</li> <li>27 countries participated in RIMAP 2022.</li> </ul>

## Coal Gasification by 2030

The Government of India has prepared a **National Mission document** to achieve 100 MT (Million Tonnes) Coal Gasification by 2030.

### About Coal Gasification

- It is a process in which coal is **partially oxidized with air, oxygen, steam or carbon dioxide to form a fuel gas.**
- **In-situ** gasification of coal (Underground Coal Gasification (UCG)) is the technique of converting coal into gas while it is still in the seam and then extracting it through wells.



- In this process, **syngas is produced**, which is a mixture consisting primarily of carbon monoxide (CO), hydrogen (H<sub>2</sub>), Carbon Dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and water vapour.
- This gas is then used instead of piped natural gas, methane and others for deriving energy.
- **China has the biggest number of coal gasification projects in the world.**

Advantages	Disadvantages
<ul style="list-style-type: none"> <li>• It provides a more <b>environment friendly method</b> of producing energy. Gasification plants produce significantly lower quantities of air pollutants.</li> <li>• It can be used to <b>produce methanol and chemicals like ammonia and urea</b>, which are the foundation of many fertilizers.</li> <li>• It can also be used to <b>produce transportation fuels</b> from <b>oil sands, coal and biomass.</b></li> <li>• Steel companies use coking coal in their manufacturing process which is imported and is expensive. To cut costs, plants can use syngas</li> </ul>	<ul style="list-style-type: none"> <li>• According to Centre for Science and Environment (CSE) assessment, <b>coal gasification actually produces more carbon dioxide than a conventional coal-powered thermal power plant.</b></li> <li>• One unit of electricity generated by burning gasified coal <b>generates 2.5 times more CO<sub>2</sub></b> than what would result when burning the coal directly.</li> <li>• It is one of the <b>more water-intensive forms of energy production.</b></li> <li>• Coal gasification plants are <b>costlier</b> than conventional power plants.</li> </ul>

### Steps Taken By The Government In This Sector

- For encouraging use of clean sources of fuel, the government has provided for a **concession of 20% on revenue share of coal used for gasification.**
- **Coal India Limited (CIL)** has planned to set up **at least 3 gasification plants** and has signed an MOU with GAIL for marketing synthetic natural gas.
- The Ministry of Coal has decided to set up the **National Coal Gasification Mission** in order to create awareness among all stakeholders and to prepare an implementable road map with specific responsibilities.

## Commission Of Air Quality Management (CAQM)

It is a **statutory body** formed under the Commission for Air Quality Management in National Capital Region and Adjoining Areas, Act 2021.

### Function of the commission

- It has the power to take measures, issue directions and entertain complaints for the purpose of protecting and improving the quality of air in the National Capital Region.
- It will also coordinate action taken by states on air pollution (stubble burning) and will lay down parameters for air quality and emission or discharge of environmental pollutants.
- It is headed by a full-time chairperson who has been a Secretary to the Government of India, or a Chief Secretary to a State government.
- The chairperson will hold the post for **three years** or until s/he attains the **age of 70 years**.
- It will have members from several Ministries as well as experts from CPCB, ISRO & Civil Society.

## State of India's Environment Report 2022

The Centre for Science and Environment (CSE) has released the State of India's Environment Report 2022.

### About The Report

- It is an **annual publication of the CSE and Down To Earth**.
- It has a comprehensive set of infographics and statistical analysis of how India's states are faring in meeting the Sustainable Development Goals (**SDGs**).
- It **focuses on climate change, migration, health and food systems**.
- It also covers biodiversity, forest and wildlife, energy, industry, habitat, pollution, waste, agriculture and rural development.

### Key Findings Of This Report

- **Economy** - The target for the economy is to raise the GDP to **nearly \$4 trillion by 2022-23**. But by 2020, the economy **has grown only to \$2.48 trillion**.
- **Employment** - The target is to increase the **female labour force participation rate to at least 30% by 2022-23**, it stood at **17.3%** in January-March 2020.
- **Housing** - The targets are to construct 29.5 million housing units under Pradhan Mantri Awas Yojana (PMAY)-Rural and 12 million units under PMAY-Urban, **only about 46.8% and 38% respectively** of the targets under 'Housing for All' have been achieved.
- **Provision of Drinking Water** - The target is to provide safe piped drinking water to all by 2022-23, only **45%** of the target has been achieved.
- **Agriculture** - The average monthly income of an agricultural household has **increased to Rs 10,218 from Rs 6,426**, this increase is largely due to increase in wages and income from farming animals.
- **Digitisation of Land Records** - Target is to digitise all land records by 2022. While many states have made good progress but **Jammu and Kashmir, Ladakh and Sikkim languish less than 10% digitisation of land records**.
- **Air Pollution** - The target is to **bring down PM2.5 levels** in Indian cities to less than 50 microgram per cubic metre ( $\mu\text{g}/\text{m}^3$ ). In 2020, when vehicular movement was restricted due to the pandemic, 23 of the 121 cities monitored for PM2.5 exceeded 50  $\mu\text{g}/\text{m}^3$ .
- **Solid Waste Management** - The **target is to achieve 100%** source segregation in all households **solid waste** but the **overall progress is 78%**.

- **Manual Scavenging** – The target is the complete eradication, but **India still has 66,692 manual scavengers**.
- **Increasing Forest Cover** - The target is to **increase it to 33.3%** of the geographical area, as envisaged in the National Forest Policy, 1988. **By 2019, 21.67% of India was under forest cover**.
- **Energy** - The target is to achieve **175 GW** of renewable energy generation capacity by 2022 but **only 56% of this target has been achieved**.

#### Center for Science and Environment

- It is a public interest research and advocacy organization based in New Delhi.
- It researches into, lobbies for, and communicates the urgency of development that is both sustainable and equitable.
- Its efforts are specifically designed to create awareness about problems and propose sustainable solutions.

#### Living Lands Charter

- It is a **non-binding mandate** that member states will protect global land resources and prevent climate change, loss of biodiversity and land degradation while working towards sustainable management.
- All **54 Commonwealth members** have agreed to adopt it.

#### Eco-Sensitive Zone (ESZ)

The Supreme Court directed that every protected forest, national park and wildlife sanctuary should have a **mandatory eco-sensitive zone (ESZ) of a minimum one km** starting from their demarcated boundaries.

#### About ESZ

- It is an **area notified by the Ministry of Environment, Forest and Climate Change (MoEFCC)**, around Protected Areas, National Park and Wildlife sanctuaries.
- The width of the ESZ and type of regulation may vary from protected area to area. However, **as a general principle, the width of the ESZ could go up to 10 kms** around the protected area.
  - ✓ The National Wildlife Action Plan (2002-2016) of MoEFCC stipulated that state governments should declare land falling within 10 km of the boundaries of national parks and wildlife sanctuaries as eco fragile zones or ESZs under the Environmental (Protection) Act, 1986.
- The **Environment (Protection) Act, 1986 does not mention the word “Eco-Sensitive Zones”**.

Permitted Activities In ESZ	Regulated Activities In ESZ	Prohibited Activities In ESZ
Activities permitted in the areas include ongoing agriculture and horticulture practices by local communities, rainwater harvesting, organic farming, adoption of green technology and use of renewable energy sources.	Activities like felling of trees, establishment of hotels and resorts, commercial use of natural water, erection of electrical cables, drastic change of agriculture system, widening of roads etc.	Activities like commercial mining, setting up industries that cause pollution, tourism activities like flying over protected areas in an aircraft or hot air balloon, establishment of major hydro-electric projects, commercial use of wood and discharge of effluents or any solid waste or production of hazardous substances etc.

#### Significance of ESZ

- These areas **act as a buffer for protected areas** and **reduce developmental pressures** around a wildlife sanctuary or national park.
- They also **act as a transition zone** from areas of high protection to areas involving lesser protection.

- It also **helps in in-situ conservation**, which deals with conservation of an endangered species in its natural habitat.
- It **minimizes the forest depletion and man-animal conflict**.

### World Environment Day 2022

- It is **celebrated annually on 5 June since 1973**.
- It is **led by United Nations Environment Programme (UNEP)**.
- It is celebrated **to raise awareness on degrading environmental conditions** as well as to **encourage people worldwide to take positive environmental actions** in order to help in creating a better future.
- It is hosted by a different country each year. **For year 2022, Sweden is the host country**.
- **India hosted the 45th celebration of World Environment Day** in 2018 under the theme 'Beat Plastic Pollution'.

### World's Largest Plant

- Scientists have discovered the **world's largest plant, a seagrass meadow** that has **grown by repeatedly copying, or cloning, itself**.
- It has been **discovered in Shark Bay**, off the West Coast of Australia.
- It has survived by making copies of itself for **over 4,500 years**.
- It is sterile, has double the number of chromosomes than other similar plants, and has managed to survive the volatile atmosphere of the shallow Shark Bay
- The **scientists call the meadow Posidonia australis or ribbon weed** "the most widespread known clone on Earth," which **covers an area of 20,000 hectares**.
- The **2<sup>nd</sup> largest plant, is the clonal colony of a quaking Aspen tree in Utah**, United States, which covers 43.6 hectares.
- The **largest tree in India is the Great Banyan in Howrah's Botanical Garden**, covers 1.41 hectares.

### Jungle Cork Tree

- It is native to India & is referred to as chilbil, papri, kanju and several other names in local languages.
- The tree has therapeutic properties.
- The tree is drought-resistant and is easy to grow.
- The seeds are consumed by tribal communities in Uttar Pradesh, Bihar and in Himalayan Terai region. Its wood is widely used for making furniture and for construction purposes.

### Environment Performance Index (EPI) 2022

- The Environment Ministry of India rebutted the Environmental Performance Index 2022 that ranked India at the bottom of 180 countries.
- The government said that some of the indicators that were used for the index are 'extrapolated and based on the surmises and unscientific methods'.

### About EPI

- It is an **international ranking system** that measures **environmental health and sustainability of countries**.

- It is a biennial index, published by the **Yale Center for Environment Law and Policy** and the **Center for International Earth Science Information Network, Columbia University**.
- The index ranks 180 countries on 40 performance indicators across 11 categories, which are further grouped in three categories:



### EPI 2022 Ranking

Top 3 Countries from Top			Top 3 Countries from Below		
Countries	Rank	EPI Score	Countries	Rank	EPI Score
Denmark	1	77.90	Pakistan	178	24.60
UK	2	77.70	Bangladesh	179	23.10
Finland	3	76.50	India	180	18.90

### Significance of EPI

- These indicators **provide a gauge at the national level of how close countries are to the established environmental policy goals**.
- It **suggests that a country's economic prosperity** makes it possible to invest in policies on the environment that lead to desirable incomes.
- It **enables decision makers to identify the drivers of top-tier performance**.
- It helps to promote sustainable development in support of a more environmentally secure and equitable future.

### Why India Rejected The Report

- **Report Used Many Indicators Based On Unfounded Assumptions**
  - ✓ Some of these indicators used for assessing performance are extrapolated and based on surmises and unscientific methods.
  - ✓ Environmental and climate experts also said the methodology does not consider per capita emissions and different socio-economic conditions across countries.
- **Reasons For Change In Assignment Of Weights Has Not Been Explained**
  - ✓ As per the govt, the weight of indicators in which the country was performing well has been reduced. And reasons for change in assignment of weights has not been explained
- **The Principle Of Equity Is Given Very Low Weightage**
  - ✓ The principle of equity is given very low weightage in the form of the indicators like GHG emission per capita and GHG emission intensity trend.
  - ✓ The common but differentiated responsibilities and respective capabilities (CBDR-RC) principle is also barely reflected in the composition of the index.
  - ✓ India is party to the Paris Agreement and has given a goal of net zero by 2070. Hence comparing it to countries with projected 2050 emissions level equal to or below zero receiving the maximum score is against the principle of equity as enshrined in CBDR-RC.
- **Flawed Methodology**
  - ✓ The Environment Ministry pointed to a new indicator in the Climate Policy objective of EPI, **Projected GHG Emissions levels in 2050**.

- ✓ This is computed based on average rate of change in emissions of the previous 10 years instead of modelling that takes into account *a longer time period, Extent of renewable energy capacity and use, additional carbon sinks, and Energy efficiency of respective countries.*
- ✓ **Both forests and wetlands of the country are crucial carbon sinks.** These have not been factored in while computing the projected GHG emissions trajectory up to 2050 by EPI 2022.
- **Uncertainty In Copernicus Air Pollutant Concentration**
  - ✓ India said that the Copernicus air pollutant concentration data have higher uncertainty in regions with less extensive monitoring networks and emissions inventories.
  - ✓ This limitation reduces the chance of accurate assessment of air quality in India.
  - ✓ Also, the indicators on water quality, water use efficiency, waste generation per capita which are closely linked to sustainable consumption and production are not included in the Index.
- **India's Record Is Impeccable**
  - ✓ India has already achieved the target of 40% of installed electricity capacity from non- fossil fuel-based sources, 9 years in advance of its commitments.
  - ✓ In 2015, as part of its nationally determined contributions under the Paris Agreement, India had committed to achieving 40% of its installed electricity capacity from non-fossil energy sources by 2030.
- **Enough Room For Improvement In The Index**
  - ✓ The index computes the extent of ecosystems but not their condition or productivity.
  - ✓ Efforts must be made to include metrics that truly capture ecosystem productivity such that:
  - ✓ Regulatory, provisioning as well as cultural services provided by various ecosystems like forests, wetlands, croplands are assessed and reflected in performance.
  - ✓ Indicators like Agro biodiversity, soil health, food loss and waste are not included.
  - ✓ Although they are important for developing countries with large agrarian populations.

## Carbon Bombs

A group of environmentalists, lawyers, and activists have come together to identify and defuse carbon bombs.

### About Carbon Bombs

- It is an **oil or gas project** that will result in **at least a billion tonnes of CO<sub>2</sub> emissions** over its lifetime.
- In total, around 195 such projects have been identified world over, including in the US, Russia, West Asia, Australia and India.
- Over a third of the carbon bombs are currently being prepared and have not yet started extraction.
- Deactivation of carbon bombs is necessary to meet the Paris Agreement's temperature targets.

### Plan for Defusing Carbon Bombs

- The network working towards defusing carbon bomb is called **Leave It In the Ground Initiative (LINGO)**.
- Its **mission is to leave fossil fuels in the ground and learn to live without them.**
- It has listed carbon bomb projects from all over the world.
- It aims to organise ground support for protesting such projects, challenge them through litigation, and conduct analysis and studies for the same.

## Leaders in Climate Change Management Program (LCCM)

- The **National Institute of Urban Affairs (NIUA) and World Resources Institute (WRI) India**, jointly announced 'Leaders in Climate Change Management Program.
- It aims at **building capacity among urban professionals to lead climate action** across sectors and geographies in India.

- The programme seeks to not only identify hundreds of climate leaders but also focus on how these leaders can be oriented in terms of their training and how they will move forward.
- To facilitate this face-to-face learning program, the **Administrative Training Institute (ATI), Mysuru**, also signed a tripartite MoU with NIUA and WRI India, becoming the first delivery partner of the LCCM program.
- The program, designed and implemented in partnership with the **United Nation Environment Programme (UNEP) and Indian School of Business (ISB)**, aims to strengthen India's workforce to achieve Panch Amrit goal.
- At COP26 last year, Prime Minister Narendra Modi proposed a five-fold strategy **Panch Amrit** to global leaders, extending India's co-operation to meet the **1.5 degrees Celsius targets**.

#### **Panch Amrit COP26**

- **1<sup>st</sup>** - India will reach its non-fossil energy capacity to 500 GW by 2030.
- **2<sup>nd</sup>** - India will meet 50% of its energy requirements from renewable energy by 2030.
- **3<sup>rd</sup>** - India will reduce the total projected carbon emissions by 1 billion tonnes from now onwards till 2030.
- **4<sup>th</sup>** - By 2030, India will reduce the carbon intensity of its economy by less than 45%.
- **5<sup>th</sup>** - By the year 2070, India will achieve the target of Net Zero.

#### **Stockholm +50 Conference**

Stockholm +50 Conference is being held in **Stockholm (Sweden)** to commemorate **50 years of the Stockholm Conference**, the first United Nations conference on Environment in 1972.

#### **Objectives of Stockholm+50 Conference**

- To reflect on the **urgent need for actions towards a healthy planet** and prosperity of all.
- To achieve a **sustainable and inclusive recovery** from the COVID-19 pandemic.
- To accelerate the **implementation of the environmental dimension of Sustainable Development** in the context of the Decade of Action.

#### **About Stockholm Conference, 1972**

- The United Nations Conference on the Human Environment in Stockholm was held in June, 1972.
- The idea of the Stockholm Conference was first proposed by Sweden. That's why it's also termed the "Swedish Initiative"
- This was the **first global convergence on the planetary environment**.
- The theme was 'Only One Earth'.
- It **aims to creating a common governance framework for the planetary environment and natural resources**.
- 70 out of 122 participant countries which were developing and poor countries adopted the Stockholm Declaration.
- The **United Nations Environment Programme (UNEP)** has been established by the **United Nations General Assembly in pursuance of the Stockholm Conference**.

#### **Biomass Co-firing**

- The Union Ministry of Power recently **mandated 5-10% co-firing at every thermal power plant in the country**.

- Unavailability of biomass pellets of agricultural residues is slowing down the implementation of the co-fire biomass with coal in thermal power plants.

### About Biomass Co-firing

- Co-firing is the **combustion of two (or more) different types of materials at the same time.**
- Biomass co-firing stands for adding biomass as a partial substitute fuel in high efficiency coal boilers.
- Coal and biomass are co-combusted in boilers that have been designed to burn coal.

Significance Of Biomass Co-Firing	Challenges With Biomass Co-Firing
<ul style="list-style-type: none"> <li>• It is a good <b>method to minimize greenhouse gases</b>, because this process reduces net CO<sub>2</sub>, CH<sub>4</sub>, SOX and often NOX emissions, compared to coal combustion.</li> <li>• <b>Substituting 5-7% of coal with biomass</b> in coal-based power plants can save 38 million tonnes of CO<sub>2</sub> emissions.</li> <li>• The existing <b>coal power plants can be retrofitted quickly and cost-effectively.</b></li> <li>• It is an effective way to curb emissions from open burning of crop residue.</li> </ul>	<ul style="list-style-type: none"> <li>• Around <b>95,000-96,000 tonnes</b> of biomass pellets are required per day for co-firing, but India's pellet manufacturing capacity is 7,000 tonnes per day.</li> <li>• There is a <b>potential increase in corrosion and some ash deposition issues.</b></li> <li>• If co-firing plants are not carefully designed, it may involve some risks, <b>like increased plant outages, possible interference with operation of burner, furnace, boiler etc.</b></li> <li>• <b>Other challenge is to store biomass pellets for long durations</b> at the plant sites since they absorb moisture from air quickly, rendering them useless for co-firing.</li> </ul>

### Government Intervention To Promote Biomass Co-Firing

- The '**National Mission on use of Biomass in coal-based thermal power plants**', also called **SAMARTH** (Sustainable Agrarian Mission on use of Agro-residue in Thermal Power Plants) has shared a list of 70-80 pellet manufacturers with the power plants.
- The government has stressed on **increasing the capacity of pellet manufacturers** and in this regard, several trainings for pellet manufacturers have been conducted by the National Power Training Institute all over the country.
- In order to further strengthen and regulate the supply chain, the manufacturers were also asked to be registered under SAMARTH.

### Way Forward

- Platforms need to be established to **ensure farmers have an intrinsic role in this business model of pellet manufacturing and co-firing in power plants.**
- Need to **ensure the price of biomass pellets are capped and protected from fluctuations in market demand.**
- **Map existing manufacturers** and encouraging entrepreneurs to set up more pellet manufacturing plants.

### Green Jobs

- It refers to a **class of jobs that directly have a positive impact on the planet, and contribute to the overall environmental welfare.**
- Jobs involving **renewable energy, conservation of resources, ensuring energy efficient means** are categorised under the same.
- It **aims at reducing the negative environmental impact of economic sectors** and furthering the process of creating a low-carbon economy.

## India and Green Jobs

- The **Skill Council for Green Jobs** was launched by the Union Government in October, 2015.
- Aligned to **National Skill Development Missions**, it was set up to be a not-for-profit, independent, industry-led initiative.
- It is promoted by the **Ministry of New and Renewable Energy (MNRE) and the Confederation of Indian Industry (CII)**.
- The council **aims to help manufacturers and other service providers in India's 'green business' sector**.

## Scenario Across the World

- The International Labour Organisation (ILO), International Trade Union Confederation (ITUC), United Nations Environment Programme (UNEP) and International Employers Organisation (IEO) collectively launched the Green Jobs Initiative in 2008.
- It is aimed at bettering placements, training and creating opportunities for individuals to work in green jobs.

## ILO Projections for India

- According to the ILO, India moving to a green economy by the next decade would alone create about 3 million jobs in the renewable energy sector.
- The renewable energy sector created about 47,000 new jobs in 2017 accounting for a 12% increase in just the span of a year.

## Significance of Green Jobs

- Awareness and training regarding green jobs skills will ensure **limiting greenhouse gas emissions, minimising waste and pollution, protect and restore ecosystems, support adaptation to the effects of climate change**.
- For India it **can prove immensely useful with sectors like renewable energy, waste management, green transport and urban farming** all having great potential to employ a trained workforce.

### Green Mining Techniques

- It is a mixture of technological advances and best practices to achieve the extraction of minerals and metals while mitigating the environmental impacts of the process.
- It allows the recovery of all useful minerals and minimises mining waste.
- It helps to organise the operations in such a way that they are safe and meaningful to employees, and harmless for local residents and the environment.

## Abnormal Dinosaur Egg

- A team of Indian researchers, for the first time in the fossil history, has **discovered an egg-in-egg or abnormal titanosaurid dinosaur egg from the Bagh area in Dhar District, Madhya Pradesh**.
  - Titanosaurs were a diverse group of sauropod dinosaurs(long necks, long tails, small heads, and four thick legs)
- The **abnormal egg displays two continuous and circular eggshell layers** separated by a wide gap like that observed in birds, ovum-in-ovo (**one egg inside another egg**).
- Eggs-within-eggs are **rare phenomena**. They are so far known to occur only in birds and have never known in reptiles
- **Discovery leads to new connection between reptilian and avian evolution.**
- The finding opens up the possibility that sauropod dinosaurs had *oviduct morphology* similar to those of crocodiles or birds and they **may have adapted to a mode of egg-laying characteristic of birds**.

- Fossils of these animals have been found in Gujarat, Madhya Pradesh as well as Meghalaya.

### Single-Use Plastic

- The **Union government has banned the use of single-use plastic from July 1 2022.**
- The manufacture, import, stocking, distribution, sale and use of single-use plastic, including polystyrene and expanded polystyrene, commodities shall be prohibited.

### About Single-Use Plastic

- It refers to plastic items that are used once and discarded.
- It has among the highest shares of plastic manufactured and used from packaging of items, to bottles, polythene bags, face masks, coffee cups, cling film, trash bags, food packaging etc.

### Why Single-Use Plastic Is A Major Concern

- A report by the Australian philanthropic organisations said it account for **a third of all plastic produced globally, with 98% manufactured from fossil fuels.**
- It also accounts for the majority of plastic discarded (**130 million metric tonnes globally in 2019**), all of which is burned, buried in landfills or discarded directly into the environment.
- On the current trajectory of production, it has been projected that **single-use plastic could account for 5-10% of greenhouse gas emissions by 2050.**
- The report found that India features in **top 100 countries of single-use plastic waste generation – at rank 94.**
- When it remains in the environment for long periods of time and does not decay, **it turns into microplastics and enter in our food sources and then the human body**, which is extremely harmful.

### Bedti-Varada Interlinking

- Bedti-Varada River Interlinking Project is located in Karnataka.
- The project was envisaged in 1992 to supply drinking water.
- The plan aims to link the Bedti, a river flowing west into the Arabian Sea, with the Varada, a tributary of the Tungabhadra River, which flows into the Krishna.

### Four New Corals Recorded From Indian Waters

For the first time, **Zoological Survey of India (ZSI) recorded four species of *azooxanthellate corals from waters of Andaman and Nicobar (A&N) Islands.***

#### Key Findings

- All four groups of corals are from same family Flabellidae.
- Four species, namely *Truncatoflabellum crassum*, *T. incrustatum*, *T. aculeatum*, and *T. irregulare*, were previously found from Japan to Philippines and Australian waters while only



#### About Coral Reefs

- Corals are invertebrate animals belonging to a large group of colourful and fascinating animals called Cnidaria. It shares a symbiotic relationship with single-celled algae called zooxanthellae.
- Reefs are formed of colonies of coral polyps held together by calcium carbonate.
- The algae provide the coral with food and nutrients, which they make through photosynthesis, using the sun's light and also give corals their bright colour.
- Coral Reefs are also called the rainforests of the seas.
- It can survive only under saline conditions with an average salinity between 27% to 40%.
- The temperature of the water for reefs should not be below 20°C and should not exceed 35°C

T. crassum was reported within the range of Indo-West Pacific distribution including the Gulf of Aden and the Persian Gulf.

- They are **Azooxanthellate corals**, which are a **group of corals that do not contain zooxanthellae and derive nourishment not from the sun** but from capturing different forms of plankton.
- They are **deep-sea representatives**, with the majority of species reporting from between 200 m to 1000 m.
- They **also occur in shallow coastal waters**.
- They are hard corals and are not only solitary but have a highly compressed skeletal structure.

Significance Of Coral Reefs	Threats To The Coral Reefs
<ul style="list-style-type: none"> <li>• It provides an <b>important ecosystem</b> for life underwater.</li> <li>• It acts as a barrier that <b>absorbs the forces of waves, currents, storms, hurricanes</b>, etc. coming from the open sea, thereby reducing coastal erosion.</li> <li>• It is an <b>important reservoir of carbon</b> and help sequester ocean carbon.</li> <li>• It the <b>backbone of tropical regions' economies</b>, through reef-related tourism and marine exports.</li> <li>• As per an estimate, the <b>total annual net benefit per year of the world's coral reefs is \$29.8 billion</b>.</li> <li>• Extracts from animals and plants living on reefs have been <b>used to develop treatments for many diseases</b> like asthma, arthritis, cancer and heart disease.</li> </ul>	<ul style="list-style-type: none"> <li>• As global warming is increasing, our <b>oceans become more acidic</b> and the threat to coral reefs is increasing.</li> <li>• <b>Rise in sea level causes corals to die deep underwater</b>. They receive less sunlight and grow more slowly.</li> <li>• <b>Stronger, more frequent storms, hurricanes, cyclones can break off coral branches</b> and overturn coral colonies.</li> <li>• As the oceans absorb CO<sub>2</sub>, they become more acidic. The increase in <b>acidity in the water has a negative effect on the coral</b>.</li> <li>• <b>The overabundance of nutrients in the marine environment upsets</b> the balance of reef ecosystems.</li> <li>• <b>Marine debris can damage or kill coral reefs</b> and the many animals that live in them.</li> </ul>

#### Way Forward

- **Improve water quality** in coral reefs & **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.

#### Coral Reefs In India

- There are about **570 species of hard corals found in India**. Almost 90% of corals are found in the waters surrounding Andaman and Nicobar Islands.
- India has **4 major coral reef areas: Gulf of Mannar, Andaman and Nicobar Islands, Lakshadweep islands and the Gulf of Kutch**.

#### The Coral Triangle

A coral-rich marine region in Southeast Asia that encompasses the waters between Indonesia, Malaysia, the Philippines and Papua New Guinea - is the most biologically diverse marine ecosystem on Earth.

#### Supermoon

- The moment when the moon is closest to the Earth is called a lunar perigee. When the moon is furthest away it is known as a lunar apogee.
- **If the lunar perigee occurs very close to a full moon, then we see a supermoon.**
- If a lunar apogee occurs very close to a full moon, then we see a micro moon.
- **During a supermoon, the Moon appears up to 14% bigger and 30% brighter compared with when the Moon is furthest away.**

## New Map Of Earth's Tectonic Plates

- Researchers from the University of Adelaide, Australia, have carried out a new study that includes an updated map of the earth's tectonic plates.
- The material will help in forming a **better understanding of natural hazards like earthquakes and volcanoes.**
- These **plates move relative to each other** and interact along their boundaries, where they meet, diverge, or overtake each other.

### About New Map

- New model for tectonic plates **better explains the spatial distribution of 90% of earthquakes and 80% of volcanoes** from the past two million years whereas existing models only capture 65% of earthquakes.
- The new map added several new **microplates to the existing tectonic plate** model like the *Macquarie microplate which sits south of Tasmania and the Capricorn microplate that separates the Indian and Australian plates.*
- The new model now includes all the **deformation zones north of India as the plate bulldozes its way into Eurasia.**

### Significance of New Map

- It can be **used to evaluate risks from natural hazards like earthquakes and volcanoes.**
- It can be **used for further exploration of minerals.**
- It can be **used for a better understanding of the evolution of the earth.**

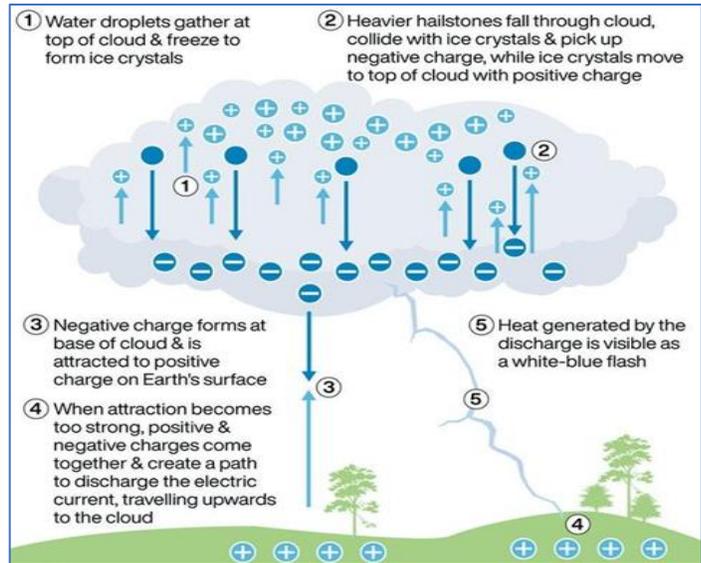
Major Tectonic Plates	Some Minor Tectonic Plates (Found between)
1. Pacific Plate	1. Somali Plate
2. North American Plate	2. Nazca Plate (South America and Pacific plate)
3. Eurasian Plate	3. Philippine Sea Plate(Asiatic and Pacific plate)
4. African Plate	4. Arabian Plate(Saudi Arabian landmass)
5. Antarctic Plate	5. Caribbean Plate
6. Indo-Australian Plate	6. Cocos Plate (Central America and Pacific plate)
7. South American Plate	7. Caroline Plate (Philippine and Indian plate)
	8. Scotia Plate (edge of the South Atlantic and Southern oceans)
	9. Burma Plate
	10. New Hebrides Plate (Pacific Ocean near the island nation of Vanuatu)
	11. Juan De Fuca Plate (South-East of North American Plate)

## Lighting – A Disaster That's Need Attention

- It is a **rapid and massive discharge of electricity** into atmosphere, some of which is directed towards the Earth.
- There is occurrence of a natural 'electrical discharge of very short duration and high voltage between a cloud and the ground or within a cloud', accompanied by a bright flash and sound, and sometimes thunderstorms.
- **Inter cloud or intra cloud (IC) lightning** are visible and harmless. **Cloud to Ground (CG) lightning** is harmful as the 'high electric voltage and electric current' leads to electrocution.
- Discharges are produced in huge moisture clouds that are 10-12 km long.

## How Lightning Is Formed?

- As **water vapour moves upwards** in the cloud, it condenses due to the falling temperature.
- As they drop to a temperature below 0°C, the water **droplets turn into tiny ice crystals**.
- They continue to grow until **they become so heavy** that they begin to fall to the earth.



- This leads to a system in which, at the same time, **smaller ice crystals are moving up and larger crystals coming down**.
- **Electrons are released and triggered after a collision**; a process similar to the production of electric sparks.
- As the moving free electrons cause more collisions and more electrons, a chain reaction occurs.
- This process results in a situation in which the **upper layer of the cloud becomes positively charged, while the middle layer becomes negatively charged**.
- The electric potential **difference between the two layers is very large**, on the order of one billion to 10 billion volts.
- In a very short time, a **huge current, on the order of 100,000 to one million amperes, begins to flow between the layers**.
- **Earth is a good conductor of electricity**; it is electrically neutral.
- However, **compared to the middle layer of the cloud, it becomes positively charged**.
- As a result, about **15%-20% of the current is directed towards the earth as well**.

## Lightning-Prone Area in India

- **Madhya Pradesh** has recorded the highest number of ground lightning, followed by *Chhattisgarh, Maharashtra, Odisha and West Bengal*.
- Other states with high strike rates include Bihar, UP, Karnataka, Jharkhand and Tamil Nadu.

## Beacon of Maracaibo or the Everlasting Storm

- The most lightning activity on Earth is seen on the shore of **Lake Maracaibo in Venezuela**.
- At the place where the Catatumbo river falls into Lake Maracaibo, an average 260 storm days occur every year, and October sees 28 lightning flashes every minute

## Why Lightning Is A Concern?

- About **1.4 crore lightning strikes were recorded in 2019-20**, which increased to 1.85 crore in 2020-21. In **2021-22, about 1.49 crore strikes** were registered across the country.
- It **cannot be predicted**, making it more challenging to issue timely warnings.
- According to National Crime Records Bureau data, at least **2,000 deaths have been caused by lightning every year since 2005**. More than **96% of lightning-related deaths occur in rural areas**
- It is **not classified as a natural calamity**, which means the affected people are not eligible for compensation from the government unlike in the case of floods or earthquakes.

- **Infrastructure Loss:** Buildings, communication networks, power plants etc are often **destroyed** by lightning incidents.
- Occasionally, lightning and thunder **can cause potentially devastating forest fires**.

### Government Initiatives To Tackle Lightning

- NDMA has issued **detailed guidelines** which provide **dos and don'ts** along with steps to be taken by the general public during lightning.
- National Disaster Management Authority (NDMA) has issued **Common Alert Protocol (CAP)** system to warn people about impending thunderstorm and lightning.
- **Lightning Alert System** provides location-specific forecast of thunder, lightning, strong winds, high winds, hailstorm occurrences up to 48 hours.
- **ISRO is providing satellite information about convective clouds** from INSAT-3DR, which is uploaded every 15 minutes.
- **Damini app** was developed by the Indian Institute of Tropical Meteorology and Earth System Science Organization. It warns user of lightning near them by a **GPS notification below 20 km and 40 km**.
- The **Lightning Resilient India campaign** aims to reduce the number of lightning deaths to 1,200 per year by 2022.
  - ✓ It is a joint initiative of Climate Resilient Observing-Systems Promotion Council (CROPC), NDMA, IMD, Union Ministry of Earth Science, World Vision India, UNICEF among others.

### Precautions Taken for Lightning

- **Avoid wet ground** because people are most commonly struck by ground currents. The electrical energy, after hitting earth, spreads laterally on ground for some distance, and people in this area receive electrical shocks.
- **Do not take shelter under a tree**, it is dangerous, as it may attract lightning.
- **Go indoors in a storm**, however, avoid touching electrical fittings, wires, metal, and water even indoor. **Pay attention to alerts and warnings**.

### Minor Forest Produce

- Forest Rights Act 2006 defines a Minor Forest Produce (MFP) as all non-timber forest produce of plant origin and includes *bamboo*, brushwood, stumps, canes, Tusser, cocoon, honey, waxes, Lac, tendu/kendu leaves, medicinal plants and herbs, roots, tuber.
- It provides essential nutrition to the people living in forest areas, and is used for domestic purposes, thus forming a significant part of their non-cash income.
- According to a World Bank estimate, the MFP economy is fragile but supports close to 275 million people in rural India.

### Species In The News

<p><b>Eublepharis Pictus</b></p> 	<ul style="list-style-type: none"> <li>• It is <b>also known as the Painted Leopard Gecko</b>.</li> <li>• It is strictly nocturnal, actively foraging along trails in the forest after dusk.</li> <li>• This new species appears to be common in forests of <b>Andhra Pradesh &amp; Odisha</b>.</li> <li>• Based on IUCN conservation prioritization criteria, the <b>researchers suggested it to list as Near Threatened</b>.</li> </ul>
<p><b>Thiomargarita</b></p>	<ul style="list-style-type: none"> <li>• It is a bacterium that is big enough to be seen through the naked eye. It is said</li> </ul>

<p><b>magnifica</b></p> 	<p>to be the size of a fly.</p> <ul style="list-style-type: none"> <li>This huge string-like bacterium is native to <b>Caribbean mangroves</b>.</li> </ul>
<p><b>Fishing Cat</b></p> 	<ul style="list-style-type: none"> <li>Recently the <b>world's first population estimation</b> of the fishing cat has been conducted outside the protected area network.</li> <li>Fishing cats are about <b>twice the size of a typical domestic cat</b>.</li> <li>The fishing cat is nocturnal (active at night) and apart from fish also preys on frogs, crustaceans, snakes, birds, and scavenges on carcasses of larger animals. The species breed all year round.</li> <li>They spend most of their lives in areas of dense vegetation close to water bodies and are excellent swimmers.</li> <li>In India, fishing cats are mainly found in the mangrove forests of the <b>Sundarbans, Chilika lagoon</b>, on the foothills of the Himalayas along the Ganga and Brahmaputra river valleys and in the Western Ghats.</li> <li>It is listed as <b>Endangered on the IUCN Red List</b> and in <b>Schedule I of the Indian Wildlife (Protection) Act, 1972</b>.</li> </ul>
<p><b>Saras Crane</b></p> 	<ul style="list-style-type: none"> <li>It is a <b>large non-migratory crane found in parts of the Indian subcontinent, Southeast Asia, and Australia</b>.</li> <li>It is <b>the tallest flying bird in world</b> standing 152-156 cm tall with a wingspan of 240cm.</li> <li>It is easily distinguished from other cranes in the region by its overall grey colour and the contrasting red head and upper neck.</li> <li>It is listed as <b>Vulnerable on IUCN Red List</b> and in <b>Schedule IV of the Wildlife (Protection) Act 1972</b>.</li> </ul>
<p><b>Platygomphus benritarum</b></p> 	<ul style="list-style-type: none"> <li>It is a <b>new species of dragonfly</b> discovered in Assam.</li> <li>It has turquoise blue eyes and dark brown face covered with hair on the sides.</li> <li>It has been <b>named in honour of two women</b>, Monisha Ben Behal and Rita Banerji.</li> </ul>
<p><b>Blue Duke</b></p> 	<ul style="list-style-type: none"> <li>The Chief Minister of Sikkim declared <b>Blue Duke</b> as <b>"State Butterfly of Sikkim"</b></li> <li>It is a <b>native butterfly species of Sikkim</b>.</li> <li>It is also called Bassarona durga. It was first discovered in Sikkim in 1858.</li> <li>It is <b>listed in Schedule 2 of Wildlife Protection Act, 1972</b>.</li> </ul>
<p><b>Cheetah</b></p> 	<ul style="list-style-type: none"> <li>It is the world's fastest land mammal.</li> <li>It is <b>native to Africa and central Iran</b>.</li> <li>The <b>Asiatic cheetah</b>, which is now found only Iran, is classified as <b>critically endangered</b> in IUCN Red List; while the <b>African cheetah</b> is classified as <b>vulnerable</b> in the IUCN red list.</li> <li>In India, cheetah was <b>declared extinct in 1952</b>.</li> </ul>
<p><b>Chelonoidis Phantasticus</b></p>	<ul style="list-style-type: none"> <li>A <b>giant tortoise species</b>, believed to be extinct 100 years ago, is rediscovered recently.</li> </ul>

	<ul style="list-style-type: none"> <li>• It is commonly called Fernandina Island, Galapagos Giant Tortoise.</li> <li>• Its <b>habitat is largely dry brush land</b> at lower elevations, but much of that habitat has been destroyed.</li> <li>• It is listed as <b>Critically Endangered</b> on the IUCN Red list.</li> </ul>
<p><b>Haploptychius Sahyadriensis</b></p> 	<ul style="list-style-type: none"> <li>• A <b>new species of snail</b> has been found in <b>northern Western Ghats</b> of Maharashtra.</li> <li>• The species is <b>endemic to Vishalgad Conservation Reserve in Kolhapur</b>.</li> <li>• It has been named after the type locality of the species in the northern part of the Western Ghats, which is Sahyadri in Sanskrit.</li> <li>• India has nearly 1,450 snails and slugs with the highest diversity in north-eastern India followed by the Western Ghats.</li> </ul>
<p><b>Great Indian Hornbill</b></p> 	<ul style="list-style-type: none"> <li>• It is a member of hornbill family. It is found in the <b>Indian subcontinent and Southeast Asia</b>.</li> <li>• In India, its distribution is fragmented in the Western Ghats and in the foothills of the Himalayas.</li> <li>• It is listed as <b>Vulnerable</b> on the IUCN Red List and in Schedule I of the Indian Wildlife (Protection) Act, 1972.</li> <li>• It is the <b>state bird of Kerala and Arunachal Pradesh</b>.</li> <li>• Hornbill festival is celebrated every year in Nagaland.</li> </ul>
<p><b>Pink Bollworm</b></p> 	<ul style="list-style-type: none"> <li>• It is an <b>insect known for being a pest in cotton farming</b>.</li> <li>• The adult is a small, thin, gray moth with fringed wings.</li> <li>• Adults lay eggs on cotton bolls. Once hatched, the <b>larvae eat the seeds and damage the fibers of the cotton</b>, reducing the yield and quality.</li> <li>• It is <b>native to Asia</b>, but has become an <b>invasive species in most of the world's cotton-growing regions</b>.</li> </ul>
<p><b>Glischropus Meghalayanus</b></p> 	<ul style="list-style-type: none"> <li>• Scientists have discovered new <b>species of bamboo-dwelling bat in Meghalaya</b>.</li> <li>• It is small in size and has a dark brown colour with sulphur yellow belly.</li> <li>• With this discovery, the total number of <b>bat species from India stands at 131 species</b> with <b>Meghalaya registering the highest bat diversity with 67 species</b>.</li> <li>• Bamboo-dwelling bats are a particular kind of bats living in the internodes of bamboos.</li> </ul>
<p><b>Burmagomphus chaukulensis</b></p> 	<ul style="list-style-type: none"> <li>• This rare <b>dragonfly</b> was spotted in Kerala.</li> <li>• <b>The species that is known to be endemic to the Western Ghats was discovered in Maharashtra earlier this year</b>.</li> <li>• The new species can be separated from its congeners by the markings on the lateral thorax and peculiar shape of anal appendages.</li> </ul>

## Astra Mk-1

The Ministry of Defence has signed a contract with the Hyderabad-based public-sector Bharat Dynamics Ltd (BDL) for supply of the **Astra Mark-1**.

- The Astra project was officially launched in the early 2000s with defined parameters and proposed future variants.

### About Astra Mk-1

- It is a **beyond visual range (BVR), air-to-air missile**.
  - BVM missiles are capable of engaging beyond the range of 20 nautical miles or 37 kilometers.
- The range for Astra Mk-1 is around 110 km. The Mk-2 with a range over 150 km is under development and Mk-3 version with a longer range is being envisaged.
- It has been **designed and developed by the DRDO**.
- It will be used for deployment on fighter jets like Sukhoi-30 MKI and Tejas of the IAF and the Mig-29K of the Navy.
- The missile **can travel at speeds more than four times that of sound** and can reach a maximum altitude of 20 km, making it extremely flexible for air combat.
- The missile has been designed based on requirements specified by the IAF for BVR as well as close-combat engagement, reducing the dependency on foreign sources.

## Cosmic Cannibalism

- It is a cosmic phenomenon where a star is ending its life so violently that the dead star is left behind, called a white dwarf.
  - ✓ A white dwarf is formed when a *low-mass star* like our sun exhausts most of its nuclear fuel.
- This white dwarf is disrupting an entire planetary system by sucking in debris from both its inner and outer reaches. It is consuming the rock-metallic and icy material, both of which are "planetary components".

## International Liquid-Mirror Telescope (ILMT)

It is the **world's first Liquid-Mirror Telescope (LMT)** to be commissioned for astronomy.

### About ILMT

- It has **been set up at the Devasthal Observatory campus** owned by Aryabhata Research Institute of Observational Sciences (ARIES), **Nainital (Uttarakhand)**.
  - ✓ ARIES is an autonomous institute under the Department of Science & Technology.
- **India, Belgium, Canada, Poland and Uzbekistan** are the main countries who have collaborated to set up this telescope.
- The **operations and up-keep of this telescope is to be done by India**.
- A liquid mirror telescope, as its name suggests, uses a liquid, not aluminized glass, as its primary mirror. The liquid, usually **mercury**, is poured into a rotating dish.
- The rotation creates two fundamental forces that act on the mercury -- **gravity** and **inertia**.
- Gravity pulls down on the liquid surface, while inertia pulls the liquid sideways at the edge of the dish.
- As a result, the liquid forms a uniform and perfect parabola, the ideal reflecting surface for a telescope.
- Best of all, the liquid mirror surface remains smooth and flawless with little or no maintenance.

- If the liquid is disturbed, gravity and inertia will act on the liquid to return it to its original state.
- It will keep a close watch on the skies to identify transient or variable objects such as asteroids, space debris, supernovae, and gravitational lenses.

### Significance of ILMT

- This will be significant for the scientific communities because it **will generate enormous amount of data (10-15 GB/night)**.
- The data generated by it will be cleaned, maintained and archived.
- **The data will be open only for researchers from participating institutes for an initial stipulated period. At a later stage, the data will be accessible to all global scientific communities.**
- Selected data can be used as a base data for carrying out further focused research using spectrographs, near-Infrared spectrograph mounted on the in-house Devasthal Optical Telescope (DOT).

### Difference Between Conventional Telescope And Liquid-Mirror Telescope

Conventional Telescope	Liquid-mirror Telescope
It is <b>steered to point towards the celestial source of interest in the sky for observations.</b>	It's a <b>stationary telescope</b> that images a strip of the sky which is at the zenith at a given point of time in the night.
It <b>consists of highly polished glass mirrors, either single or in combination</b> , that are operated in a controlled manner to focus the target celestial object on specific nights.	It is <b>made up of mirrors with a reflective liquid</b> . Like, mercury, which has a high light-reflecting capacity.
It <b>observes specific stellar sources for fixed hours</b> as per the study requirement.	It will <b>capture the sky's images on all nights</b> between two successive twilights.

### Why India's Majority Telescopes Are Stationed At Devasthal Observatory

- ILMT will be the third telescope to be operating from Devasthal after the –
  - ✓ 3.6-metre **Devasthal Optical Telescope (DOT)** — the largest in India commissioned in 2016 and
  - ✓ 1.3-metre **Devasthal Fast Optical Telescope (DFOT)** inaugurated in 2010.
- This site was chosen after an extensive site characterization conducted during 1980 - 2001 in the central Himalayan range.
- The main advantages of Devasthal site are in its dark skies, sub-arcsec seeing, low extinction and at the same time being easily assessable and manageable.
- In total, 41,692 square meter of land has been transferred to ARIES from Uttarakhand Government which includes roads, base camp area and telescope site.

### Gaia Space Mission

- It is an astronomical observatory mission launched in December 2013 by the European Space Agency (ESA).
- Its objective is to create the most accurate 3D map of the Milky Way by surveying 1% or one billion of the galaxy's 100 billion stars.
- Mission found that some stars in Milky Way galaxy are composed of primordial material (existing from beginning of time) while others are composed of matter enriched by previous generations of stars.
- It spotted large scale tsunami, called starquakes, which changes the shape of stars.

## RFID Technology

Baggage tags equipped with Radio-Frequency Identification (RFID) will soon be available at Delhi's Indira Gandhi International Airport.

### About RFID Technology

- It uses radio waves to automatically identify various tagged objects.
- Transponder, receiver, and transmitter are the three components of an RFID system.

### There Are Three Types Of RFID Tags

- **Passive Tags:** There is no power supply for passive tags. They acquire their power from the readers' incoming radio waves. Passive RFID tags do not have a battery and are powered by the reader.
- **Semi-passive Tags:** Semi-passive tags comprise an internal circuit with a power source, but rely on the radio waves received from the reader to transmit the response.
- **Active Tags:** The internal circuit of active tags is powered by a power source. Batteries are used to power active RFID tags. It also utilises its own power supply to send the response to the reader.

### Significance of RFID Technology wrt Barcodes

- An RFID reader can scan a tag as long as it is within frequency range. It **does not have any line-of-sight limitations**.
  - ✓ Barcodes use light to read the black-and-white pattern printed on the tag.
  - ✓ Barcodes are simple and easy to copy or counterfeit, whereas RFID is more complicated and difficult to replicate or counterfeit.
  - ✓ RFID tags are expensive compared to barcodes.
- Other ID systems typically have a single or limited identifier for each object but **RFID tags can contain more information**, some are also read-write, allowing you to add or change data.
- It can scan multiple items simultaneously.

### Drawback of RFID Technology

- Its **initial high costs** restricted usage to larger businesses.
- RFID readers can scan through most non-metallic materials, they have **problems with metal and water**.
- **Tag collision may occur** if a reader picks up signals from multiple tags at the same time.
- **Unauthorized devices may be able to read and even change data on tags** without the knowledge of the person who owns the object.

## QR Codes

India's drug pricing authority has shortlisted the top 300 brands of drugs, which will have to put QR codes to their packages, in a bid to ensure authenticity and enable tracing.

### About QR Codes

- It is a **two-dimensional version of the barcode**, which stands for Quick Response.
- It consists of **black squares arranged in a square grid on a white background**.
- The data stored in a QR code can include website URLs, phone numbers, or up to 4,000 characters of text.

### Application of QR Code

- **Operations & Instructions** - Provide instructions and procedures for performing critical tasks or operating equipment; communicate this information using text, images and/or video.
- **Regulatory Compliance** - Document important authorizations needed to comply with local, state or federal regulations, such as inspection or expiration dates, permits or licenses.
- **Inventory Control** - Document important information about equipment components or complex systems.

- **Emergency Contacts** - Provide direct access to important departments and personnel via mobile-friendly technologies such as click-to-call, text messaging and email.

#### Are QR Codes Safe

- **Attackers can embed malicious URLs containing custom malware into a QR code** which could then exfiltrate data from a mobile device when scanned.
- It is also **possible to embed a malicious URL into a QR code** that directs to a phishing site, where unsuspecting users could disclose personal or financial information.
- Because humans cannot read QR codes, it is **easy for attackers to alter a QR code to point to an alternative resource without being detected**.
- Sometimes malicious QR code replaced in public by covering legitimate QR code.

#### How Can One Increase QR Code Security

- When we scan QR code, we **get a preview of the URL**, if it's a short link or something unrecognizable, proceed with caution.
- **Be very caution, don't log in after a QR code tap.**
- **Don't download apps from a QR code.**
- **Don't make payments through a QR code unless you're absolutely certain it is legitimate.**

#### Difference Between Barcode and QR code

- A **bar code is one dimensional** whereas QR codes are two dimensional.
- A **barcode only holds information nicely in the horizontal direction, a QR can do so vertically as well.**

#### Electronic-Skin (E-skin)

- A team of researchers, led by one of India-origin, has developed an electronic skin.
- It is a **thin, translucent material** that can mimic the function and mechanical properties of human skin.
- It has **sensors embedded to measure pressure, temperature, humidity and air flow**.
- It **can be used for many applications, including prosthetic devices, wearable health monitors, robotics, virtual reality and as well as a variety of human-machine interactions.**

#### D2M Technology

The Department of Telecommunications (DoT) and India's public service broadcaster Prasar Bharati are exploring the feasibility of a Direct-To-Mobile' (D2M) technology.

#### About D2M Technology

- The **technology based on the convergence of broadband and broadcast**, using which **mobile phones can receive terrestrial digital TV**.
- It would be **similar to how people listen to FM radio on their phones**, where a receiver within the phone can tap into radio frequencies.
- This technology allows to broadcast video and other forms of multimedia content directly to mobile phones, without needing an active internet connection.

#### Significance of D2M Technology

- It can possibly be used to directly broadcast content related to **citizen-centric information**.
- It can be further **used to counter fake news, issue emergency alerts and offer assistance in disaster management**, among other things.

- The technology will allow people from rural areas, with limited or no internet access, to watch video content.
  - ✓ They would be able to access multimedia content from **Video on Demand (VoD)** or **Over The Top (OTT)** content platforms without having to exhaust their mobile data, and more importantly, at a nominal rate.
- It can enable telecom service providers to offload video traffic from their mobile network onto the broadcast network. Thus, helping them to decongest valuable mobile spectrum. This will **also improve usage of mobile spectrum and free up bandwidth which will help reduce call drops, increase data speeds** etc.

### Challenges To D2M Technology

- Technology is still at a **nascent stage**.
- Bringing key stakeholders like **mobile operators onboard** will be the biggest challenge in launching D2M technology on a wide scale.
- The **mass roll out of the technology** will entail changes in infrastructure and some regulatory changes.

### Government's Initiatives to Facilitate D2M Technology

- The DoT has set up a **committee to study the feasibility of a spectrum band** for offering broadcast services directly to users' smartphones.
- **Band 526-582 MHz is envisaged to work** in coordination with both mobile and broadcast services.
- Public service broadcaster **Prasar Bharati had last year announced collaboration with IIT Kanpur to test the feasibility of the technology**.

### CrysXPP

- Researchers from **IIT Kharagpur** in collaboration with the **Indo-Korea Science and Technology Center (IKST)** have developed a method called **CrysXPP**.
- It is a **machine learning (ML) system** that enables rapid prediction of various **material properties** with high precision.
  - ✓ ML is a type of artificial intelligence (AI) that allows software applications to become more accurate at predicting outcomes without being explicitly programmed to do so.
  - ✓ Machine learning algorithms use historical data as input to predict new output values.
  - ✓ Applications of ML: Recommendation engines, fraud detection, spam filtering, malware threat detection, business process automation (BPA) and Predictive maintenance.
- **CrysXPP made large-scale testing easier**, because until now, it has been difficult to test crystalline materials on a large scale.
- It also helps determine the **electronic, magnetic and elastic properties of crystals**, which are often time-consuming, expensive and computation-intensive.

### Param Ananta

- The Centre for Development of Advanced Computing (**C-DAC**) and the **IIT, Gandhinagar** have jointly unveiled a **new supercomputer called Param Ananta**.
- It is **unveiled in phase II of the central government's National Supercomputing Mission (NSM)**.
- It is capable of offering peak performance of **838 teraflops**.
- It will offer IIT Gandhinagar with increased capacity for research projects in various fields, including machine learning, data science, computational fluid dynamics, bioengineering and more.

### About Supercomputer

- It is a computer that **performs at or near the highest operational rate for computers**.

- It is **used for scientific and engineering applications** that handle large scale databases, perform large amounts of computation.
- Supercomputer processing speed is measured in *quadrillion floating point operations per second*, also known as **petaflops or PFLOPS**.
- **Processing power is the main difference between supercomputers and general-purpose computer systems.**

USA's **Frontier supercomputer (1.1 exaFLOPS)** was officially ranked as the most powerful supercomputer in the world. It outperformed **Fugaku**, the second most powerful supercomputer.

- Japanese supercomputer Fugaku (442 petaflops), IBM's Summit (148.8 petaflops), Chinese Sunway TaihuLight (93 petaflops)

#### **Supercomputer In India**

- Recently, IISc Bengaluru installed the supercomputer '**Param Pravega**'. It has a supercomputing capacity of 3.3 petaflops.
- **Mihir (Ranked 146th)**: Mihir clubs with Pratyush to generate enough computing power to match PARAM-Siddhi.
  - ✓ **Pratyush (Ranked 78<sup>th</sup>)**: It is a supercomputer used for weather forecasting at the Indian Institute of Tropical Meteorology.
- **PARAM-Siddhi** (6.5 petaflops): It is the second Indian supercomputer to be entered in the top 100 on the Top500 list. In 2020, PARAM Siddhi, the High-Performance Computing-Artificial Intelligence (HPC-AI) supercomputer, achieved global ranking of 62nd in Top 500 most powerful supercomputers
- **India's first supercomputer was PARAM 8000.**
- **PARAM Shivay**: It is the first supercomputer assembled indigenously, was installed in IIT (BHU), followed by PARAM Shakti, PARAM Brahma, PARAM Yukti, PARAM Sanganak at IIT-Kharagpur IISER, Pune, JNCASR, Bengaluru and IIT Kanpur respectively

#### **About National Supercomputing Mission (NSM)**

- Government of India **launched NSM in 2015**.
- Under NSM, the **plan was to connect R&D institutions and academic institutions in the country using a supercomputing grid** with National Knowledge Network (NKN) as the backbone.
- The mission was planned in three phases:
  - ✓ **Phase I**: Assembling supercomputers,
  - ✓ **Phase II**: Manufacturing certain components within the country.
  - ✓ **Phase III**: Where a supercomputer is designed by India.
- An indigenously developed server platform called '**Rudra**' is being tried out in a pilot system, with an interconnect for inter node communication called Trinetra also having been developed.
- Department of Science and Technology (DST) and Department of Electronics and Information Technology (DeitY) jointly guides the mission.
- C-DAC is entrusted with overall design, development, deployment, and commissioning of computers build under this mission.
- It aims to deploy **24 facilities** with a combined computing power of more than **64 petaFLOPS**.
  - ✓ One petaFLOP is equal to one quadrillion FLOPS, or **one thousand teraFLOPS**.

#### **About C-DAC**

- It is an Indian autonomous scientific society, operating under the Ministry of Electronics and Information Technology.

- PARAM 8000, the first supercomputer of India, was built by CDAC.

### Ancovax

The **Minister of Agriculture & Farmers Welfare** has unveiled a vaccine, called Ancovax.

- It is the **1<sup>st</sup> Covid-19 vaccine for animals developed in India.**
- It is developed by Hisar-based National Research Centre on Equines to protect animals against the Delta and Omicron variants of SARS-CoV-2.
- It can be **used in dogs, lions, leopards, mice, and rabbits.**
- It is an inactivated vaccine developed using an infectious part of the Delta variant.

### Need of The Vaccine

- There have been reports of Covid-19 infection in several animals, including dogs and cats.
- The vaccine can **protect animals in the zoo.**
- It can also **prevent transmission from companion animals to humans.**

### Amyloidosis

- It is a **rare disease that occurs when an abnormal protein, called amyloid, builds up in your organs and interferes with their normal function.**
- Amyloid isn't normally found in the body, but it can be formed from several different types of protein.
- Organs that may be affected include the **heart, kidneys, liver, spleen, nervous system and digestive tract.**
- Some varieties of amyloidosis occur in association with other diseases.
- **Chemotherapy is being used in the treatment** of Amyloidosis, which is used to fight cancer.

### Ramsay Hunt Syndrome

Recently, Pop singer Justin Bieber has been diagnosed with Ramsay Hunt Syndrome.

- It is **also known as Herpes Zoster Oticus.**
- It is a **virus infection of geniculate ganglion (7th cranial nerve) of the facial nerve that occurs when a shingles infection affects the facial nerve.**
  - ✓ There are 12 cranial nerves in the body.
  - ✓ These 12 pairs pass from the brain, through openings in the skull, to different areas of the head, neck, chest, and abdomen. The cranial nerves send information between the brain and the sense organs
  - ✓ They also help you make facial expressions, blink your eyes and move your tongue.
- It is **caused by reactivation of varicella zoster virus** that has previously caused chickenpox and shingles in the patient. This virus belongs to the **herpes-virus** group.
- When the **nerves get inflamed, they lose their ability to function, leading to temporary facial palsy or paralysis.**
- Only about 5- 10 out of every 1,00,000 people develops Ramsay Hunt Syndrome every year, making it **an extremely rare disorder.**

### Web 5.0

Former Twitter CEO recently announced his vision for a new *decentralized web platform* that is being called Web 5.0. It is being **built with an aim to return “ownership of data and identity to individuals”.**

### About Web 5.0

- It is a **Decentralized Web Platform** that enables developers to leverage Decentralized Identifiers, Verifiable Credentials, and Decentralized Web Nodes to ***write Decentralized Web Apps.***
- Simply put, **Web 5.0 is Web 2.0 plus Web 3.0** that will allow **users to own their identity** on the Internet and **control their data.**
- It is being developed by former Twitter CEO Jack Dorsey's Bitcoin business unit, The Block Head.
- It aimed at building an extra decentralized web that puts one in control of your data and identity.

### Significance of Web 5.0

- It **brings decentralized identity and data storage to individuals' applications.**
- It will see applications able to interpret information on more complex levels, emotionally as well as logically.

### Issue With The Current Web

- The web democratised the exchange of information, but **it is missing a key layer that is identity.**
- We struggle to secure personal data with hundreds of accounts and passwords. **Identity and personal data have become the property of third parties in today's world.**
- **Web 3.0 is not truly decentralised** or owned by its users, but is instead controlled by various venture capitalists and limited partners.

### World Wide Web (WWW)

- It is an **interconnected framework in which Uniform Resource Locators (URLs) define documentation and other web resources.**
- All of which can be associated with hyperlinks, and accessed via the internet.
- Anyone who has internet connection can see web pages which involve multimedia tools such as text, images or videos.

### About different Web Versions

<b>Web 1.0</b>	It is often referred to as the <b><i>read-only Internet</i></b> made of static web-pages that only allowed for passive engagement.
<b>Web 2.0 (Social Web)</b>	It is <b><i>read and write internet</i></b> which made the internet a lot more interactive. Users were now able to communicate with servers and other users leading to the creation of the social web.
<b>Web 3.0 (Semantic Web)</b>	It is <b><i>read-write-execute</i></b> web, built leveraging the blockchain technology. It will be driven by Artificial Intelligence (AI) and machine learning where machines will be able to interpret information like humans.  It aims to provide a single, consistent, platform-agnostic way to manage data across systems, without requiring a corporation to contain its own interests and agendas and where users control their own data
<b>Web 4.0 (Mobile Web)</b>	It is already a work in progress, with no clear understanding of what it would entail. It is often referred to as the <b><i>symbiotic web</i></b> . The symbiotic web's fantasy is a contact between humans and computers in symbiosis.

### Lumpy Skin Disease

Some 1,229 cattle across five districts of Gujarat have been infected with Lumpy Skin Disease (LSD).

### About LSD

- It is a **viral disease** that is caused by **capripox virus.**
- Its only affects cattle, water buffalo and closely related wildlife.

✓ The other two species of virus being Sheeppox virus and Goatpox virus.

- The **disease does not affect humans**.
- It easily spreads through direct contact of infected animal, contaminated feed and water, blood-sucking insects like mosquitoes, flies and ticks.
- Lumpy skin disease was first seen as an epidemic in Zambia in 1929.
- **Effect on animals:** The animal stops eating and faces problems while chewing or eating, resulting in reduced milk production. If an animal is pregnant, the calf dies.
- **Treatment of LSD:** No treatment is available for the disease so **prevention by vaccination is the most effective means of control**.

### Symptoms of LSD

- Symptoms primarily consist of fever, fluid excretion from eyes and nose, dribbling of saliva from the mouth.
- Nodules of two to five-centimetre diameter appears all over the body, particularly around the head, neck, limbs, udder and genitals.

## Prithvi II Missile

India successfully conducted the night trial of missile Prithvi-II missile.

### About Prithvi-II Missile

- It is an indigenously developed **Surface-to-Surface nuclear-capable Short-Range Ballistic Missile (SRBM)**.
- It is **developed by DRDO under its Integrated Guided Missile Development Programme (IGMDP)**.
- It is a **single-stage liquid-fueled missile** with range of around 250 km-350km.
- It is **capable of carrying 500-1,000 kilogram** of warheads.
- It **uses Advanced Inertial Guidance System (AIGS)** with a manoeuvring trajectory to hit its target with high accuracy.
- It was first used by the Indian Air Force as the primary user, and later been inducted into the Army as well.

### About Prathvi Missiles

- The Prithvi I missiles have been in service with the Indian Army since 1994. Reportedly, **Prahar** missiles are replacing with Prithvi I missiles.
- Prithvi II missiles have been in service since 1996.
- Prithvi III having a more extended range of 350 km, was successfully test-fired in 2004.
- The naval variant of Prithvi I and Prithvi III class missiles have the code-name **Dhanush**.



**Integrated Guided Missile Development Programme (IGMDP)**

- ↳ It was an Indian Ministry of Defence programme to research and develop a comprehensive range of missiles.
- ↳ It was launched in 1982-83.
- ↳ It was conceived by Dr. A.P.J. Abdul Kalam.
- ↳ The programme was managed by the DRDO and Ordnance Factory Board in partnership with other Indian government political organisations.

The 5 missiles developed under this program

- ↳ Prithvi: Short range surface to surface ballistic missile.
- ↳ Agni: Medium to intercontinental surface-to-surface missile Agni (1,2,3,4,5).
- ↳ Trishul: Short-range low-level surface to air missile.
- ↳ Akash: Medium range surface to air missile.
- ↳ Nag: India's 3rd generation fire and forget anti-tank missile

## Ultra-thin Heteroprotein Films

- It has been **developed by Institute of Advanced Study in Science and Technology (IASST)**, Guwahati, an autonomous institute under the Department of Science and Technology.
- These films **have excellent thermal, mechanical and pH stability**.
- It can **pave the way for expanding applications of thin films in biomedical and food packaging industries**.

- It consists of two globular proteins: **Bovine Serum Albumin (BSA)** and **Lysozyme (Lys)**.
  - ✓ Globular proteins are spherical proteins and are one of the common protein types. They are somewhat water-soluble, unlike the fibrous or membrane proteins.
- They used the technique called **Langmuir-Blodgett (LB)** technique which gives the films thickness in the order of nanometre.
- They are **soft and thin and have the advantage of being more flexible** than the other films.

### LaMDA

A senior engineer at Google claimed that the company's artificial intelligence-based chatbot **Language Model for Dialogue Applications (LaMDA)** had become "sentient" (able to perceive or feel things)

- It is **modern conversational agent enabled with a neural network capable of deep learning**.
- The **chatbot model is built on Transformer, a neural network architecture that Google invented in 2017**.
- It is **designed to improve the automated chat experiences of the machine and the human end-user**.
- In 2022 Google announced LaMDA 2.0 which further builds on LaMDA.
  - ✓ LaMDA was introduced on the first day of Google I/O (Input/Output) in 2021.

#### About Chatbot

- It is **also known as chatterbot**.
- It is a **software application used to conduct on-line chat conversations via text or text-to-speech in exchange for providing direct contact with a live human agent**.
- Key examples are used by businesses in Facebook Messenger, or as virtual assistants, such as Amazon's Alexa.
- Chatbots tend to operate in one of two ways—either via machine learning or with set guidelines.

### Black Death

- It is also **known as bubonic plague**.
- It is **caused by bacterium Yersinia pestis** and spread by fleas that were carried by rodent hosts.
- There are **no reports of human to human transmission** of bubonic plague.
- Symptoms include sudden high fever and chills, pains in the areas of the abdomen, arms and legs, large and swollen lumps in the lymph nodes that develop and leak pus.
- It is commonly believed that the term Black Death **gets its name from the black marks that appeared on some of the plague victims' bodies**.
- According to the WHO it can kill an adult in less than 24 hours, if not treated in time.
- It **can be treated and cured with antibiotics**.

### GSAT-24

- **New Space India Limited (NSIL) launched GSAT-24 satellite**.
- It is a **communication satellite** with Pan India coverage **for meeting DTH application needs**.
- It is **1<sup>st</sup> demand-driven satellite mission post space sector reforms**.
  - Demand-driven means that when a satellite is launched, someone will know who is going to be the end customer and what kind of usage and commitment is there.
- It is built by ISRO for NSIL.

- NSIL has leased the entire satellite capacity to Tata Play.
- It is **successfully placed into geostationary orbit by the Ariane 5 rocket**, operated by French company Arianespace.

### Alzheimer's Disease

- It is a **progressive neurologic disorder that causes the brain to shrink and brain cells to die.**
- It is the **most common cause of dementia**, a continuous decline in thinking, behavioral and social skills that affects a person's ability to function independently.
- Scientists believe that for most people, **it is caused by a combination of genetic, lifestyle and environmental factors that affect the brain over time.**
- It usually **begins with mild memory loss**, and as **symptoms grow severe, patients lose the ability to perform even simple tasks.**
- There is **no treatment that cures this disease** or alters the disease process in the brain.
- Medications may temporarily improve or slow progression of symptoms.

### Indian Scenario Related To Alzheimer

- **In India, only 1 in 10 people with dementia** receive any diagnosis, treatment or care for the disease, according to the World Alzheimer's Report, 2021.
- **Lack of awareness is a major problem** in battling the disease. Most of our population accepts it as normal aging.
- An increasing prevalence of diabetes, hypertension, and obesity is expected to drive up the incidence of dementia in India in the coming decades.
- According to the Global Burden of Disease study **India could see a 197% jump in dementia, including Alzheimer's, from 3.84 million cases in 2019 to 11.44 million cases by 2050.**

### CAPSTONE

- **NASA launched CAPSTONE**, a microwave oven-sized **CubeSat** weighing just 25 kg.
- CAPSTONE, short for Cis-lunar Autonomous Positioning System Technology Operations and Navigation Experiment.
- It is designed to test a **unique, elliptical lunar orbit.**
- It **aims to help reduce risk for future spacecraft** by validating innovative navigation technologies, and by verifying the dynamics of the halo-shaped orbit.
- It is **heading toward an orbit known as a near-rectilinear halo orbit (NRHO)**
- **The orbit is** intended in the future for Gateway, a Moon-orbiting outpost that is part of NASA's Artemis program.
- It will **fly within 1,600 km of the Moon's North Pole** on its near pass and 70,000 km from the South Pole at its farthest.
- The spacecraft will repeat the cycle every six-and-a-half days and maintain this orbit for at least six months to study dynamics.

### ABHYAS

ABHYAS, a **High-Speed Expendable Aerial Target (HEAT)** was successfully flight-tested off the coast of Odisha from the Integrated Test Range (ITR), Chandipur.

### About Abhyas

- It is a **drone (UAV)** that will be used as a target for various missile systems.
- It is **designed & developed by DRDO's Aeronautical Development Establishment (ADE)**, Bengaluru.
- It is **powered by a gas turbine engine** to sustain a long endurance flight at subsonic speed.
- The target aircraft is **equipped with MEMS (Micro-Electro-Mechanical Systems) based Inertial Navigation System (INS) for navigation along with the Flight Control Computer (FCC) for guidance and control.**
- The vehicle is programmed for fully autonomous flight.
- It can **also function as a decoy.**
- It is very **lightweight, reliable, consumes less power and is cost-effective.**

### Hermit

- It is the **latest sophisticated commercial spyware.**
- It is believed to have **targeted iPhones and Android** devices in Italy and Kazakhstan.
- It has been developed by an Italian vendor called RCS Lab.
- As per the report, it is **distributed through text message.** The message looks like coming from a legitimate source.
- It **uses different modules for collecting call logs, messages, photos, emails, along with recording audio.**
- It **can redirect phone calls** and can expose device's exact location.
- It can **also root phones**, by controlling files from command-and-control server. It can also steal data from the target's calendar and address book apps, as well as take pictures with their phone's camera.

### Difference Between Malware and Spyware

Malware	Spyware
<ul style="list-style-type: none"><li>• It is a file or a code, designed to cause damage to a user's personal computer and network</li></ul>	<ul style="list-style-type: none"><li>• It is a form of malware designed to collect your personal information.</li></ul>
<ul style="list-style-type: none"><li>• It is more harmful than spyware.</li></ul>	<ul style="list-style-type: none"><li>• It is less harmful than Malware.</li></ul>
<ul style="list-style-type: none"><li>• It can replicate itself and makes duplicate copy of it.</li></ul>	<ul style="list-style-type: none"><li>• It cannot self-replicate.</li></ul>
<ul style="list-style-type: none"><li>• It can be detected and removed by the antivirus program.</li></ul>	<ul style="list-style-type: none"><li>• It can be detected and removed by the antispyware program.</li></ul>
<ul style="list-style-type: none"><li>• It can destroy data and resources, cause error and slow down the performance.</li></ul>	<ul style="list-style-type: none"><li>• It provides profit to the third party by collecting data of user without his awareness.</li></ul>

### Heterologous Booster Vaccine

- Heterologous boosters use a different booster vaccine (platform) from the first couple of doses.
- It showed higher vaccine effectiveness than homologous boosters, which use the same type of vaccine as the first and second doses.

# CULTURE

## Buddha's Relics Taken to Mongolia

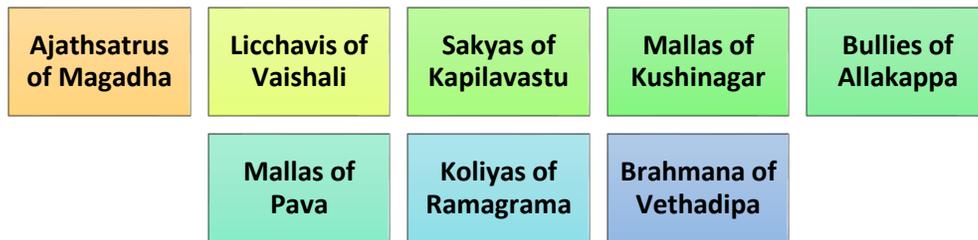
- Four Holy Relics of Lord Buddha were recently taken to Mongolia for an 11-day exposition to coincide with Mongolian Buddha Purnima celebrations.
- The relics were displayed at the **Batsagaan Temple in Gandan Monastery complex** in **Ulaanbaatar**.
- In 2015, the Holy Relics were placed under the '**AA**' category of *Antiquities and Art Treasures* which should not be ordinarily taken out of the country for exhibition, considering their delicate nature.
- However, upon the request of Mongolian government, the government has made a special exception. The relics will be accorded the status of a 'state guest' in Mongolia and will be taken again at the National Museum, India.

## Relics

- Relics are the physical remains of saints or holy people or, more generally, objects that have been in contact with holy individuals.
- Examples of relics include teeth, bones, hairs, and fragments of objects such as fabrics or wood.
- In religion relics are believed to have special powers to heal or grant favours.

## Buddha's Relics

- The four relics come from among 22 Buddha relics, currently housed at Delhi's National Museum.
- Together, they are known as the '**Kapilvastu Relics**' since they are from a site in Bihar believed to be the ancient city of Kapilvastu. The site was discovered in 1898.
- At the age of 80, according to Buddhist beliefs, Buddha attained salvation in Uttar Pradesh's Kushinagar district. The Mallas of Kushinagar cremated his body with ceremonies befitting a universal king.
- His relics from the funeral pyre were collected and **divided into eight shares** to be distributed among:



- The purpose was erecting stupas over the sacred relics. **Two more stupas came up** — one over the urn in which the relics had been collected and the other over the embers.
- Stupas erected over the bodily relics of Buddha (**Saririka stupas**) are the earliest surviving Buddhist shrines.
- It is said that Ashoka (272–232 BC), opened up seven of these eight stupas, and collected major portion of the relics for enshrinement within 84,000 stupas built by him to popularise Buddhism as well as the cult of the stupas.

## Kapilavastu Relics

- The discovery of an inscribed casket in 1898 at the stupa site in Piprahwa (near Siddharthnagar in Uttar Pradesh) helped identify the place with ancient Kapilavastu.
- The inscription on the lid of the casket referred to the relics of Buddha and his community, the Sakya.
- This discovery was followed by several explorations. An Archaeological Survey of India excavation of the stupa in 1971-77 revealed two more steatite relic caskets containing 22 sacred bone relics, now under the care of the National Museum.

## Sant Tukaram

- The Prime Minister recently inaugurated the **Sant Tukaram Shila (rock) Mandir** in the temple town of **Dehu** in Pune district.
- Sant Tukaram was a **17th century Marathi poet and saint** of **Warkari sect** (Marathi Vaishnav tradition). The Warkari sect worships Lord Vitthal, considered a form of Lord Vishnu.
- Tukaram is best known for his **devotional poetry** called **Abhanga** and community-oriented worship with spiritual songs known as kirtans.
- **Abhanga** is a devotional poetry sung in praise of **Lord Vitthal**, also known as Vithoba. The word abhanga comes from **a** for **non** and **bhang** for **ending**, in other words, a flawless, continuous poem.
- He preached about a society without caste and denied rituals, which led to a social movement.
- His poetry refers to earlier Bhakti saints Namdev, Dnyaneshwar, Kabir, and Eknath, who influenced his spiritual growth.
- He is credited with starting the **Wari pilgrimage**, where devotees of Lord Vitthal, walk 250 kilometres from Dehu to Vitthal temple in Pandharpur over 21 days.

## Significance of Shila (Rock)

- The saint had immersed all his work in the **Indrayani river**. Later when the authenticity of his abhangs was questioned, he sat on a rock for 13 days.
- After 13 days, his work mysteriously reappeared and since then rock that he sat on is considered sacred by the Warkari sect.
- The Shila is placed on the Dehu Sansthan temple premise.

## Zafar Mahal

- Recently, Zafar Mahal in Mehrauli (Delhi) was in news for being in a bad and neglected condition.
- According to ASI, a restoration plan had been put on hold by Covid-19. The funds are ready, and plans to restore it are moving forward now.
- Earlier known as **Lal mahal or Rang Mahal**, Zafar Mahal is considered as the last monumental structure built as a summer palace during the fading years of the Mughal era.
- The building has two components namely, the **Mahal** or the palace, which was built first by **Akbar Shah II** in the 18th century.
- And the entrance gate known as **Hathi Gate**, built by **Bahadur Shah Zafar** as an extension to the existing palace.
- It got its name because of the fact that an elephant can pass through it with the 'houdah' (seat, where people sit on elephant) mounted over it.

## Phool Walon ki Sair festival

- Zafar Mahal, was used in the festival of **Phoolwalon ki Sair** (procession of the florists).
- The festival was stopped by the British during Quit India movement in 1942. However, it was restarted by Prime Minister Jawaharlal Nehru in 1962.
- Even today the festival is celebrated by both Hindus and Muslims alike.

## Sant Kabir

- The President recently inaugurated **Sant Kabir Academy and Research Centre** at Kabir Chaura Dham, Maghar, Uttar Pradesh.

- Born in the city of **Varanasi** in Uttar Pradesh, Kabir was a 15th-century Indian **mystic poet and saint**, whose writings influenced Hinduism's Bhakti movement.

### **Kabir's Compositions**

- These can be classified into three literary forms – **dohas** (short two liners), ramanas (rhymed 4 liners), sung compositions of varying length, known as **padas** (verses) and **sabdhas** (words).
- He composed his verses orally and is generally assumed to be illiterate.
- His poems were in **vernacular Hindi**, borrowing from various dialects including **Braj, Bhojpuri and Awadhi**. Most of his work was concerned with devotion, mysticism and discipline.
- His verses are found in Sikhism's scripture Guru Granth Sahib, Satguru Granth Sahib of Sant Garib Das and Kabir Sagar.

### **Kabir and the Bhakti Movement**

- The Bhakti movement, which began in the 7th century in South India, had begun to spread across north India in the 14th and the 15th centuries.
- The movement was characterized by popular poet-saints who sang devotional songs to God in vernacular languages. They emphasized on intense emotional attachment with God.
- One school within the Bhakti movement was the **Nirguni tradition** and Sant Kabir was a prominent member of it. In this tradition, God was understood to be a **universal and formless being**.
- Many of the saints of the Bhakti movement came from the ranks of the lower to middle artisanal classes. Kabir was a low caste weaver (Julaha), Raidas was a leather worker and Dadu a cotton carder.

### **Kabir's Critique Of Religion And Caste**

- Kabir questioned rituals and unethical practices of all religions primarily the wrong practices in Hindu and Muslim religion. He also dismissed the sacred authority of their religious books, the Vedas and the Quran.
- Kabir did use the name Rama in his poems, but he clarified that he was not referring to the avatar of Vishnu, but a formless and general Hindu name for the divine
- Instead of God being an external entity that resided in temples or mosques, Kabir argued that God existed inside everyone.
- He, like the other prominent saints of his time, held that one could attain salvation only through bhakti, intense love or devotion to God.
- In many of his verses, Kabir proclaimed that people of all castes have the right to salvation through the bhakti tradition.

### **Kabir's Legacy**

- Kabir's message of equality led to a community of his followers called the Kabir Panth - a sect in northern and central India.
- Historians estimate that it was established in India between 1600 and 1650, one or two centuries after his death.
- Today, the sect exists as a large and distinct community, with various sects under different spiritual leaders. However, all regard Kabir as their guru and treat the Bijak as their holy scripture.
- The **Bijak** contains works attributed to Kabir and is believed to have been written in the 17th century.
- Kabir's teachings continue to shape various religious discourses in India today. In the Sikh tradition he is seen to have influenced Guru Nanak, for Hindus he is a Vaishnavite (devotees of Vishnu), and is revered by Muslims as a Sufi saint.

### Central Advisory Board of Archaeology (CABA)

- Government has re-constituted the CABA which was formed seven years ago.
- It has been constituted to strengthen contacts between the Archaeological Survey of India (ASI) and those in the field of archaeological research.
- The board will include five persons nominated in their personal capacities by the Government of India and former Director-Generals of ASI.

### Mela Kheerbhawani

- Recently, Kashmiri Hindus, locally known as Pandits, celebrated Zvestha Ashtami at the Mata Kheerbhawani temple at Tulmulla in central Kashmir's Ganderbal.
- The festival, known as Mela Kheerbhawani, held every year, is the largest gathering of Hindus in Kashmir after the annual Amarnath Yatra.
- The temple gets its name from kheer, or milk and rice pudding that pilgrims pour into the spring inside the temple complex as an offering to the goddess.

### Sao Joao festival

- It was recently celebrated in **Goa** after a two year coronavirus induced gap.
- It is celebrated on **24th June** and is dedicated to **St. John the Baptist**, who baptised Lord Jesus on the river of Jordan.
- The celebrations include people jumping into the wells, streams and ponds. This jump is to signify the joy that St. John felt when Jesus was born.
- People wear the **Kopel** (crown of fruits, flowers and leaves) and play instruments like **Gumott** (percussion instrument) and **Cansaim** (cymbal).

### Gulabi Minakari

- During the G7 meet in Germany, the Indian Prime Minister gifted a Gulabi Minakari brooch to US President Joe Biden.
- Gulabi Minakari is a GI-tagged art form of Varanasi in Uttar Pradesh that involves colouring the surface of metals by fusing different colours.
- It is originally from Persia and was brought to Varanasi by Persian enamellists during the Mughal era around the early 17th century.
- The word 'mina' is the feminine form of the Persian word 'Minoo' and means 'heaven'. It refers to the azure colour of heaven.
- In Varanasi, it is practiced on jewellery and home decor items. Thus, products with minakari work on them like jewellery boxes, idols, sculptures, key chains, dining sets, trays, cupboards etc. are available in Varanasi.
- Minakari can be found popularly in three forms:

#### Ek Rang Khula Meena

- Only gold outlines are exposed and a single transparent colour is used

#### Panch Rangi Meena

- Five colours of red, white, green, light blue and dark blue are used

#### Gulabi Meena

- In which pink is the dominant colour