



**UPSC**

**MONTHLY**  
**CURRENT**  
**AFFAIRS**  
**CAPSULES**

**AUGUST 2021**

# Monthly Current Affairs Magazine – August 2021

It is the time to fast-track and target the UPSC Civil Services Examination preparation for Prelims 2021. To ease the preparation, we are providing monthly current affairs compilation for the aspirants. The magazine contains subject-wise distribution of comprehensive news articles, and a separate section for Prelims Booster Articles.

*"Every day is a chance to begin again. Don't focus on the failures of yesterday, start today with positive thoughts and expectations." - Catherine Pulsifer*

## Contents

<b>Polity &amp; Governance .....</b>	<b>3</b>
<b>International Relations .....</b>	<b>27</b>
<b>Economy .....</b>	<b>32</b>
<b>Social Issues .....</b>	<b>45</b>
<b>Environment &amp; Biodiversity .....</b>	<b>50</b>
<b>Science &amp; Technology .....</b>	<b>60</b>
<b>Security .....</b>	<b>65</b>
<b>History, Art &amp; Culture .....</b>	<b>68</b>
<b>Prelims Booster Articles .....</b>	<b>70</b>

## Polity & Governance

### Uttar Pradesh Draft Population Bill 2021

#### Context

- Uttar Pradesh's state law commission has presented a draft Population Bill 2021 while inviting comments from experts and other stakeholders.
- It proposes to introduce two-child policy norms by incentivizing it through various government measure.
- The draft law is based on the findings of the National Family Health Survey-4.

#### Key features:

- **Rationale for the draft bill:**
  - Effective use of **limited ecological and economic resources** at hand.
  - For promotion of **sustainable development** with more **equitable distribution**.
  - to ensure healthy birth spacing through measures related to augmenting the availability, accessibility and affordability of **quality reproductive health services** to achieve the goal of **population control, stabilization and its welfare** in the State
- **Dis-incentives:** for couples violating the two-child policy norms.
  - Debarred from benefits of all government-sponsored welfare schemes,
  - Cannot contest election to local bodies,
  - Ineligible to apply for government jobs under the state government,
  - Cannot get a promotion in a government job,
  - His or her ration card would be limited to four members, and
  - He or she shall be ineligible to receive any kind of government subsidy.
- **Incentives:** for couples adhering to two-child policy norms.
  - A soft housing loan, **rebate on charges for utilities** such as water, electricity, and house tax among other things.
  - **Government employees** who adhere to the two-child norm will also get two additional increments during the entire service, maternity or paternity leave of 12 months with full salary and allowances and free health care facility and insurance coverage to the spouse.

- **Incentives for those with single child:** This for those who have only one child and undergo voluntary sterilization will get additional benefits like-
  - **Free health care facilities** and free insurance coverage to the single child till they turn 20,
  - **Preference to single child in admission in all educational institutions**, including IIMs and AIIMS, free education up to graduation level,
  - **Scholarship** for higher studies in case of a girl child and **preference to a single child in government jobs**.
  - **Public servants:** sticking to the one-child norm will be eligible for four additional increments in all apart from the incentives promised to the general public doing the same.
  - **Couple living below the poverty line:** having one child and one of them go voluntary sterilization, will be eligible for monetary benefits (Rs 80,000 if the single child is a boy, and Rs 1 Lakh if the single child is a girl) from the government.

#### Associated concerns with the draft bill

- **Puts women's health and well-being at risk:**
  - Women sterilization will likely to get increased as burden of contraception and family planning disproportionately falls on women.
  - Stringent population control measures have potential to magnify unsafe abortion as there is strong son-preference in Indian society as has been seen in many states.



- **Disproportionately affecting marginalized sections of the society:** as they are prone to socio-economic benefits provided by the government. Evidence also suggests that coercive measures doesn't result in population control in India.
  - For example, putting bar on individuals having more than two children from contesting local elections, will disproportionately affect poor's representation in local bodies.

#### Way forward:

- **Focusing on socio-economic empowerment:** will lead to comprehensive development of new generation along with reducing the fertility rate of the state as has been witnessed in many south Indian states.
- **Harnessing the population growth for achieving sustainable economic growth:** this can be done by comprehensively researching various aspects of population growth.
- **Collaborative and cooperative approach towards family planning:** The government at all levels- Union, State and Local, citizens, civil societies as well as the businesses must take the onus to promote awareness and advocate the sexual and reproductive rights of women and encourage the use of contraception.

### Supreme Court Verdict on 97th Amendment

#### Context

- Recently, Supreme Court **quashed some provisions of 97<sup>th</sup> Constitutional Amendments** that deals with cooperative societies.

#### Key points

- The Supreme Court has **upheld the judgement of the Gujarat High Court** and has struck down some of the provisions with a **2:1 majority**.
- While Justices Nariman and Justice Gavai struck down only that part of Part IXB that dealt with cooperative societies and were confined to states, **Justice Joseph** in a separate judgment struck down the **entire 97th constitutional amendment**.
- Supreme Court held that cooperative societies is a subject in **List II (State List)** of the 7<sup>th</sup> Schedule of Indian Constitution. So, the Parliament do not have the constitutional mandate to make laws on this subject.
- The 97<sup>th</sup> amendment gave usurping power to the Parliament and made a direct in-road into the **exclusive domain of states** to enact laws with regard to cooperatives.

#### Background

- The 97<sup>th</sup> Constitutional Amendment Act was enacted **in 2011** to deal with issues relating to **co-operatives societies** of our country.
  - The amendment inserted the word cooperatives in **Article 19(1)(c), Article 43B and Part IXB** of Indian Constitution.

#### View of the Union Government

- The centre has emphasised on the importance of 97<sup>th</sup> amendment. It said that the provision was added to bring **uniformity and professionalism** in the management of cooperative societies.
- Cooperative societies were suffering from poor services and low productivity due to **lack of accountability** by the members.
- **Elections are not held on time.** Co-operative societies need to run on democratic principles. These reasons have made it imperative for the centre to intervene.

#### Supreme Court reply

- Supreme Court, however, said that had the centre's objective were to bring uniformity, it should have done it through **Article 252** of Indian Constitution that deals with power of Parliament to legislate for **two or more states by consent**.
- It held that as per **Article 368(2)** of the Constitution, the 97th Constitutional Amendment required **ratification** by at least one-half of the state legislatures.
- Since such **ratification was not done** in the case of the 97th amendment, it was unconstitutional and need to be struck down.

#### What the SC upheld?

- The SC upheld the validity of provisions related to **Multi State Cooperative Societies (MSCS)**.
- It did not strike down the portions of Part IXB of the Amendment concerning 'Multi State Co-operative Societies (MSCS)' due to the lack of ratification as discussed above.
- Here SC was of the view that **MSCS are not confined to one state**, thus, the legislative power dealing with this section would **reside with Union of India** as given under Entry 44 List I (Union List) of the 7<sup>th</sup> Schedule of the Constitution.





### Way forward

- The judgement declared that Part IXB of the Constitution is operative only insofar as it concerns MSCS both within the various States and in the Union Territories.

## Sedition Law: Background, Relevance and Challenges of the Colonial Law

### Context

- Recently, Supreme Court while criticizing the government for its frequent use of sedition law, asked why a colonial law used against Mahatma Gandhi and Bal Gangadhar Tilak continued to survive in the law book after 75 years of Independence.

### Key points about sedition law

- **About:** It is a crime under Section 124A of the Indian Penal Code (IPC).
- **Definition:** Section 124A defines sedition as an offence committed when "any person by words, either spoken or written, or by signs, or by visible representation, or otherwise, brings or attempts to bring into hatred or contempt, or excites or attempts to excite disaffection towards the government established by law in India".
  - Disaffection includes **disloyalty and all feelings of enmity**.
  - However, comments without exciting or attempting to excite hatred, contempt or disaffection, will not constitute an offence under this section.
- **Punishment under sedition law:**
  - Sedition is a non-bailable offence.
  - Punishment under the Section 124A ranges from imprisonment up to three years to a life term, to which fine may be added.
  - A person charged under this law is barred from a government job.
  - They have to live without their passport and must produce themselves in the court at all times as and when required.
- **Observations made by freedom fighters:**
  - **Mahatma Gandhi** called it- **the prince among the political sections of the IPC** designed to suppress the liberty of citizens.
  - **Pandit Jawaharlal Nehru** said that the provision was "obnoxious" and "highly objectionable" and "the sooner we get rid of it the better".

### Historical background

- It was originally drafted in 1837 by Thomas Macaulay but later inexplicably omitted when the Indian Penal Code (IPC) was enacted in 1860.
- It was further re-introduced as **Section 124A** under IPC in 1870 by **Sir James Stephen** in response to the **Wahabi movement**.
  - It was one of the many draconian laws enacted to stifle any voices of dissent at that time.

### Government's argument for retaining the sedition law

- To help in effectively combating **anti-national, secessionist and terrorist elements** in the country.
- **To ensure stability of the state established under the law:** from any attempts to overthrow the government with violence and illegal means.
- **To counter violent activities of internal armed groups:** who openly talk about overthrowing democratically elected state government by revolution. For example, Maoist insurgency.

### Arguments against sedition law

- **Violates right to freedom of speech and expression:** which is provided by the Constitution as fundamental rights under article 19.
- **Widespread misuse:** it is being invoked even in cases where there is no incitement to violence or tendency to create public disorder.
  - Its provisions are **vague and prone to multiple interpretation**, for example, 'public order', 'disaffection', etc. This leads to misuse by the government based on their whims and fancies and other narrow political interest.
  - Government use this tool to **suppress dissent and criticism of government** which are essential ingredients of public policy in a vibrant democracy.
  - It is also being misused as a tool to **persecute political dissent**.
- **Other section of IPC and laws like Unlawful Activities Prevention Act 2019** have provisions that penalize "disrupting the public order" or "overthrowing the government with violence and illegal means".
  - These are sufficient for protecting national integrity, eliminating the need for a dedicated Section 124A under IPC.
- Britain (introduce sedition to oppress Indians) has already abolished sedition law in their country, prompting India to do so.

### Way forward

- **Reconsideration of the sedition law:** In August 2018, the Law Commission of India published a consultation paper recommending that it is time to re-think or repeal Section 124A of the Indian Penal Code that deals with sedition.
- **Limiting the scope of the section 124A:** to terrorist activity against India and interests of India along with issue affecting territorial integrity and the sovereignty of the country.
- **Sensitization of police and magistrates at the ground level:** who often use this draconian law on people committing minor offenses or for which other laws are available.
- India is the largest democracy of the world and the right to free speech and expression is an essential ingredient of democracy. The expression or thought that is not in consonance with the policy of the government of the day should not be considered as sedition.

## Samagra Shiksha Scheme

### Context

- Central government has launched National Initiative for Proficiency in Reading with Understanding and Numeracy (NIPUN Bharat) scheme under its flagship scheme- Samagra Shiksha Abhiyan.
- **Aim of NUPUR initiative:** to create an enabling environment to ensure universal acquisition of foundational literacy and numeracy, by the end of Grade 3, by 2026-27.

### About Samagra Shiksha

- It is an overarching program for the school education sector extending from **pre-school to class 12** with the goal of improving school effectiveness-measured in terms of **equal opportunities for schooling and equitable learning outcomes**.
- **Integration:** of three erstwhile schemes-
  1. Sarva Shiksha Abhiyan (SSA)
  2. Rashtriya Madhyamik Shiksha Abhiyan (RMSA) and
  3. Teacher Education (TE)
- It aims to improve quality of school education by focusing on the two T's – Teacher and Technology.
- **Vision:** to ensure inclusive and equitable quality education from pre-school to senior secondary stage in accordance with the Sustainable Development Goal (SDG) for Education (**SDG 4**).

- **Implementing mechanism:** the department of school education and literacy is the nodal agency for implementation.
- **State/UT level:** Implementation through a single State Implementation Society (SIS). States would be expected to bring a single Plan for the entire school education sector.
- **Union level:**
  - **Governing Council headed by Minister of Human Resource Development:** empowered to modify financial and programmatic norms and approve the detailed guidelines for implementation within the overall Framework of the scheme.
  - **Project Approval Board (PAB)** headed by Secretary, Department of School Education and Literacy.
- **Funding pattern:** it is a **centrally sponsored scheme**.
  - **90:10 for 8 North-Eastern States** (Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura) and **3 Himalayan States** (Jammu & Kashmir, Himachal Pradesh and Uttarakhand).
  - **60:40 for all other States and Union Territories with Legislature.**
  - It is 100% centrally sponsored for Union Territories without Legislature.

### Important features of the scheme: it focuses on-

- **Administrative reform:** harmonized implementation through Single and unified administrative structure and flexibility to states to prioritize their interventions under the scheme.
- **Quality Education through:**
  - Capacity Building of Teachers and School Heads
  - **Improving the quality of prospective teachers:** by strengthening Teacher Education Institutions like SCERTs and DIETs.
  - **Support for Rashtriya Avishkar Abhiyan:** to promote Science and Maths learning in schools.
  - **Support Padhe Bharat Badhe Bharat Programme:** to develop foundational skills at primary level.
- **Digital Education**
  - Support 'Operation Digital Board' in all secondary schools over a period of 5 years.
  - Enhanced use of digital technology in education through smart classrooms, digital boards and DTH channels
  - Digital initiatives like UDISE+, Shagun, to be strengthened

**Strengthening of Schools**

- Transport facility to children across all classes from I to VIII.
- Supports 'Swachh Vidyalaya': for ensuring cleanliness.
- Improve the Quality of Infrastructure in Government Schools

**Girl Education**

- Upgradation of Kasturba Gandhi Balika Vidyalayas (KGBVs) from Class 6-8 to Class 6-12.
- Self-defence training for girls from upper primary to senior secondary stage
- Enhanced Commitment to 'Beti Bachao Beti Padhao'

**Skill Development**

- **Exposure to Vocational Skills at Upper Primary** Level would be extended.
- **Vocational education** for Class 9-12 as integrated with the curriculum and to be made more practical and industry oriented.
- Reinforce emphasis on '**Kaushal Vikas**'

**Sports Education to be an integral part of curriculum:** allocation for buying sports equipments, aims to inculcate and emphasize relevance of sports.**Regional Balance**

- Preference to Educationally Backward Blocks (EBBs), LWE affected districts, Special Focus Districts (SFDs), Border areas and the 117 aspirational districts identified by Niti Aayog.

**Expected benefits of the scheme:**

- Improve the transition rates across the various levels of school education and aid in promoting universal access to children to complete school education.
- **Integration of Teacher Education:** would facilitate effective convergence and linkages between different support structures in school education through interventions such as a **unified training calendar, innovations in pedagogy, mentoring and monitoring, etc.**
- **Need-focused and dynamic in-service program:** as this will be conducted and monitored by the SCERT (nodal agency) under the scheme.
- **Use of technology:** would help in widening the access of good quality education across all States and UTs and across all sections of the Society.

**Revamped BharatNet****Context:**

- Recently, the cabinet has approved the **revamped BharatNet** (BharatNet 2.0) project, with an additional allocation of more than Rs.19,000 crore.

**Key points:**

- Private players will be enrolled through **Public-Private Partnership** (PPP) model, and it will be implemented in **16 states**.
- It will extend to **all inhabited villages**, beyond the Gram Panchayats (**GPs**).
- The responsibility of creation, maintenance, operation, upgradation, and utilisation will rest with the concessionaire, who will be selected through an international bidding process.

**What is BharatNet?**

- It is a **central sector scheme** of Ministry of Communication.
- It is implemented by **Bharat Broadband Network Limited**, a special purpose vehicle.
- It was first launched in **2011** as **National Optical Fibre Network**, and was renamed as BharatNet in **2015**.
- The objectives under this mission were to connect all the 2.50,000 GPs through an optical fibre network and provide **100 Mbps** connectivity to all GPs.
- It is funded, entirely, by the **Universal Service Obligation Fund** (USOF), which was launched to improve the telecommunication services in rural areas of the country.

**Significance of BharatNet programme:**

- **Digital divide:** The programme can reduce the division created by the digital technology in rural and urban areas.
- It has cross sectoral benefits ranging from **e-governance, e-farming, e-healthcare, e-education, e-commerce** among others.
- It will help integrating the rural areas of the country in achieving the objectives of digital India.
- It will help in expediting government initiatives like **Start-up India, Stand-up India, Make-in India**.
- The project has a special advantage in the present **power line infrastructure** like easy maintenance, faster implementation etc.

**Reasons for the launch of BharatNet 2.0:**

- The earlier version was unable to achieve the **last mile connectivity**.
- **Lack of functional Internet connectivity:** The report of Digital Empowerment Foundation's research has found that only 50 of the 269 surveyed GPs had broadband internet connection and only 11% of them had functional internet connection.
- **Poor internet speed:** The objective of 100 Mbps was not met and the internet speed in GPs, wherever it was available, was very slow.
- **Poor Implementation:** Most of the delay was due to the absence of any detailed project report.

**Steps needed to make BharatNet 2.0 successful:**

- **Establish accountability:** This is one of the cardinal steps in making a project successful. Government should fix accountability and put the name in the public forum.
- **Use funds properly:** The earlier phase of the project faced the dearth of funds. The allocated amount in the successive budget has not been used effectively.
- **Digital Literacy:** The digital divide could be reduced by increasing the digital literacy in the remote areas.
  - Initiatives like **PM Grameen Digital Saksharta Abhiyan (PMGDISHA)** can prove to be a game changer in this direction.
  - This could also reduce **the financial frauds**, which are prevalent in rural areas of the country.
- **Affordability:** The internet should be made affordable to the people. Just making internet accessible to rural areas is only a half-won battle.
- **Gender gap:** The internet service should be made inclusive by focussing on the socio-economic weaker section of the society including women.

**Way Forward:**

In the era of digital revolution, internet services have become a necessity. The objective of inclusive development needs an equity-based solution, specifically tailored for the socio-economic backward strata of the Indian population. BharatNet has the potential to make our country, truly, Aatmanirbhar!

**Recusal Of Judges and The Issues Arising from It****Context**

- Recently, a Delhi High Court judge recused himself from hearing a petition of digital media houses, which challenged the validity of the IT rules regulating intermediaries. It is not a one-off case and, just a few days ago, two Supreme Court judges had recused themselves from hearing a plea relating to West Bengal.

**Recusal of Judges: What it means?**

- **Recusal or judicial disqualification** means an **act of abstention** by any presiding court officer or an administrative officer **from participating in an official action** due to a conflict of interest.

**Grounds for recusal**

- The judge is **biased** in favour of a litigant of any case.
- The judge has an **interest in the subject matter**, either directly or indirectly.
- The judge is having **prior experience** on the subject of litigation.
- The judge knows the litigants **personally**.

**What does the constitution say?**

Article 14, under its **due process of law**, states that **no one can be a judge of her own case**. Owing to this cardinal feature, conflict of interest was accepted as a ground for recusal.

**Process of recusal**

- The decision of recusal is, generally, taken by the judge herself. There are **no formal laws**, which defines the process of recusal.
- It is **left on the conscience** of judges to declare whether there is any potential conflict of interest arising from the litigation.
- When a judge recuses, the case is listed before the Chief Justice for allotment to a fresh Bench.

**Past Supreme Court judgements**

- It is a **central sector scheme** of Ministry of Communication.
- Although there are no formal rules, several Supreme Court judgements have dealt with the issue.
- **Ranjit Thakur v Union of India (1987):** In this case, the Supreme Court opined that the test of the likelihood of bias is the reasonableness of the apprehension in the mind of the parties to the litigation.



- **The 1999 charter** 'Restatement of Values in Judicial Life'— a code of ethics adopted by the Supreme Court—states, "A Judge shall not hear and decide a matter in a company in which he holds shares... unless he has disclosed his interest and no objection to his hearing and deciding the matter is raised".

### Issues with the recusal of judges

- Frequent recusal of judges from the cases raises questions on the **independence of the judiciary**, a basic feature of our constitution.
- Parties, sometimes, suggests that the judge should recuse herself from litigation. This precedent of **judging the judge**, without any significant evidence, is an alarming trend.
- It allows parties to **cherry-pick judge** of their own choice.
- The rule, which states that no one should be the judge of her own case, is subject to **different interpretations**. The conflict-of-interest clause is, at many times, misused.
- Judges **do not record the reasons** for recusal in writing, leaving plenty of scope for conjecture.

### Way forward

- In 2015, Justice Kurian Joseph and Justice Madan Lokur, while holding the National Judicial Appointments Commission unconstitutional, stated the need for judges to **give reasons for recusal to build transparency** and help frame rules to govern the process.
- Recusal must **not become an instrument to navigate the justice delivery**.
- Judicial officers **must resist all the pressure**, no matter where they are coming from. It is what our constitution expects from them.
- There is a need for **definite and exhaustive rules**, which deals specifically with this issue.

## One Nation One Ration Card

### Context

- Recently, the Supreme Court directed all states and Union Territories to implement the One Nation, One Ration Card (ONORC) system, which allows for inter- and intra-state portability, by July 31.

### Supreme court ruling:

- It directed States and UT to distribute dry rations and run community kitchen for migrant workers and center to provide needed grains to implement this.
- Directed the Centre to re-determine the total number of beneficiaries under National Food Security (NFS) Act, 2013.

### ONORC scheme:

#### • About:

- Due to large scale intra-state and inter-state migration, a large section of the Public Distribution System (PDS) beneficiaries under NFS Act 2013, were unable to access their entitlements.
- This is because NFSA beneficiaries were allowed to collect their subsidized rations from assigned Fair Price Shop (FPS) only.
- To rectify this anomaly, ONORC was launched in August, 2019.
- **Nodal ministry: Ministry of Consumer Affairs, Food and Public Distribution.**
- **Aim:** to ensure hassle-free delivery of subsidized food grains to all migratory beneficiaries anywhere in the country by ensuring nationwide portability of their ration cards under the National Food Security Act (NFSA).

### How does ONORC work?

#### • Technology enabled ONORC:

- It involves details of beneficiaries' ration card, Aadhaar number, and electronic Points of Sale (ePoS).
- **Identification of beneficiary:** through biometric authentication on ePoS devices at fair price shops.
- **Two portals to run the system that also host all the relevant data:**
  1. **Integrated Management of Public Distribution System (IM-PDS) portal:** records the inter-state transactions.
  2. **Annavitran Portal:** maintains a record of intra-state transactions (inter-district and intra-district).

### Implementation status:

- **Covid economic relief package:** by center government incentivized states to implement ONORC scheme by increasing the of borrowing limit of the compliant states.
  - Till date, 32 states and Union Territories have joined the ONORC, covering about 69 crore NFSA beneficiaries.
  - **Four states are yet to join the scheme** — Assam, Chhattisgarh, Delhi and West Bengal.

**Benefits of the ONORC System:**

- **Reduce the leakages:** by better targeting of the beneficiaries and preventing duplication and double benefits, resulting in reduced corruption in the PDS system.
- **Efficient and effective implementation:** of the PDS scheme as it provides grains to the needy people around the country, irrespective of their residence, as envisaged under NFSA 2013.
- **Achieving the target of SDG 2 of ending the hunger 2030:** as it will result in access to requisite food-grains to the poorest people living in the different parts of the country.
- **Economic benefits:** as availability of basic food-grains in different parts of the country will facilitate smooth movement of the workforce, resulting in the enhanced economic activity and better utilization of huge human resource present in India.
- **Nutritional security:** as availability of cheap food-grains for free under the scheme will leave room for people to spend a share of their income on nutritional items like fruits and vegetables.

**Challenges with the scheme:**

- **Against federal scheme of the constitution:** as alleged by many states due to its centralization features and top-down approach.
- **Non-compliance by many states:** for various reasons. For instance-
  - **Delhi** is yet to start the use of ePoS in fair price shops, which is a prerequisite for the implementation of ONORC.
  - **West Bengal** has demanded that the non-NFSA ration card holders (ration cards issued by the state government) should also be covered under the ONORC.
- **Administrative challenges:** for instance, different states have different rates and this mismatching rate will be a big challenge.

**Way forward:**

- Union government should hold consultation with all the relevant stakeholders including state governments to ensure a more inclusive and comprehensive ONORC scheme with adequate flexibility for states to incorporate their local requirements.
- This will facilitate effective implementation and coverage of the scheme, resulting in the universalization of rations to all migrant workers across India.

**Office of Governor: Issues and Challenges****Context**

- Questionable conduct by many governors of states have again raised the question about constitutional propriety of their actions.
- S/he often has been criticised for being a puppet at the hands of the central government, instead of performing his/her constitutional role.

**Important Constitutional provisions about governor**

- **Background:** The office of governor has been borrowed from the Government of India Act 1935. He is to be appointed by the president of India.
  - Unlike British Indian government, the governor is a nominal head of a state. Like president at the centre, s/he is expected to act on the aid and advice of the Council of Ministers (COM) state, barring few constitutional and situational discretions.
- **Article 163:** It is the source of all discretionary powers of the governor, resulting in conflict with elected state executives and legislature.
- **Article 153:** Governor for each State or two or more States.
- **Article 256:** The executive power of the Union shall extend to the giving of such directions to a State as may appear to the Government of India to be necessary for that purpose.
- **Emergency powers (Art 356):** Governor can recommend imposition of emergency in the state on grounds of failure of constitution machinery in the state and issues the proclamation, after obtaining the consent of the President of India.
- **Act as a bridge between states and union government:** Constitution makers imagined governor to be a common link between centre and states, ensuring smooth functioning of the democratic government in the state.



### Issues with the office of Governor

- **Appointment/removal process:** Governors hold office till the pleasure of the president as no grounds for removal is mentioned in the constitution.
  - This leads to favouritism in the appointment process and well-suited candidates are ignored in favour of the less competent individuals.
- **Acting as an agent of political party at the centre:** Due to favouritism in appointment and lack of any security of tenure in the constitution, the office of governor often works as a puppet/agent of the union government instead of acting as bridge between state and centre government.
- **Discretionary powers:**
  - **Partisan role in Hung assemblies:** It is a situational discretion where s/he is free to invite a party/alliance to form the government in case no single party/pre-poll alliance has won the majority of the seats in the state assembly elections.
    - ♦ Ex: Karnataka where governor invited single largest party to form the government instead of inviting the leader of a post-poll alliance which had won the majority seats in the elections.
  - **Misuse of power of reserving a bill for president's consideration:** It is his constitutional discretion to reserve certain state bills for the consideration of the president. Misusing this power, governors often interfere in the law-making process of the state assembly, especially for the bills which are uncomfortable to central government.
- **Misuse of the emergency powers:** Governors have often found to be recommending imposition of the president's rule in state on the frivolous grounds, especially when ruling party at centre is different from that of the concerned state.
- **Bypassing the elected government:** There has been instances when governors found to give orders to state officials directly or visit public offices without informing the state governments. This is against his/her constitutional mandate as he is only a nominal head and expected to act on the advice of the COM in the state.

### Suggestions:

- **Implementing the S.R Bommai judgement in the letter and spirit:** which allows the Supreme Court to investigate the imposition of emergency in the state on the grounds of being mala-fide and unreasonable.
- **Develop a sound procedure for appointment and removal of the governors:** as suggested by Puchhi and Sarkaria Commissions, governors should be selected based on impeccable character and quality and should be provided with fixed tenure.
- **Develop a code of conduct for the office of governor:** with prior consultation and agreement of the union and state governments along with Supreme Court, high courts and other constitutional experts in the field.
- **Upholding the constitutional principles:** Governor should uphold the constitutional morality by upholding the spirit of the constitution, instead of acting in the narrow political interests of the ruling party at the centre.

### Not-for-profit hospital model

#### Context

- Recently, NITI Aayog has released a report on the not-for-profit hospital model in India.

#### Constitutional provisions regarding public health

- Article 39(e), Article 47, Schedule 11 (entry 23).

#### Not-for-profit hospitals: What are they?

- These hospitals, as the name suggests, do not have making money as their prime objective. The fees, above the cost of service, are re-invested in the hospital. This is a kind of charitable organisation, and is more popular in the developed countries like the US.

#### Key Points:

- The cumulative cost of care at not-for-profit hospitals are far lesser than the for-profit hospitals.
- Almost all the identified not-for-profit hospitals are empanelled with either state or central governments through schemes like Ayushman Bharat.
- Salaries of doctors, in the not-for-profit hospitals, are 50-75% lower than the market standards.
- On the infrastructure front, 90-95% are general ward beds in these hospitals.
- Not-for-profit hospitals have lower operating costs as compared to for-profit hospitals.
- Categories of such hospitals: Faith-based hospitals, Community-based hospitals, Cooperative hospitals, and private trust hospitals.

**Significance of not-for-profit hospitals:**

- India's policies and programmes aims to achieve Universal Health Coverage by 2030. This objective demands a comprehensive analysis of healthcare infrastructure in our country.
- These institutions provide affordable and accessible health care to people.
- Although various institutions have been established for different purposes, this sector provides not only curative healthcare, but also preventive healthcare.
- It links healthcare with social reform, community engagement, and education.
- India has a much lower bed density than the rest of the world. The public hospitals are overstretched. So, loads of health care provision shift towards the private sector, which generally provides health care at a much higher cost. In this background, focussing on non-for-profit hospitals could have a multipronged benefit.
- The expertise of these hospitals can come to much better use in rural areas, where the issue of limited finance persists.

**Limitations:**

- According to the report, not-for-profit hospitals account for only 1.1% of treated ailments, while for-profit hospitals it is 23.3%, as of June 2018.
- According to the report, while for-profit hospitals account for 55.3% of in-patients, not-for-profit hospitals account for 2.7% of in-patients in India.
- People remain unaware of the services rendered by the not-for-profit hospitals.
- According to the NSSO 75th round survey, for-profit accounts for 55.3% of in-patients, while for not-for-profit hospitals, it is just 2.7%.

**Way Forward:**

- NITI Aayog recommends 100% income tax exemption for donations (against the 50% exemption given earlier), quick release of funds from government schemes and grants to strengthen the not-for-profit hospitals.
- NITI Aayog also recommended allowing not-for-profit hospitals to use Primary Health Care infrastructure to take healthcare to rural India.
- High performing hospitals should be involved in Public-Private Partnership (PPP) models for managing primary health care and operating government facilities.

- Not-for-profit hospitals could be given working capital loans with lower interest rates.
- The long-pending reimbursements should be cleared soon to maintain their financial viability.
- A mechanism should be developed to rank such not-for-profit hospitals based on their operational efficiency.
- A national level directory, in the lines of National Health Resource Repository, should be created to effectively monitor the operations and of not-for-profit hospitals.
- A collaborative and coordinated approach, among the different institutions— government, private, Civil Society Organisations (CSOs)—is needed to achieve the objectives under SDG 3 and the aims of Astana Declaration.

**National Human Rights Commission (NHRC): Structure, Functions, Powers and Challenges****Context**

- The National Human Rights Commission (NHRC) committee formed to investigate complaints of postpoll violence in West Bengal has recommended that cases of heinous crimes be transferred to the Central Bureau of Investigation (CBI).

**Key points about NHRC**

- **Formation:** NHRC is an independent statutory body, setup in 1993 as per provisions of Protection of Human Rights Act (PHRA), 1993, later amended in 2006.
- **Headquarter:** New Delhi, India
- **Statutory mandate:** It is responsible for the protection and promotion of human rights.
- **Human rights:** PHRA defines human rights as the rights relating to life, liberty, equality and dignity of the individual guaranteed by the Constitution or embodied in the International Covenants and enforceable by courts in India.
- **In conformity with the 'Paris Principle':** which was adopted at the first 'international workshop on national institutions for the promotion and protection of human rights' held in Paris in October 1991, and endorsed by the General Assembly of the United Nations in 1993.
- The NHRC is an embodiment of India's concern for the promotion and protection of human rights.



### Structure of NHRC

- After an amendment to the PHRC in 2019, the organizational structure of the NHRC comprise of following members with required qualifications-

Members	Appointment criteria
A Chairperson	Who has been Chief Justice of India or a Judge of the Supreme Court (added after an amendment in 2019)
One member	Who is, or has been, a Judge of the Supreme Court of India
One member	Who is or has been the chief justice of a High Court
Three members (of which one must be women)	To be appointed from among persons having knowledge of, or practical experience in, matters relating to human rights
Deemed/ex-officio members	Chairpersons of the following bodies- <ul style="list-style-type: none"> <li>National Commission for Scheduled Castes;</li> <li>National Commission for Scheduled Tribes, National Commission for Minorities;</li> <li>National Commission for Women;</li> <li>National Commission for Backward Classes;</li> <li>National Commission for the Protection of Child Rights and</li> <li>Chief Commissioner for Persons with Disabilities</li> </ul>

- Appointment of the members:** President appoints the Chairman and members of NHRC on recommendation of high-powered committee headed by Prime Minister. Composition of this high-powered committee includes-
  - The Prime Minister (chairperson)
  - The Home Minister of India
  - The Leader of the Opposition in the Lok Sabha (House of the People)
  - The Leader of the Opposition in the Rajya Sabha (Council of States)
  - The Speaker of the Lok Sabha (House of the People)
  - The Deputy Chairman of the Rajya Sabha (Council of States)

- Tenure:** The Chairperson and Members of the Commission hold office to three years or until they attain the age of 70 years, whichever is earlier.
  - They shall also **be eligible for re-appointment.**
- Grounds for Removal:**
- Removal is **done by president** on grounds of **bankruptcy, unsound mind, infirmity of body or mind, sentenced to imprisonment for a crime, or engages in paid employment.**
- He can also be removed for **proved misbehaviour or incapacity** if SC enquiry finds him guilty.
- They can **resign by writing to president.**

### Powers and Functions of NHRC

- Intervention:** It intervene in any proceeding involving any allegation of violation of human rights pending before a court with the approval of such court.
- Enquiry:** It can enquire into any complaints of violation of human rights or negligence in the prevention of such violation by a public servant.
  - While making an inquiry into the complaints, the commission enjoys the powers of a civil court.
- Safeguards the interests of the vulnerable:** for example, NHRC can visit any jail or any other institution under the control of the State Government to see the living conditions of the inmates and to make recommendations thereon.
- Scope:** It can **recommend to both the central and state governments** to take suitable steps to prevent the violation of Human Rights.
  - It submits its **annual report to the President of India** who causes it to **be laid before each House of Parliament.**
  - the Commission also studies treaties and international instruments on human rights and make recommendations for their effective implementation to the Government.
- Awareness generation:** NHRC spread human rights literacy among various sections of society and promote awareness of the safeguards available for the protection of these rights through publications, the media, seminars and other available means.
  - It also plays an active role in coordinating with other NHRIs of the world to enhance awareness from the perspective of human rights.
- It has **also hosted delegations from UN Bodies and other National Human Rights Commissions** as well as members of civil society, lawyers and political and social activists from many countries.

- **Collaboration with Civil societies:** It encourages the efforts of non-governmental organizations and institutions working in the field of human rights.
- It is also known for promoting research and encouraging NGOs in the field of human rights.

#### Associated challenges with the NHRC

- **Recommendatory nature of advice:** it means that it cannot legally enforce its decisions and depends on the wishes of the concerned authority for the same. This lack of authority to ensure compliance can lead to outright rejection of its decision too.
- **Lack of independent investigative machinery:** as it does not have its own independent investigative machinery. So, it has to be dependent on other agencies like CBI who may not function in fair and independent manner.
- **Bounded by time duration:** as Under the Protection of Human Rights Act, 1993, human rights commissions cannot investigate an event if the complaint was made more than one year after the incident. Therefore, a large number of genuine grievances go unaddressed.
- Many a times NHRC is viewed as **post-retirement destinations** for judges and bureaucrats with political affiliation. Along with this, **inadequacy of funds** also hampers its effective functioning.
- **Exclusion of Armed forces from investigative powers of the NHRC** further restricts its powers and authority to serve as the guardian of human rights in India.

#### Suggestions for Improvement in the Human Rights situation in India

- **Revamping the institution of the NHRC:**
  - By entrusting it **with powers to ensure enforcement** of its decisions by implementing authorities.
  - **Independent investigating machinery:** should be set under complete control of the NHRC in order to ensure free and fair investigation in the human rights violation cases.
  - **Diversify its composition by including people from civil society, human rights activists etc.:** this will reduce bureaucratization of the NHRC, resulting in better functioning of the organization.

- **Armed forces:** The definition of the armed forces should be restricted to only army, navy, and air force.
  - Further, even in these cases the Commission should be allowed to independently investigate cases of violation of rights.
- For NHRC to be an **effective watchdog of the human rights** in the country, it is important to empower NHRC to make it work more efficiently and independently. This will help in improving and strengthening the human rights situation in India.

### National Education Policy

#### Context

- NEP, 2020 has **completed one year** of its launch. On this occasion, let us know the policy in detail.

#### Key points

- It is the **third education policy** of our country. The earlier two was launched in **1968 and 1986**.
  - This national policy came after a gap of 34 years.
- It is based on the recommendations of **Kasturirangan committee**.
- It renames the Ministry of Human Resource Development to **Ministry of Education**.
- It proposes a **5+3+3+4** curricular and pedagogical structure.

Stages	Years	Class	Features
Foundational	3-8	3 years of pre-primary and 1-2	Flexible, multi-level, activity-based learning
Preparatory	9-11	3-5	Light textbooks, more formal but interactive classroom learning
Middle	12-14	6-8	Introduction of subject teachers for learning of more abstract concepts, experimental learning
Secondary	15-18	9-12	Reading in-depth, critical thinking, greater attention to life aspirations



### Elementary Education

- Preparatory classes or **Bal vaticas** for the children up to class 1.
- Universal foundational literacy by **2025**.
- Mid-day meal scheme to be extended to **preparatory classes**.
- Major reconfiguration of **curricular and pedagogical** structure.
- Make early childhood care and Education an **integral part** of school education.

### School education

- Seeks to **reduce load** in school education curriculum.
- There will be **NCFSE** (National Curriculum Framework for Secondary Education), which will be revised and updated once in every 5-10 years by NCERT.
- A National Assessment Centre, **PARAKH** (Performance Assessment Review, and Analysis of Knowledge for Holistic development) will be established.
- **100%** Gross Enrolment Ratio (GER) in preschool to secondary by **2030**.
- All subjects including **art, music, sports, yoga, community service** will be part of the curricular.
- **No difference** between curricular activities and extra-curricular activities.

### Higher education

- **50%** GER in Higher Educational Institutions (HEIs) by **2035**.
- **Academic Bank of Credit** to be created to provide multiple entry and exit options for students in Higher education.
- **The M.Phil** program to be discontinued.
- Multidisciplinary Education & Research University (**MERU**) to be created.
- By **2040**, all HEIs to be multi-disciplinary.
- Over a period of 15-years, all HEIs to become **independent and self-governing** (ending of affiliation system).
- Higher education institutions to be driven by two missions: **Mission Nalanda** and **Mission Takshashila**.

### Vocational Education

- By **2025**, **50%** students will have vocational exposure and to serve this purpose, NCIVE (National Committee for the Integration of Vocational Education) is to be created.

### Equity-based education

- **Special Education Zones** will be created in regions where there is large population of socially and educationally disadvantaged students.
- **Gender Inclusion Fund** to be created for holistic development of all genders, including transgenders.

### Teacher Education

- **Aanganwadi workers**, having qualification up to class 12, to be given 6 months certification program and those workers having qualification less than the above, should be given a one-year diploma program.
- 4 years integrated stage specific B.Ed. program to be the **minimum qualification** for teachers.
- Each teacher will participate in at least 50 hours of **Continuous Professional Development**.
- **Pupil-teacher ratio** of **30:1** in normal areas and **25:1** in socio-educationally disadvantaged areas.
- **NCFTE** (National Curriculum Framework for Teacher Education) will be formulated by NCTE and NCERT by 2021.
- **Shutting down** sub-standard teacher education institutions.
- Move all teacher education programmed to **large universities**.

### Research and Technology

- **National Research Foundation** to be created for instilling research-based behaviour among students.
- **National Education Technology Forum** for exchange of ideas on use of technology.
- **Agricultural technology parks** for implementing lab to land programs.

### Implementation

- There will be an apex body called **Higher Education Commission of India** (HECI), which will resolve disputes among the following bodies.

Bodies	Features
<b>NHERA</b> (National Higher Education Regulatory Authority)	Light but tight regulation
<b>NAC</b> (National Accreditation Commission)	Meta-accrediting agency
<b>HEGC</b> (Higher Education Grants Council)	Responsible for funding
<b>GEC</b> (General Education Council)	frame expected learning outcomes for higher education programmes.

### Language

- Medium of Instruction should be **mother tongue till class 5**. It, however, is preferable upto class 8.
- Promotion of Indian **classical language**.
- **Indian Institute of Translation and Interpretation** to be created.
- 3 new national institutes for **Pali, Prakrit and Persian** language.

### National Commission for Protection of Child Rights (NCPCR): Constitution, Composition and Key Functions

#### Context

- A recent report by the National Commission for Protection of Child Rights (NCPCR) showed that 6,855 children had been orphaned between April 1, 2020 and July 23, 2021.

#### About NCPCR

- **Constitution:** It was set up in March 2007 under the Commission for Protection of Child Rights Act, 2005. It is a statutory body under the Act.
- **Ministry:** It functions under the administrative control of the Ministry of Women & Child Development, Government of India.
- **Definition of child:** The Child is defined as a person in the 0 to 18 years age group.
- **Mandate:** to ensure that all **Laws, Policies, Programs, 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, 1989**.
  - The above Convention was ratified by India in 1992. This convention defines child as a human being below 18 years of age.

#### Composition:

NCPCR consists of the following members namely:

- **Chairperson:** a person of eminence and has done outstanding work for promoting the welfare of children.
- **6 other members, of which two must be women.** They are to be **appointed by the Central Government** from amongst person of eminence, ability, integrity, standing and experience in the following fields-

1. Education;
  2. Child health, care, welfare or child development;
  3. Juvenile justice or care of neglected or marginalized children or children with disabilities;
  4. Elimination of child labour or children in distress;
  5. Child psychology or sociology; and
  6. Laws relating to children.
- **Tenure:** All members are to be appointed by Central Government **for three years**. The maximum age to serve in commission is **65 years for Chairman and 60 years for members**.

#### Key functions of NCPCR

- **Assess and review the safeguards that are provided for child rights protection** in India under existing laws and also suggest measures for implementing them effectively.
- **Present reports on the workings of the laws** in this domain to the central government as and when necessary.
- **Study the factors that prevent the enjoyment of rights of children** impacted by terrorism, riots, natural calamities, communal violence, trafficking, HIV/AIDS, torture and exploitation, maltreatment, prostitution and pornography, and suggest remedial measures for them.
- **Inquire cases of child rights violations and initiate proceedings.**
- **Review current policies** with respect to children's rights and protection **by studying treaties and international instruments** and suggest changes as needed.
- Conduct research in the field of child rights.





- **Inquire into complaints and take Suo-motu notice of matter relating to-**
  - Deprivation and violation of child right
  - Non implementation of laws providing for protection and development of children;
  - Non-compliance of policy decisions, guidelines or instructions aimed at mitigating hardships to and ensuring welfare of the children and provide relief to such children;
  - Or take up the issues arising out of such matters with appropriate authorities.

#### Mandates under following Acts

- **Right to Education Act, 2009:** Inquires into complaints relating to a child's right to free and compulsory education.
  - Examine and review the safeguards for rights provided by or under this act and recommend measure for their effective implementation.
- **Protection of Children from Sexual Offences (POCSO) Act, 2012:** Monitors the implementation of the POCSO Act. It is also mandated-
- To monitor the designation of Special Courts by State Governments;
- To monitor the appointment of Public Prosecutors by State Governments;

### Ministry of Cooperation

#### Context

- Recently, a separate **Ministry of Cooperation** was created by the Government of India for realizing the vision of 'Sahkar se Samridhi'.
  - Announcement for such a move was made in the union budget 2021 which proposed to set up a separate administrative structure for cooperatives.

#### About co-operatives:

- **Definition:** International Labour Organisation (ILO) defines cooperatives as an autonomous association of persons united voluntarily to meet their common economic, social and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.
  - The United Nations General Assembly had declared the year 2012 as the International Year of Cooperatives.
- **Categories of cooperatives:** There are many types of cooperatives Society but can be classified broadly in two types, especially in agriculture sector.

1. **Producer cooperatives:** seek to obtain the highest possible value for the goods and services supplied by farmers, fisherfolk, artisans or labourers.
2. **Consumer cooperatives:** provide inputs (fertiliser, seed, credit, etc), groceries, housing, health and other services at the most economic rates to their members.

#### Legal provisions related to Cooperatives in India

- It is a state subject under entry 32 of the State list under the **Schedule 7 of the Constitution**.
  - **Cooperatives having presence in a single state:** are governed by laws in their respective states, with a **Cooperation Commissioner** and the **Registrar of Societies** as their governing office.
- **Multi-State Cooperative Societies Act, 2002:** enacted by the parliament to govern societies with operations in more than one state.
  - **The Central Registrar of Societies** is their **controlling authority**, but on the ground the State Registrar takes actions on his behalf.
- **Formation of the National Cooperative Development Corporation (NCDC):** works for the promotion of the cooperative movement in India. Its main functions include-
  - Planning, promoting, coordinating and financing cooperative development programs at the national level.
  - it provides financial, insurance and technical support to cooperative institutions of farmers and other weaker sections.

#### Constitution provisions regarding the cooperatives

- **The Constitution (97th Amendment) Act, 2011** added a new "**Part IXB**" right after Part IXA (Municipals) regarding the cooperatives working in India.
- **Article 19(1)(c) under Part III of the Constitution:** provides for "**cooperatives**", allowing all the citizens to form cooperatives by giving elevating it to the **status of a fundamental right**.
- **Article 43B** was added in the **Directive Principles of State Policy (Part IV)** regarding the "**promotion of cooperative societies**".

### Key objectives of the newly formed cooperation ministry

- To provide a separate administrative, **legal and policy framework for strengthening** the cooperative movement in the country.
- To make the cooperative movement a true **people-based movement** by helping it reach the **grassroots level**.
- To streamline processes **for ease of doing business** for cooperatives and enable the development of **multi-state cooperatives (MSCS)**.

### Benefits of a dedicated Cooperation Ministry

- **Help in expanding the reach of the cooperatives:** Presently, cooperative structure has managed to flourish and leave its mark only in a handful of states like Maharashtra, Gujarat, Karnataka etc.
  - Under the new Ministry, the cooperative movement would **get the required financial and legal power** needed to penetrate into other states also.
- **Strengthen cooperative funding structure:** Cooperative institutions get capital from the Centre, either as equity or as working capital, for which the state governments stand guarantee.
  - Under the new Ministry, the cooperative funding structure would be able to **get a new lease of life**.
- **Dedicated ministry will correct the present administrative anomaly:** previously cooperatives were under agriculture ministry which is not designed to focus on the specific needs of the cooperatives. This resulted in poor focus and development of the cooperatives in India.
  - **Separate ministry would effectively cater the needs of the evolving cooperatives:** Most new registrations for co-operatives are not in the agriculture sector and now coming up in sectors like housing and labor.

### Associated concerns with the separate ministry

- **Centralization of power:** “cooperatives” are state subject under the constitution and many states believe that formation of a separate ministry will concentrate powers in the hands of Centre.
- **Compromises the principle of federalism:** as many believed that it is yet another attempt by central government to gain control over grassroots institutions, especially in Opposition-ruled states.

### Way forward

- **Ensure Ease of Doing business for the cooperatives:** Ministry of Cooperation should make it easier for cooperatives to do business, right from registration to winding up.
- **Cooperation with states:** to ensure compatible legislation with the requirements of a modern market economy and effective implementation of various measures on the ground.
- **Unified regulation:** by providing for a single regulator for all the cooperative societies.
- **Facilitating women led cooperatives:** to ensure all round development of the society. Currently they constitute less than 3% of the 8 lakh cooperatives in the country.

### Legislative Council: A Complete Analysis

#### Context

- Recently, **West Bengal** government has passed a resolution to **create legislative council** in the state.

#### What is a legislative council?

- **India follows bicameralism**—two Houses in the Parliament, which has two houses, lower house or Lok Sabha, and upper House or Rajya Sabha.
- Similarly, at state-level, we have lower house or legislative assembly and upper house or legislative council.
- Legislative council is a **permanent body** like Rajya Sabha and is **not subject to dissolution** but, has many inherent differences from the Rajya Sabha.
- **Article 171** of Indian constitution provides that the Legislative Council of a state shall **not have more than one-third of the total strength** of the State Assembly, and **not less than 40** members.

#### States having Legislative Council

- As of now, **six states** have legislative councils namely, Andhra Pradesh, Bihar, Karnataka, Maharashtra, Telangana, and Uttar Pradesh.
- Earlier, Jammu and Kashmir too had legislative council, but it got dissolved once the state was bifurcated into two UTs—Jammu and Kashmir, and Ladakh.

#### Creation of legislative council

- **Article 168** of Indian constitution provides for option for a state to establish a legislative council.

- **Article 169** of the constitution provides that to create a legislative council, state legislative assembly need to pass a resolution to this effect by a **majority of total membership** of the Assembly and by a majority of **not less than two-thirds** of the members of the Assembly present and voting.
- Parliament then passes a resolution with simple majority and creates a legislative council
- The **final decision of abolishing or creation of legislative council rests with the Parliament.**

### Legislative Council and Rajya Sabha

- Unlike Legislative Council, **Rajya Sabha has power to reject a non-financial bill** and a constitutional amendment bill.
- Rajya Saba members can **vote** in the election of the President and the vice-president, while the members of legislative council cannot.
- Rajya Sabha has exclusive powers related with **All-India Services** and **making laws on the subject of state list**, while there is no such power vested with legislative council.

### Importance

- It checks **hasty decision** of the legislative assembly
- It **enables a non-elected but deserving individual** to contribute to policy making
- It provides a platform for the **academicians and intellectuals**, who are unaware of the political know-hows, to contribute to the development of state.
- It is like a **House of elders** at state level and thus provides a wise counselling to the legislative assembly.
- It provides opportunity for people from **various communities** to play an active role in policy making and thus work for the upliftment of their community.

### Criticism:

- In the name of giving deserving ones an opportunity, the council has become a **back door entry of the politicians, who lose in election.**
- It causes an **unnecessary delay** to pass a bill as the ultimate authority lies with the state assembly.
- It is an unnecessary burden **on state exchequer** and the money can be used in other developmental work.

- Graduates, doctors, academicians are not rare today and neither is their presence in active politics.

### Way forward

- There is a need for **national policy on legislative council**, which should ultimately decide whether state needs such body or not.
- There should be a report, which provides data regarding the **positive impacts of legislative council** in ensuring good governance.
- Legislative council should be given **power equivalent to Rajya Sabha** and should be made second house and not a secondary house.

## Information Technology Rules, 2021

### Context

- Recently, the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, came into effect.
  - It will supersede the earlier **Information Technology (Intermediary Guidelines) Rules 2011.**
  - These rules have been prepared by the Ministry of Electronics and Information Technology (MEITY).
- Central government has formed these rules under section 87 (2) of the Information Technology Act, 2000.

**Key guidelines Related to Social Media Platforms:** to Be Administered by Ministry of Electronics and IT.

- **Mandatory Due diligence:** to be followed by intermediaries, including social media intermediaries. In case, due diligence is not followed by the intermediary, safe harbour provisions will not apply to them.
- **Safe harbour provision under section 79 of IT act 2000:** It says any intermediary shall not be held legally or otherwise liable for any third-party information, data, or communication link made available or hosted on its platform.
- **Mandatory Grievance redressal mechanism:** appointment of **Grievance Redressal Officer (GRO)** by intermediaries for receiving and resolving complaints from the users or victims.
  - GRO shall acknowledge the complaint within twenty-four hours and resolve it within fifteen days from its receipt.
- **Ensuring online safety and dignity (especially of women) users:** Intermediaries are directed to remove or disable access withing 24 hours of receipt of complaints of sexual contents.

- Such a complaint can be filed either by the individual or by any other person on his/her behalf.
- **Categorization of social media intermediaries in two categories:** to encourage innovations and enable growth of new social media intermediaries by reducing their compliance requirement.
  1. **Social media intermediaries and**
  2. **Significant social media intermediaries**
- Government is empowered to notify the threshold of user base that will distinguish between social media intermediaries and significant social media intermediaries.
- **Additional compliance mechanism for Significant social media intermediaries: they are mandated to-**
  - **Appoint a Chief Compliance Officer** (responsible for ensuring compliance with the Act and Rules) and a **Nodal Contact Person** for 24x7 coordination with law enforcement agencies. Both shall be a resident in India.
  - **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.
  - **Identification of the first originator of the information (by messaging service providers):** would be required in case of an offence related to sovereignty and integrity of India.
  - **Mandatory physical contact address** in India published on its website or mobile app or both.
  - **Voluntary User Verification Mechanism:** to be provided to users who wish to verify their account.
  - Appropriate mechanism to be provided to users to contradict removal/disablement of their content by the significant social media intermediaries.
- **Removal of Unlawful Information/fake news:** by the intermediaries after receiving the actual knowledge in the form of a court order or by an authorized government officer.

#### Issues associated with the rules concerning social media intermediaries

- **Depriving intermediaries from their right to be heard in case of disagreement:** as intermediaries are expected to take down content within 36 hours upon receiving orders from the Government.

- **Violates right to free speech and expression:** which is a fundamental right under Article 19 of the constitution as these rules fix the Government as the ultimate adjudicator of objectionable speech online.
- **Issue with traceability of originator of the information: previously,** end-to-end encryption of user content and messages resulted in lack of access to intermediaries, hence, immunity from government dictate to provide access to these contents.
- **Violates right to privacy:** by imposing a mandatory requirement of traceability, which will break this immunity, thereby weakening the security of the privacy of these conversations.
- **Lack of legal protection for privacy:** as country does not have a dedicated privacy law, which may result in unhindered violation of citizens' privacy under the guise of these rules.
- **Excessive compliance burden:** especially on the small and new platforms may hinder innovation and growth of new players in this space.

#### Way forward

- **Accommodating the differences:** by ensuring participation of and deliberation with all the concerned stakeholders while forming the rules.
- **Strengthening the privacy infrastructure in the country:** by enacting a comprehensive data security law. In this context, there is a need to expedite the passing of the personal data protection bill, 2019.
- **Providing statutory backing:** by widely debating and deliberating the issue with experts and stakeholders and putting it on parliamentary platform for its legislative scrutiny. This will also enhance its acceptability among all stakeholders in particular and people in general.





## Improvement in education: United District Information System for Education Plus (UDISE+) Report

### Context:

- Recently, the Ministry of Education released the **UDISE+ report 2019-20** for school education in India.

### Key Points:

#### On GER

- The Gross Enrolment Ratio (**GER**) for **school education has improved** for all levels in 2019-20 as compared to the previous year.
- The GER, of **both boys and girls**, has seen a significant improvement.
- Between 2012-13 and 2019-20, the Gender Parity Index (GPI) at both secondary and higher secondary levels have improved.

#### On Facilities

- The number of schools with **functional electricity, functional computers, internet facilities, handwash facilities** has improved incredibly.

#### On Teacher Pupil Ratio

- The teacher-pupil ratio has increased** at all levels of school education.

### Significance of the report:

- GER and teacher-pupil ratio are important indicators of education improvement in any country. An increase in these parameters indicates an increase in footfalls in the schools, which implies a **social inclination towards education**.
- An increase in toilets, drinking water facilities, electricity indicates steps towards robust infrastructure, which implies the government's efforts towards providing **effective education**.

### Steps taken by the government to increase GER:

- Right to Education Act, 2009** has not only increased the GER but also decreased the drop-out rate
- For the comprehensive solution, **Samagra Shiksha Abhiyaan** was launched. It caters to the needs of students from class 1 to class 12.
- Schemes like **Beti Bachao Beti Padhao, Mid-day meal scheme and Kasturba Gandhi Balika Vidyalaya** have ensured that girl children should get efficient and timely education.

- To give quality education to rural areas, **Navodaya Vidyalayas** were established. Even now, they set a high standard in school education.
- Showing affirmative action, the government focussed on tribal education through schemes like the **Aspirational district programme** and **Eklavya Model Residential Schools**.

### Limitations of the steps taken by the government:

- Annual Survey of Education Report (ASER) 2018** is an indication that GER should not be the only criteria to decide improvement in education. The report found that only around 50% of the children enrolled in Std V can read an Std II level book.
- Kasturirangan Committee** reported that
  - majority of the teachers lacks proper quality and proper training.
  - We have a substandard pedagogy.
  - We have a low focus on educational aspects of early childhood.
- The funds allocated to education still hovers **around 3% of the GDP**.
- COVID-19 has **widened the digital divide** between rural and urban areas, as reported by ASER 2020.

### Steps needed:

- Higher education:**
  - Develop world-class research institutions to attract students from around the world. Programs like the **Institute of Eminence** should be implemented properly.
  - Provide apprentice opportunities to graduates through schemes like Scheme for Higher Education Youth in Apprenticeship and Skills (**SHREYAS**).
- Primary education:**
  - Increase remuneration to teachers.** Example- Bhutan increased the salary of teachers and doctors to an amount greater than that given to a civil servant. This increases the status of teachers and the attrition rate would decrease.
  - NITI Aayog, in **Strategy for New India @75**, recommended **spending 6% of its GDP** on education, by 2022.
  - Make education an integral part of programs like the **Integrated Child Development Scheme**.
- We more research institutions apart from **TIFR, IISc and Homi Bhabha Centre for Science Education**, and we need more interaction between such institutions and teaching universities.



- We need to make the undergraduate program more research-based.
- Teacher training should form an important part of the school curriculum. Programs like National Initiative for School Heads and Teacher's Holistic Advancement (NISHTHA) are a welcome step.
- For vocational education, **National Skills Qualification Framework** should be expedited upon.

### Way Forward

**National Education Policy 2020** is a comprehensive policy, which aims to address every issue our education system is facing. Implementing it in letter and spirit will not only help us reap the benefits of **demographic dividend**, but also help us achieve the targets under **SDG 4**.

### Government of NCT of Delhi (Amendment) Act, 2021

#### Context:

- **The Government of National Capital Territory (GNCT) of Delhi (Amendment) Act**, passed by the Parliament, has come into force recently.
- It amends Sections 21, 24, 33 and 44 of the Government of National Capital Territory of Delhi Act, 1991.

#### Features of the GNCT of Delhi (Amendment) Act, 2021:

- **Strengthening the position of the Lieutenant-Governor (L-G) of Delhi:**
  - **Prior approval of the L-G:** before taking any executing action based on decisions taken by the Cabinet or any individual minister.
  - **Restriction on laws passed by the Assembly:** Act provides that the term "government" referred to in any law made by the Legislative Assembly will imply LG of Delhi.
  - **Widening the discretionary powers of L-G:**
- **Rules of Procedure of the Assembly:** Rules made by Legislative Assembly to regulate the procedure and conduct of business in the Assembly shall be consistent with the Rules of Procedure and Conduct of Business in the Lok Sabha.
- **Limits the powers of Assembly in administrative decisions:** Act prohibits the Legislative Assembly from making any rule to enable itself or its committees to:
  1. Consider the matters of day-to-day administration of the NCT of Delhi and
  2. Conduct any inquiry in relation to administrative decisions.
 It also provides that all such rules made before its enactment will be void.

#### Criticism:

- **Compromise the spirit of Federalism:** as many of the above features seem to give priority to L-G of Delhi (appointed by President of India) over elected Delhi government.
- **Affecting governance of Delhi:** as elected government has to take prior consent of the L-G, which may affect speed and efficacy of the governance.
- **Lack of any timeline for L-G to give his/her opinion:** A politically motivated L-G could exploit this loophole to hamper elected government's various administrative functions.
- **Impact on Committees:** Prohibiting Committees to conduct inquiries in relation to the administrative decisions (an extremely broad exception) completely negates the ability of committees to function effectively as the Assembly's advisors and agents.

#### Constitutional provisions: inserted by 69<sup>th</sup> Constitutional Amendment Act

- **Article 239AA:** provides that the Union Territory of Delhi be called the National Capital Territory of Delhi and its administrator shall be known as Lt. Governor.
  - creates a legislative assembly for Delhi which can make laws on subjects under the State List and Concurrent List except on these matters: public order, land, and police.
  - provides for a Council of Ministers for Delhi consisting of not more than 10% of the total number of members in the assembly.
- **Article 239AB:** provides that the President may by order suspend the operation of any provision of Article 239AA or of all or any of the provisions of any law made in pursuance of that article. This provision resembles Article 356 (President's Rule).

- This will also affect quality of quality of legislative work emanating from the Assembly.
- **Against supreme court's 2018 judgement:** In the Government of NCT of Delhi vs Union of India and Another in 2018 case, the SC held that:
  - The LG's concurrence is not required on issues other than police, public order and land.
  - That any differences between them should be resolved keeping in view the constitutional primacy of representative government and cooperative federalism.
  - Made it extremely difficult for the L-G to refer such matters to the President.

**Union government's justification:**

- **Aimed to clear ambiguities:** in the roles of various stakeholders and provide a constructive rules-based framework for stakeholders within the government of Delhi to work in tandem with the Union government.
- **Provides Rules-based framework:** which is important given that Delhi is also our national capital and carries the symbolism that comes with being the seat of the sovereign power.

**Way forward:**

- **Defining the time-limit for L-G to give his opinion:** this will reduce the possibility of misuse of powers by L-G under political influence and help in effective functioning of the elected government.
- **Upholding constitutional Principles of cooperative federalism in letter and spirit:** by giving adequate space for elected government of Delhi, representing the will aspirations of the people of Delhi.
- L-G should act in the spirit of constitutionalism instead of undue narrow political interest of concerned political party at the Center.
- Interest of people of NCT of Delhi should be the guiding principle for both L-G and elected representatives of the Delhi assembly.

**Competition Commission of India: India's Anti-trust Regulator****Context:**

- Recently, Competition Commission of India has accused Amazon of concealing facts and making false submissions when it sought approval for a 2019 investment in a Future Group unit.

**Competition Commission of India (CCI)**

- **About:** The Competition Commission of India (CCI) was established in March 2009 (established in 2003 but became fully functional in 2009) by Government of India under the Competition Act, 2002 for the administration, implementation, and enforcement of the Act.
  - It is a **statutory and quasi-judicial body** and works under the **Ministry of Corporate Affairs**.
- **Competition Act, 2002:** it repealed and replaced the **Monopolies and Restrictive Trade Practices Act, 1969 (MRTP Act)**.
  - Under the Act, the Competition Commission of India and the Competition Appellate Tribunal (COMAT) have been established.

- The Act prohibits anti-competitive agreements, abuse of dominant position by enterprises, and regulates combinations (acquisition, acquiring of control, and Merger and acquisition), which causes or likely to cause an appreciable adverse effect on competition within India.
- In 2017, functions of the COMAT were subsumed under National Company Law Appellate Tribunal (NCLAT).
- **Composition:** it has a chairperson and 6 Members appointed by the Central Government.
  - These members are appointed for 5 years or 65 years of age (whichever comes first). However, these members are eligible for reappointment.
- **Objectives and functions of CCI:**
  - To Eliminate practices having adverse effect on competition
  - To Promote and sustain competition
  - To Protect the interests of consumers
  - To Ensure freedom of trade in the markets of India
  - To Establish a robust competitive environment through:
    - ◆ Proactive engagement with all stakeholders, including consumers, industry, government and international jurisdictions.
    - ◆ Being a knowledge intensive organization with high competence level.
    - ◆ Professionalism, transparency, resolve and wisdom in enforcement.

**Powers of the CCI:****It derives following authority from the competition Act 2002-**

- It can inquire about the acquisition or combination to understand if there is any appreciable adverse effect on competition.
- CCI has the authority to notify organizations that sell to India if it feels they may be negatively influencing competition in India's domestic market.
- It can issue of interim orders in case of anti-competitive agreement.
- The central or state government may reference the commission for the opinion. But that is not binding on the Government.
- CCI gets its powers to execute orders against any unlawful trade practices.

**Functions of CCI:** It takes following measure to achieve its objectives-

- Ensuring that markets work for the benefit and welfare of consumers.
- Ensure fair and healthy competition in economic activities in the country for faster and inclusive growth and development of the economy.
- **Implement competition policies:** aimed at ensuring most efficient utilization of economic resources.
- **Ensure effective relations and interactions with sectoral regulators:** to ensure smooth alignment of sectoral regulatory laws in tandem with the competition law.
- **Awareness generation:** among all stakeholders to establish and nurture competition culture in Indian economy.

**Why we need an Anti-trust regulator?**

- **To protect the interests of the consumers:** competition leads to fair pricing of goods and services. Lack of competition leads to monopoly, harming the interests of the consumers. CCI ensures that interests of the consumer are secured by ensuring fair competition in the market.
- **To provide an equal opportunity to all enterprise by ensuring fair competition:** by thwarting the big players in a particular industry from misusing their position to avoid competition.
- **To counter market distortion:** Markets are prone to failures and distortions, and various players can resort to anti- competitive activities such as cartels, abuse of dominance etc. CCI aims protects consumers against these malpractices.

**Way forward**

- CCI is an important institution to ensure fair competition in Indian economic system. This will boost confidence of various stakeholders in the Indian market. In this context, government should further strengthen institutional and functional capacity of the CCI by ensuring adequate financial and human resources.

### The Editorial Analysis: An emigration Bill that does not go far enough

**Context**

- The Emigration Bill, 2021 presents a long overdue opportunity to reform the recruitment process for nationals seeking employment abroad.

**Background**

- **Prevalence of serious exploitative practices:** such as large recruitment charges, contract substitution, deception, retention of passports, non-payment or underpayment of wages, poor living conditions, discrimination and other forms of ill-treatment.
- **Emigration Act, 1983:** governs labour migration from India. It has following provisions to protect the interests of the migrants-
  - Provides for hiring through government-certified recruiting agents — individuals or public or private agencies.
  - Outlines obligations for agents to conduct due diligence of prospective employers,
  - Sets up a cap on service fees, and
  - Establishes a government review of worker travel and employment documents (known as emigration clearances) to 18 countries mainly in West Asian states and South-East Asian countries

**Key features of the Emigration Bill, 2021**

- **Purpose:** to consolidate and amend the law relating to emigration of citizens of India.
- **Positives features:**
  - It launches a new emigration policy division,
  - Establishes help desks and welfare committees,
  - Requires manpower agencies to conduct pre-departure briefings for migrants, and
  - Increases accountability of brokers and other intermediaries who are also involved in labour hiring.
- **Concerning features:**
  - **Lacks a human rights framework:** which is needed to secure the rights of migrants and their families **and** these frameworks are part of progressive regimes.
  - **For example, Philippines:** which recognizes the contributions of Filipino workers and “the dignity and fundamental human rights and freedoms of the Filipino citizens”.
  - **Provision for charging services fee from migrants:** the Bill permits manpower agencies to charge workers’ service fees, and even allows agents to set their own limits.



- **Against International Labour Organization (ILO) convention:** which provides that it is employers, not workers who should bear recruitment payments including the costs of their visas, air travel, medical exams, and service charges to recruiters.
- **Exorbitant charges paid by Indian workers for jobs,** found surveys conducted by the ILO and World Bank. For example, Indians in Saudi Arabia paid on average \$1,507 in recruitment charges; their counterparts in Qatar paid \$1,156.
- **Gives power to government authorities:** to punish workers by cancelling or suspending their passports and imposing fines up to ₹50,000 for violating any of the Bill's provisions. This could have following implications-
- **Criminalizes the choices migrant workers make** either because they are unaware of the law, under the influence of their recruiters, or simply desperate to find a decent job.
- **Recruiters and public officials could misuse the law** to instil fear among workers and report or threaten to report them.
- **Discourages complaints of abuse:** especially by migrants in an irregular situation due to fear that they could be fined or have their passports revoked.
- **Does not adequately address the gender dimension of the migration:**
  - Women having limited agency in recruitment compared to their counterparts, are more likely to be employed in marginalised and informal sectors and/or isolated occupations in which labour, physical, psychological, and sexual abuse are common.
  - Inadequate labour representation or civil society engagement in the policy and welfare bodies that the bill sets up.

**Conclusion:** The Ministry of External Affairs must draft a clearer purpose which explicitly recognises the contributions of Indian workers, the unique challenges they face, and uphold the dignity and human rights of migrants and their families.

### Election Commission of India (ECI)

#### About ECI

- The ECI is an autonomous constitutional authority responsible for administering Union and State election processes in India.
- The body administers elections to the Lok Sabha, Rajya Sabha, and State Legislative Assemblies in India, and the offices of the President and Vice President in the country.

#### Background

- ECI was established on 25<sup>th</sup> January 1950 as per the provisions of the constitution of India.
- **Till 1989, it was a single member commission** which was further expanded to three members by the **Election Commissioner Amendment Act 1989**.
- Later in 1990, two posts of Election Commissioners (EC) were abolished but again in 1993, president appointed two more EC. Since that time, ECI has one CEC and two EC.

#### Constitutional provisions

- **Part XV of the Indian constitution:** deals with elections, and establishes a commission for these matters.
- **Article 324 to 329 of the constitution:** deals with powers, function, tenure, eligibility, etc. of the commission and the member.

Articles related to Elections	
<b>324</b>	Superintendence, direction and control of elections to be vested in an Election Commission.
<b>325</b>	No person to be ineligible for inclusion in, or to claim to be included in a special, electoral roll on grounds of religion, race, caste or sex.
<b>326</b>	Elections to the House of the People and to the Legislative Assemblies of States to be on the basis of adult suffrage.
<b>327</b>	Power of Parliament to make provision with respect to elections to Legislatures.
<b>328</b>	Power of Legislature of a State to make provision with respect to elections to such Legislature.
<b>329</b>	Bar to interference by courts in electoral matters.

#### Organizational structure

- ECI consists of one Chief Election Commissioner and two Election Commissioners.
- **Secretariat:** It has a dedicated secretariat located in New Delhi.

- At the state level, ECI is assisted by the Chief Electoral Officer (CEO) who is generally an IAS rank officer.
- At the constituency level, ECI appoints a Returning Officer and Assistant Returning Officer in consultation with the government of State or Union Territory as the case may be.

#### Appointment and removal

- **Appointment:** Chief Election Commissioner and Election Commissioners are to be appointed by the President of India. They have a fixed tenure of six years, or up to the age of 65 years, whichever is earlier.
  - They enjoy the same status and receive salary and perks as available to Judges of the Supreme Court of India.
- **Removal process:**
  - **Chief Election Commissioner:** S/he is to be removed from office only through a process of removal similar to that of a Supreme Court judge for by Parliament.
  - **CEC** can be removed from office through a motion adopted by Parliament on grounds of '**Proved misbehavior or incapacity**'. Removal requires **special majority of 2/3rd members present and voting** supported by **more than 50% of the total strength** of the house.
  - **Other Election Commissioners:** they can be removed from the office by the President only on the recommendation of the CEC.

#### Key functions

- **Constitutional duty of the ECI:** to ensure that the elections held in free and fair manner.
  - For this purpose, it is entrusted with powers and duties to superintends, directs and controls the conduct of elections.
- ECI decides the election schedules for the conduct of periodic and timely elections, whether general or bye-elections.
- It is responsible for granting **recognition to political parties & allot election symbols** to them along with settling disputes related to it.
- It is **responsible registering** political parties for the purpose of elections and grant them status of **national or state parties** on the basis of their poll performance.
- **Advisory jurisdiction:** The Commission advises the president (governors in case of state legislature) on the matters relating to post-election disqualification of sitting members of Parliament.

- It also advises the president whether elections can be held in a state **under president's rule** in order to extend the period of emergency after one year.
- **Model Code of Conduct (ECI):** Issued by the ECI in election for political parties and candidates so that the no one indulges in unfair practice or there is no arbitrary abuse of powers by those in power.

#### Key concerns about ECI

- **Concerns related to independence and partiality:** as Constitution does not mention any qualifications for CEC and ECs. This gives scope for favoritism in the appointment process.
- **Lack of security of tenure to Election Commissioners (EC):** as constitution of India provides security of tenure only to CEC and not to the other ECs who can be removed by the recommendation of CEC.
- **Post-retirement appointment by the governor:** as the constitution doesn't bar retiring election commissioners from accepting further job opportunity from the government.
  - This may lead to government having undue influence in the ECI as it can offer post retirement opportunities to sitting ECs in the exchange of some political favor in the elections.
- **Increasing mis-trust and deterioration faith in the institution of Election Commission:** mainly due to lack of transparency in the selection process of CEC and ECs and removal of the ECs.
  - This mistrust has been further intensified due to allegations of EVMs malfunctioning, getting hacked and not registering votes which corrodes general masses trust from the institution.

#### Way forward

- **Ensuring transparency in the selection process:** by forming a collegium headed by the Prime Minister with the Speaker of the Lok Sabha, the Leader of Opposition in the Lok Sabha, Law Minister and the Deputy Chairman of the Rajya Sabha as members (recommended by the 2<sup>nd</sup> ARC).
  - This collegium should recommend CEC and EC candidates for the consideration of the President.
- **Provide security of tenure to Election Commissioners similar to CECs:** by amending the Constitution of India.
- **Provide cooling-off period** for retiring members of the EC to ensure functional autonomy and institutional independence of the ECI.

## International Relations

### Crafting a unique partnership with Africa

#### Context

As Indian-African relationship enters the post-pandemic world, it is vital to prioritize and channel resources into augmenting partnership in agriculture.

#### Potential of African Agriculture Sector: Opportunities for India

- **Unexplored potential:** as Africa has 65% of the world's uncultivated arable land, employing over 60% of the workforce, and accounting for almost 20% of Sub-Saharan Africa's GDP.
- **Potential of start-up ecosystem in African Agri-tech sector:** which saw a 110% growth between 2016 and 2018. Last year, despite the pandemic, the sector witnessed a record increase in investments.
- **Crucial for future global food security:** as it has large untapped and underdeveloped agricultural sector which can help in ensuring global food security if properly utilized.

#### Analyzing Chinese Engagement in Africa

- **Important partner:** China is among Africa's largest trading partners and single biggest creditor. Its corporations dominate the region's infrastructure market and are now entering the agri-infra sector.
- **Access to Africa's natural resources, its untapped markets and support for 'One China:** are the primary drivers of Chinese engagement in the region.
- **Built industrial parks and economic zones in Africa:** which are attracting low-cost, labour-intensive manufacturing units from China.
- **Training and capacity building:** African agriculture experts, officials and farmers are provided opportunities to augment skills and be trained in China.
- **Focus on market capture:** by building 'brand China' to dominate the African market, even at the cost of short-term profits. This is being done through-
  - Pushing Chinese standards in host countries.
  - Laying critical telecommunications infrastructure by Chinese tech companies.
  - Investment by venture capital funds in African fintech firms,
  - Expansion of smaller Chinese enterprises across the region.

#### India-Africa agricultural cooperation

- **Multifaceted Engagement:** with projects being implemented under Indian lines of credit, capacity-building initiatives, and cooperation in a range of sectors.
- **Institutional and individual capacity-building initiatives:** Such as
  - The India-Africa Institute of Agriculture and Rural development in Malawi,
  - Extension of soft loans and Supply of machinery,
  - **Acquisition of farmlands:** Indian farmers have purchased over 6,00,000 hectares of land for commercial farming in Africa.
  - **The presence of Indian entrepreneurs in the African agricultural ecosystem.**
- **Co-operative mechanism:**
  - **Direct cooperation with Indian states:** for example, Kerala government trying to meet its steep requirement for raw cashew nuts with imports from countries in Africa to complement its limited production capacity.
  - There is a proposal to create jointly-owned brand of **Africa-Kollam cashews.**

#### Learning from Chinese mistakes

- **Negative perception about Chinese engagement:** due to insular diaspora, lopsided trade, looming debt, competition with local businesses accompanied by greater political and socioeconomic interlinkages.
- **Disconnect with ground realities:**
  - In some cases, the technology taught in China is not available locally and in others, there is inability to implement lessons learnt due to the absence of supporting resources.
  - **Language barrier:** Larger commercial farms run by Mandarin-speaking managers and the presence of small-scale Chinese farmers in local markets aggravates socio-cultural stresses.

#### Way forward

- **Promote cooperative and collaborative mechanisms:** on the lines of proposed African-Kollam Cashew brand in other areas of agriculture sector.
- **Incentivize Indian industries:** to tap into African agri-business value chains and connecting Indian technology firms and startups with partners in Africa.

- **Effective Impact Assessment:** of the existing capacity-building initiatives in agriculture for India to stand in good stead.
- **Creating demand-led skill development program:** by drawing up a Country-specific and localised curriculum.
- India should be **mindful of increasing Chinese presence** because Beijing's model, if successful here, could be heralded as a replica for the larger global south.

**Conclusion:** India has consistently chosen well to underline the development partnership to be in line with African priorities. It is pertinent, therefore, that we collectively craft a unique modern partnership with Africa.

### Understanding the India- Afghanistan Conundrum

#### Context

- **US has been pulling out its troops** from Afghanistan. Consequently, it has resulted in Taliban increasing influence over the Afghan territory and **India is wary** of some of the events that followed.

#### Recent developments

- India **pulling out its nationals** from its consulate in Kandahar, Afghanistan.
- **Killing of India-based journalist** in Afghan territory.

#### Why is India worried?

- India is cementing relations with Afghanistan **since last 20 years**.
- India has many developmental works in the country including **Salma dam, parliament building, Zeranj Delaram highway**, etc.



#### Why Afghanistan is important?

- **Strategic Importance**
  - Considering the **worsening India-Pakistan relations**, Afghanistan becomes important for India.
  - India could **keep an eye on terrorists** at Pakistan soil and its supporters in Afghanistan.
  - The country has Central Asian Republics to the North, Pakistan to its East, and through Iran and Pakistan the Indian Ocean deeper south.
- **Economic importance**
  - Afghanistan provides us an **alternate door**—completely bypassing Pakistan—to reach the world.
  - The proposed **INSTC** (The International North-South Transport Corridor) of India with Iran and Russia could increase connectivity with Afghanistan and Central Asia.

#### India's importance for Afghanistan

- India's generous humanitarian aid and infrastructural development assistance like building hospitals, enhancing power infrastructure has put it considerably **high position** in the eyes of Afghan people.
- India has always followed a principle of non-intervention in the internal affairs of Afghanistan and always abided by the principle of **Doha agreement**—not letting any foreign country use Afghanistan for perpetuating violence.
- India's engagement has not been at military level, this makes **India a desirable country** for Afghan people.

#### Why Taliban will keep relations with India intact?

Even if Taliban forms government, there is **little chance** that it will return like 1989 because:

- There are **more educated people** in Afghanistan as compared to 1990s.
- Technology, social media will make the **activities of Taliban global**. The group would not like to be tagged as a terrorist organisation if they need to govern Afghanistan.
- The **goodwill that India holds** for the Afghan citizens are immense, it is unlikely that Taliban will do anything will could endanger India's position vis-a-vis Afghanistan.
- India holds a **sizeable population of Afghans** today. Taliban is well aware of importance of India in the development of Afghanistan.



### Way forward

- India should **remain in contact** with the Taliban through indirect channel, if not directly.
- India's strategy to **build relation with Afghanistan population** should continue.
- India could play a proactive role in stabilising Afghanistan through enhanced advocacy of **6+1**—Afghanistan, Iran, Russia, China, India, Pakistan and the US— dialogue.
- India's **soft power diplomacy** has reaped multiple benefits so far. Taliban to be a people's government, must acknowledge India's importance in maintaining the stability of Afghanistan.
- Though establishment of a democratic Afghan government is in the best interest of India, being ready for any eventuality in future will only strengthen our approach to deal with this issue comprehensively.

## India – European Union relations

### Context

- European Union (EU) plans to institute a **“green pass” (also called EU digital Covid Certificate)** from July 1, 2021.
- India has warned EU to introduce a “reciprocal policy” only allowing ease of travel for those European countries that recognise Indian vaccines Covishield and Covaxin.

### Green Pass and associated issues:

- **Green pass:** It is a digital proof showing that a person has either been vaccinated against Covid-19, received a negative test result or recovered from Covid-19.
  - The certificate is both in digital and paper format, comes with a QR code is free of charge, is in the national language and English, is safe and secure and valid in all EU countries.
  - **Four approved vaccines by European Medicines Agency (EMA):** Comirnaty of Pfizer/BioNTech; Moderna; AstraZeneca's Vaxzervria; and Janssen by Johnson & Johnson.
- **Associated Concerns:**
  - **Exemption of Indian vaccines:** like Covishield (the version of the AstraZeneca vaccine being manufactured in India by SII) and Covaxin (manufactured by Bharat Biotech), are not eligible for the EU Digital Covid certificate or “green pass”.

- **Protest by the African Union:** on the grounds of promoting “inequality” for those from India and “lower-income” countries for whom the Covishield vaccine was the “backbone” of the international COVAX alliance programme.

### India-EU relations: Areas of cooperation

- **Connectivity partnership:** launched during India-EU virtual summit held in May, 2021.
  - **Aim:** to ensure connectivity in the sectors like digital, energy, transport, and people-to-people and enabling the two countries to pursue sustainable joint projects in regions spanning from Africa, Central Asia to the wider Indo-Pacific.
- **Economic Importance:**
  - The EU is India's third largest trading partner, accounting for €62.8 billion worth of trade in goods in 2020 or 11.1% of total Indian trade after China (12%) and the US (11.7%).
  - The EU is the second-largest destination for Indian exports (14% of the total) after the USA.
- **Strategic partnership:** India is a suitable partner for India to balance growing influence of China while EU can be a reliant partner of India to ensure stability in the Indo-Pacific theatre.
- **Climate change:** India can learn from a new industrial strategy called the ‘Green Deal’ of EU to render its carbon-emission neutral by 2050.
  - **Cooperation:** between India and EU to achieve the goals of Paris Agreement and Other Sustainable Development targets.
- **Cooperation on global health:** EU member-states have rallied to support India by sending critical medical supplies in the last few weeks in recognition for the role India had played in helping others over the last year.

### Challenges ahead:

- **Economic issues:**
  - **Unmet potential:** India is the EU's 10th largest trading partner (1.8% of EU total trade in goods in 2020) well behind China (16.1%), the USA (15.2%), and the UK (12.2%).
  - **Bilateral Broad-based Trade and Investment Agreement (BTIA):** started in 2007, is yet to be finalized. Recently both India and EU had agreed to accelerate the process.

- **Restrictive regulatory environment:** Technical barriers to trade (TBT), sanitary and phyto-sanitary (SPS) measures, and discrimination based on legislative or administrative measures by India, affect a wide range of sectors, including goods, services, investment and public procurement.
- **Strategic issues:** Growing influence of China in economic and other strategic sectors in EU is a concern for India.
  - ◆ EU recently signed a Comprehensive Agreement on Investment with China, which has drawn a lot of criticism and its ratification has now been suspended because of diplomatic tensions.

#### Way forward:

- **Geo-Economic Cooperation:** India can pursue EU countries to engage in Indo-Pacific narrative, geo-economically if not from security prism.
- **Potential for economic growth:** India can leverage EU's market to expand its export market, resulting in more sustained growth in the national income and industrial sector as suggested by Economic Survey, 2020-21.
  - **Conclude India-EU BIT treaty:** to achieve full trade potential of the two countries.
- **Investment in clean energy technologies:** EU can help India in achieving carbon-neutral status by 2050 by investing in clean energy technologies.
  - They can also cooperate for implementing clean energy technologies in other resource-deficient countries.
- **Combating after effects of COVID-19 pandemic:** EU shall include Indian vaccines under its green pass system to ensure barrier free movement of vaccinated Indian people, resulting in quick recovery in good and services trade between the two countries.
  - Ensuring resilient medical supply chains: should be the priority for both India and EU in order to fight against current COVID-19 pandemic and other future health challenges.

### India- Maldives Relations

#### Context

- In a letter, India has sought Maldivian government action on persons behind media reports and social media posts "attacking the dignity" of its resident diplomats, while seeking greater security for the officials.

#### Cooperation between India-Maldives:

- **Geo-strategic cooperation:**

- Both are partners in Important regional (like SAARC AND SASEC) and international groupings (Various UN organizations and other groupings).
- Maldives is an important part of India's **Neighbourhood-first policy** and its aspiration to become a dominant global player in world affairs.
- Similarly, Maldives also follows '**India first policy**', showing importance of India in its
- **Toll gate in Indian Ocean region (IOC):** Given the strategic location of the Maldives, it acts as a toll gate in the IOC, hence very important for securing India's geostrategic and economic interests.
- Nearly 50% of India's external trade and 80% of its energy imports transit these sea lanes of communications (SLOCs) in the Arabian Sea.

- **Economic cooperation:**

- **Tourism sector:** contributes to major portion of Maldives economy. In this context, a large portion of tourists are from India, hence boosting Maldives economy.
- **Indian citizens participate in the Maldivian workforce and contributes to the economy.**
- **Medical tourism:** From Maldives to India, especially in super-speciality healthcare sector due to liberal visa regime offered by India.

- **Defence cooperation:**

- **Training of Maldivian National Defence Force (MNDF):** provided by India, meeting around 70% of their defence training requirements.
- **Operation Cactus, 1988:** India deployed its military on the request of Maldives government for successfully thwarting coup attempt by rebels.
- **'Ekuverin':** a joint military exercise between India and Maldives.
- **India as a 'Net Security Provider' in the region:** Maldives is a very important part of many Indian initiatives like SAGAR initiative, Mausam Initiative, etc. directed towards achieving its goal of becoming net security provider in the region.

- **Cultural affinity:** People from both the countries share many common traditions, cultural practices and religious beliefs, helping people to connect.
- India provides opportunities to students from Maldives in its various prestigious education institutions.
- **Disaster Management:**
  - **Tsunami 2004:** India was the first country to respond to help Maldives counter this disaster.
  - **Operation NEER:** Under it, India immediately rushed bottled drinking water to Malé utilising Air Force aircraft and Navy ships during 2014 male water crisis.
  - **COVID-19 Crisis:** India provided essential medical supplies during the times of need and later also supplied Vaccines under its '**Vaccine Maitri Initiative**'.

#### Friction areas in the relation:

- **India Out campaign:** by opposition party (under previous president Abdulla Yameen) against New Delhi's massive developmental funding for creating physical, social and community infrastructure in Maldives.
  - **Frequent political instability and opposition parties playing India card:** to win political brownie points in the elections, could cause damage to India's interests in the region.
- **China factor:** Rising influence of China in Indian ocean region is a matter of concern for India. In this context China's growing presence in the Maldives threatens India's geo-political interests in the region.
  - The Maldives has emerged as an important 'pearl' in China's "String of Pearls" construct in South Asia.
- **Terrorism and Radicalization of youth:** Growing radicalization in the world has also affected youths of the Maldives. There has been growing instances of Maldivian nationals joining ISIS and Pakistan-based madrassas and jihadist groups.
  - **Socio-economic uncertainty in the backdrop of political instability:** has acted as a fuel for disheartened youth and driven them towards terrorist activities.

#### Way forward:

- **Continue to follow non-interference policy in the internal matters:** like it did in the previous presidential election, will help in further strengthening trust among people of Maldives towards India.
- **Cooperate on global issues:** Issues like Climate Change, of which both Maldives and India are facing major existential challenge and Terrorism which threatens internal peace and security. On such issue both countries should continue to work together for ensuring a peaceful and sustainable future.
- India should continue to work for a more prosperous, stable, peaceful and sustainable Maldives.
- **Use of diaspora and cultural aspects:** like films, music, and people to people contacts should be employed by India to strengthen its relations with

### Protests in Cuba

#### Context

- The people in Cuba are protesting against the government due to the prevailing economic situation and the mishandling of the COVID-19 pandemic.

#### Key points

- **About Cuba**

- Cuba is a Latin American country under an authoritarian communist regime for the last six decades.
- It is primarily a Spanish speaking population and has a GDP of around \$ 100bn.
- The majority of the population in this country follows Christianity.

- **About the protest**

- The protest started due to the economic crisis, which is worst since the fall of the Soviet Union.
- People took to the streets due to food shortages, rising cases of COVID-19 and severe electricity blackouts in the country.
- These domestic issues, coupled with the economic sanctions put by the US government, under Trump, has further exacerbated the situation.
- The COVID-19 followed by the nationwide lockdown has put a strain on the people who depended on the tourism sector—particularly the taxi drivers and the tradesmen.



### • Steps by the government

- The government allowed private businesses to operate in most sectors of the national economy, an unusual measure from a communist country.
- The authorised industries have seen a sudden rise and the majority of them are held privately.
- The government has accused the US-based supporters of fuelling the protests.

### Reaction from the world

- US President, Joe Biden, came out in support of the Cuban people and supported their call for 'freedom'.
- Canadian Prime Minister, Justin Trudeau, however, gave a mild response and called for a peaceful solution to the ongoing protest.
- While Russia warned against outside interference over the protests.

### Significance

- The magnanimity of the protest and the international reaction that followed, has brought the island country into the limelight.
- The contradictory responses of the US and Russia have reminded of the Cuban crisis of 1962, the epicentre of the Cold War.

### Cuban Missile Crisis

- After the failed Bay of Pigs invasion, which was aimed at overthrowing Fidel Castro's government in Cuba, Castro asked for help from the Soviets against any future US aggression.
- Khrushchev, the President of the Soviet, installed nuclear weapons in the country, which were directed towards the US.
- Khrushchev argued that it was for the protection of Cuba, while the hidden objective was to alter the global power in favour of the Soviets.
- After the US got to know about these developments, its President, J.F.Kennedy, established a naval blockade to prevent more missiles from reaching Cuba and asked the Soviets to remove those already established.
- This whole episode is referred to as the Cuban Missile Crisis.

### How did it end?

- The crisis ended with a peace deal between the US and Russia, whereby both the countries agreed to reduce the tensions. However, Cold War was far from over. This crisis has further amplified the arms build-up of both the countries, which ended only after the disintegration of the Soviet Union.

## Economy

### Agricultural Exports from India: Recent Performance, Challenges and Solutions

#### Context

- According to a recent report published by WTO (World Trade Organisation) on the trends in world agricultural trade in the past 25 years, **India has entered the top 10** list of the countries exporting agricultural produce in the year 2019.

#### Key points

- India with **3.1% share in global Agri exports** replaced New Zealand (9th) as the largest exporters across the globe.
- This achievement is mainly contributed to the sizable share in the export of **rice, cotton, soya beans and meat**.
- India became the **top exporter of rice** by overtaking Thailand. Similarly, India is also the **third-largest cotton exporter**, and the fourth-largest importer in 2019.

- Despite the pandemic, India stepped in to meet increased demand & emerged as a significant global supplier of food & other essential agricultural products.

#### Government support

- **Export Promotion Schemes** of Agricultural & Processed Food Products Export Development Authority (**APEDA**), Marine Products Export Development Authority (**MPEDA**), Tobacco Board, Tea Board, Coffee Board, Rubber Board and Spices Board to boost the exports of agricultural produce.
- **Agriculture Export Policy, 2018** was launched to double the exports from present \$ 30 bn to \$ 60 bn by 2022 and \$ 100 bn thereafter, and integrate the farmers with global chains.
  - It can also help achieve the target to **double the farmers income** by 2022.



- **Transport and Marketing Assistance for Specified Agriculture Products** scheme for providing assistance for the international component of freight, to mitigate the freight disadvantage for the export of agriculture products, and marketing of agricultural products.
- The Government has several schemes to promote exports, including exports of agricultural products, viz. Trade Infrastructure for Export Scheme (TIES), Market Access Initiatives (MAI) Scheme, Merchandise Exports from India Scheme (MEIS).
- The Government has allowed **100% FDI** in the activities of agriculture through the automatic route.

### Challenges

- **Lower yield** of agricultural crops as compared to the world average. Also, the **increase in landholdings** leads to decrease in average farm size, which further intensifies the issue.
- **No dedicated study**, till date, has been undertaken that can estimate the long-term impact of agricultural exports.
- Trading across border is considered to be a risky affair. Farmers have reservations about the way market works.
- **Pro-consumer bias** of government hurts agricultural exports. For example- putting export restrictions on imported food items prevents food inflation but also discourages the farmers.

### Solutions

- Government should consider giving **infrastructure status to agricultural value chains**, such as warehousing, pack-houses, ripening chambers, and cold storage, etc. It would increase the credit flow in the sector.
- **Village level procurement centres** should be created as recommended by NITI Aayog.
- Improve lab to land connectivity. **Krishi Vigyan Kendras (KVKs)** should be trained to focus on the export-ability of the crops.
- Creation of a **Green channel clearance** for perishable agro products in road, air, and freight cargo stations can reduce the regulatory delays.
- **Regional production belts** should be established. It can be done by linking the Mission for Integrated Development of Horticulture (MIDH) scheme and Self-Help Groups.

### Way forward

- India performance in global agriculture basket can be improved further if certain issues are properly resolved. Focussing on agriculture export can contribute significantly to doubling farmer income by 2022.

## Bad Bank: Importance And Criticism

### Context

- Recently, Ministry of Finance has launched a **Bad Bank for stressed assets** as a measure to clean up bank books.

### What is a bad bank?

- It is place like an **Asset Reconstruction Company (ARC)** where a **struggling financial institution** can put assets it wants off its own books to eventually sell or unwind.
- Bad Bank then takes such bad loans, manages them and **finally recovers the money**.
- Unlike commercial banks, **bad bank is not involved in lending and taking deposits**.
- Many global lenders set up such divisions **after the 2008 financial crisis**.

### History

- In 1988, **US-based Mellon Bank** created the first bad bank after which the concept was replicated in many developed and developing countries.
- Last year, **China appointed a new state-owned bad-loan manager** to overcome the ill-effects of the pandemic.
- Even in India, it is **not a new concept**.
- Under the **SARFAESI Act, 2002**, ARCs were created to buy bad loans from banks and recover cash from the defaulted borrowers.



### How it will work?

- Banks will, at first, transfer those assets to the said bad bank with a **100% provision** on its book and then, based on their experience, they will decide on **transferring assets** with less than 100 per cent provisioning at a later date.
- It is being envisaged that out of the total amounts recovered, certain percentage will be in the form of **security deposits**.
- Although these receipts will reside in the bank balance sheets, they will bear a **zero-risk weight**, and will carry full government guarantee for a specified period of time.

### Benefits

- It helps **expedite the process** of debt restructuring by reducing the number of lenders who must agree to a proposed deal.
- It makes **easier for foreign funds** to build controlling positions in the debt of a firm by allowing them to negotiate with a single seller.
- placing **non-core assets** in a separate division can help the process of restructuring become more efficient and transparent as it will provide investors with financial disclosures to better track the progress of a lender's overhaul and hold management accountable.
- Putting the assets in the bad bank **frees up capital** that can be used to bolster a firm's financial strength or be redeployed to more profitable businesses.
- In case it is a separate entity, it can **also allow a bank to clean up its balance sheet**, stem losses and protect its depositors.

### Criticism

- Creation of bad bank is more **like shifting the problem** rather than solving it. Creating bad bank without governance reforms in banking sector will not give the desired result.
- Government, from time to time, infuses money through **bank capitalisation** to compensate the write-offs. In such a situation, the reason for the creation of bad bank is unjustified.
- The price at which bad banks will buy the bad loans will **not be market-determined**. It will inhibit price discovery.
- Banks will continue **reckless lending practices**, without any commitment to reduce NPAs. It might create a moral hazard in the economy.

### Way forward

- Creation of a bad bank is a **necessary but not sufficient** measure to reform the banking sector. It must be supported by other governance measures to help banking sector contribute more to the economy.

## Data Localisation: Advantages and Challenges

### Context

- **Visa** becomes the **first global financial services** company to comply with RBI's data localisation mandate.

### Data Localisation: What is it?

- Data localisation is the act of **storing data** on any device physically present **within the borders** of a country. As of now, most of these data are stored, in a cloud, outside India.

### Developments around the world

- Data localization comes in various forms. Where some countries enact **blanket bans** on data transfers, many are **sector specific**, covering personal, health, accounting, tax, financial, mapping, government, telecommunications, e-commerce and online publishing data.
- According to European Union GDPR (**General Data Protection Regulation**), companies have to keep the data secure inside the EU and if the data is to be transferred outside of the EU, then it can **only be transferred** to countries that have signed up to equivalent privacy protection.
- While **Australia** mandates data localisation for **health sectors**, **Canada and Russia** mandates the same for **all personal data**.
- Similarly, while **China** mandates data localisation for **personal, business and financial data**, **South Korea** does it for **geospatial and map data**.

### Developments in India

- **Srikrishna Committee** recommended that at least one copy of personal data will be stored within the Indian territory. Moreover, critical personal data will be stored in India only.
- **Data Protection Bill 2018** has a provision where the Central Government shall notify the critical personal data that shall only be processed in a data centre located in India.
- **Draft National E-Commerce Policy** recommends that 2-year sunset period will be given to the companies to adjust with the data localisation.

### Advantages

- **Protection of personal and financial information** of the country's citizens and residents from foreign surveillance and giving local governments and regulators the jurisdiction to call for the data when required.
- This aspect has gained importance after a spate of lynching across states in India was linked to **WhatsApp rumour**.
- **Facebook sharing user data** with Cambridge Analytica, which is alleged to have influenced voting outcomes.
- It is essential for **national security**. Storing of data locally is expected to help law-enforcement agencies to access information that is needed for the detection of a crime or to gather evidence.
- Where data is not localised, the agencies need to rely on **mutual legal assistance treaties** (MLATs) to obtain access, delaying investigations.
- On-shoring global data could also create **domestic jobs** and skills in data storage and analytics.

### Challenges

- Maintaining multiple local data centres may entail significant investments in infrastructure and **higher costs for global companies**, which is why they seem to be up in arms against these rules.
- India **lacks efficient infrastructure** for data collection and their management.
- These **protectionist policies** have a spill-over effect on the other countries and every country will try to follow suit, making it difficult for the companies to manage data.
- The geographical location of data centres provides no guarantee that the **encryption keys** will also be placed within the national boundaries.
- Strict data localisation norms can be seen as a **trade barrier** and lead to retaliatory measures.

### Way forward

- We need an integrated, **long-term strategy** for data localisation policies.
- Data localisation should integrate a **range of perspectives**—social, political and economic.
- An optimal **regulatory and legislative framework** need to be developed for data processors in the country.
- Adequate attention needs to be given to the interests of **India's Information Technology enabled Services (ITeS)** and **Business Process Outsourcing (BPO)** industries, which are thriving on cross border data flow.

## Digital Rupee: India's National Digital Currency

### Context

- **The Reserve Bank of India** is likely to soon kick off pilot projects to assess the viability of using **digital currency (Digital Rupee)** to make wholesale and retail payments to help calibrate its strategy for introducing a full-scale **central bank digital currency (CBDC)**.
- A high-level inter-ministerial committee (**SC Garg Committee**) set up by the Finance Ministry had recommended the introduction of a CBDC with changes in the legal framework including the RBI Act.

### About National Digital Currency or central bank digital currency (CBDC)

- It is simply the digital form of a country's fiat currency. Instead of printing paper currency or minting coins, the central bank issues electronic tokens. This token value is backed by the full faith and credit of the government.
- It is denominated in a sovereign currency and appears on the balance sheet of a nation's central bank.
- It can be converted/exchanged at par with similarly denominated cash and traditional central bank deposits of a nation.

### Need for NDC in India

- **Curtail malpractices**: anarchic design of existing cryptocurrencies, wherein their creation and maintenance, both are in the hands of the public, results in many malpractices, requiring a creation of a national digital currency, maintained and supervised by the RBI.
  - Malpractices: like tax evasion, terror funding, money laundering, etc.
- **Protecting citizens**: as huge volatility associated with the cryptocurrencies due to fact that they are not tied with any asset or currency, often results in harming the financial health of the citizens.
- **Keeping pace with the advancement in the technology**: A Bank for International Settlements (BIS) survey reports that **around 80 per cent of the 66 responding central banks said they have begun working on central bank-issued digital currency (CBDC) in some form**.
  - Moreover, **China** has already implementing its **Digital Renminbi** pilot project and aiming to implement it on large scale in the country.



- **Reducing Dependency on Dollar:** India can use its Digital Rupee for trade with its strategic partners, hence reducing the need for dollar.

#### Associated concerns

- **Cybersecurity threats:** Cyberspace is vulnerable to spyware and other threats. This is important as an attack on national digital currency can cripple Indian economy or may even lead to the bankruptcy.
  - Technology failures that are commonplace, especially in the government, may further harm the economy and become vulnerable to attacks from cyber criminals.
- **Inadequate digital literacy in India:** as per Digital Empowerment Foundation in 2018 report, around 90% of India's population is digitally illiterate. So, without creating enough literary awareness introduction of digital currency will create a host of new challenges to the Indian economy.
- **Privacy issues:** as the digital currency must collect certain basic information of an individual so that the person can prove that he's the holder of that digital currency. This is a significant concern, especially in the absence of any individual privacy law in India.
- It may also create various associated challenges in regulation, tracking investment and purchase, taxing individuals, etc.

#### Benefits of CBDC

- **Help in complete monetary policy transmission:** as presently banks do not completely transmit changes in the monetary policy, resulting in ineffectiveness of RBI's policies.
  - Directly influenced creation and supply flow using a Digital Rupee will immediately reflect the effects of policy changes instead of relying on commercial banks to make those changes when they deem fit.
- **Creating a cashless society:** as government has taken many initiatives like Aadhar, Digital India Mission, demonetization, etc. aimed at creating a digital and cashless society. In this context, digital rupee will prove a milestone in creating a cashless and digital society.
- **Reduce the cost of currency management:** as it will enable real-time payments without any inter-bank settlement.
  - Reduction in currency-to-GDP ratio due to introduction of CBDC, will substantially reduce the cost of printing, transporting and storing paper currency.

- **Opportunity to private players:** As the state-backed digital currency can provide investor/consumer protection, the private can confidently invest in the associated infrastructure without any doubts over its regulation. This will improve the services to people.

#### Way forward

- **Create digital infrastructure and safeguards:** in terms of ensuring digital literacy, advance cyber security infrastructure, and enact data privacy legislation.
- **Keeping pace with futuristic technology and other nations:** as CBDCs will have far-reaching implications on the future of digital finance, including cryptocurrency and digital securities.
  - Countries that lead CBDC race will most certainly gain a significant advantage and may have the possibility to spearhead many of the other innovations that come from this technology.
- **Introduce Digital rupee with adequate safeguards:** as creation of a Digital Rupee will provide an opportunity for India to empower its citizens and enable them to use it freely in our ever-expanding digital economy and break free from an outdated banking system.

#### Exports from India

##### Context

- India has registered highest quarterly merchandise exports of \$95 billion during the first quarter (April-June) of 2021-22, surpassing the previous record of \$90 billion in January-March 2020.
- Government aims to achieve the target of \$400 billion merchandise exports in FY22.

##### Indian Exports: Trends and Analysis

- **Global share:** At 13th position globally, India has a share of 2.2% in world exports of goods and services—nearly a fifth of China (10.6%).
  - India's trade to GDP ratio has surpassed that of China since 2008, but our imports outweigh exports significantly.
- **Export as a % of GDP:** the share of India's exports of goods and services in GDP has declined steadily from 24.5% in 2011 to 18.7% in 2019.
- India has traditionally a merchandise trade deficit and trade surplus in services.
- **Government's aim:** merchandise exports target of \$500 billion for FY23 and \$1 trillion in the next five years.



**Why India should focus on export?**

- **Creates a virtuous cycle of employment, income growth and demand led industrial growth:** as export will drive domestic manufacturing led employment and per-capita income. This will increase the disposable income resulting in demand driven economic growth.
- **Export and economic growth:**
  - Pre-1991, a 3.5% growth rate was associated with export growth of about 4.5%.
  - However, India's GDP growth of over 6% after 1991 was associated with real export growth of about 11%.
- **Improved sovereign credit rating:** Export growth will help in reducing India's trade deficit, nudging credit rating agencies to improve India's credit rating resulting in lower interest loans and economic growth.

**Challenges of Indian Export ecosystem:**

- **Government's focus on domestic consumption-led growth model:**
  - **Poor growth in per capita income:** will limit the consumption of goods and services.
  - **COVID-19 effect:** resulted in poor public spending, tax cuts, private investment, etc., limiting the scope for domestic demand led growth.
- **Disconnect with Global Value Supply Chains (GVC):** Unlike major exporting countries of east and south-east Asia, India is poorly connected with GVCs. This limits its export potential.
  - This results in low penetration in high-income countries.
- **Focus on limited export destination:** This results in high competition and fewer growth opportunities.
- **Poor domestic infrastructure and clear policy direction:** for example, India spends more than 14% of its GDP on the logistics, resulting costlier products for international markets, diminishing their competitiveness.
- **Lack of awareness:** There is information gap among people of India, resulting in fewer people participating in the export market.
- **Technical barriers to trade:** Imposed by many developed countries to reject exports from India. For example, use of sanitary and phytosanitary measures by European Union countries to reject various Indian goods.

**Way forward**

- **Export Focus should be on**
  - **High potential manufacturing sectors:** like electronics, apparels, pharma, among others and
  - **High value services:** in ICT, healthcare, and business and professional services.
  - **Specialization in few products:** will result in competitive advantage for those Indian products.
- **Diversification of export markets: to countries around the world instead of focusing on few destinations.**
  - Government can help exporters by preparing a list of potential goods and services demanded by a particular importing country.
- **Improving domestic infrastructure:** will result in better connectivity between remote locations and ports and airports, leading to reduced logistics cost and competitive products in the international markets.

**Financial Action Task Force (FATF):  
Composition, Functions, and Its Fight against  
Terror Financing****Context**

- Recently, Pakistan has accused India of 'using' FATF for political ends against Pakistan.
- Pakistan had accused that India had pushed for Pakistan's grey listing in 2018 for "political" rather than "technical" reasons, which continues to date.

**Key points**

- **About FATF:** It is the **global money laundering and terrorist financing watchdog**.
  - FATF is an **inter-governmental body**, established in **1989 during the G7 summit in Paris, France**.
  - **Secretariat:** located at the **Organization for Economic Cooperation and Development (OECD) headquarters in Paris**.
  - **Organizational composition:** It currently comprises 37 member jurisdictions and 2 regional organizations. It also has observers and associate members.
  - India is a **member** of the organization **since June 2010**. It had earlier acquired '**Observer**' status at FATF in **2006**.
  - **The FATF Plenary:** is the decision-making body of the FATF which **meets thrice a year**.

- **FATF President:** S/he is a senior **official appointed by the FATF Plenary** from among its members, having a **two-year tenure**.
  - ◆ S/he **convenes and chairs the meetings of the FATF Plenary and the Steering Group**, and he/she **oversees the FATF Secretariat**.
  - ◆ The President is the **principal spokesperson** for the FATF and **represents the FATF externally**.

### Role and Functions FATF

- **As a policy-making body:** works to generate the necessary political will to bring about national legislative and regulatory reforms in these areas.
- **The FATF reviews money laundering and terrorist financing techniques** and continuously strengthens its standards to address new risks, such as the regulation of virtual assets, which have spread as cryptocurrencies gain popularity.
  - It also **works to stop funding for weapons of mass destruction**.
- **Protection:** The role of the FATF is **to protect the integrity of the financial system**, and enhance its transparency, which contribute towards global security.
- **Monitoring function:** it monitors countries to ensure they implement the FATF Standards fully and effectively, and holds countries to account that do not comply.
- **Developed standards/recommendations:** develops and sets global policies, standards, best practice, and guidance to ensure a coordinated global response to prevent organized crime, corruption and terrorism.
  - It conducts and publishes expert operational and strategic studies on risks, trends, and methods.
  - **Coordination:** these standards help authorities coordinate with each other and go after the money of criminals dealing in illegal drugs, human trafficking and other crimes.
- **FATF prepares two lists:**
  1. **Grey List:** Countries that are considered safe haven for supporting terror funding and money laundering are put in the FATF grey list.
    - This inclusion serves as a **warning to the country that it may enter the blacklist**.
    - **Pakistan was retained in the grey list** because it was unsuccessful in prosecuting the top leadership of **UN Security Council-designated terror groups** which includes **Lashkar-e Toiba, Jaish-e Mohammad, and Al Qaeda**.

2. **Black List:** Countries known as **Non-Cooperative Countries or Territories (NCCTs)** are put in the blacklist. These countries support terror funding and money laundering activities.
  - The FATF revises the blacklist regularly, adding or deleting entries.
  - Countries **like North Korea** are included in this list.

### Importance of FATF

- **Prevention:** though the FATF Blacklist carries no formal sanction under international law, in reality, a jurisdiction placed on the FATF Blacklist often found itself under **intense financial pressure**. Hence, it prevents jurisdictions from prohibited activities under the FATF recommendations.
- **Fighting terror financing and money laundering:** It has been at the forefront of international efforts to fight money laundering and combating finance to terrorism.
  - Its efforts have been in conjunction with relevant resolutions of the United Nations Security Council (UNSC).
  - It has made it difficult to access financial resources for terror organizations that are causing these crimes against humanity.
- **Promoting cooperation:** it has intensified cooperation with bodies such as the United Nations, the IMF, the World Bank and the G-20 Finance Ministers and Central Bank Governors on the issues of terror financing, money laundering and other corrupt practices.
- **Awareness generation:** FATF has gained credibility as a professional organization, ensuring increased awareness regarding the challenges being faced by the global financial system, and human security issues like terrorism.

### Way forward

- FATF is a global watchdog for ensuring a transparent and clean global financial ecosystem where there is no place for money being used for illegal activities like terror financing, money laundering and production of weapon of mass destruction.
- As a standard setting body, it puts pressure on terrorism funding and money laundering by blacklisting a country which cuts the lifeline of terrorist activity supported by the state through blockage of funds.

## Financial Stability Report

### Context

Recently, RBI has released its bi-annual Financial Stability Report. The report highlighted state of Indian economy in the times of pandemic.

### Key Points

- The policy support has helped the country **mitigate the impact of COVID-19**. The dent on balance sheets of financial institutions of India has been much lower than the earlier projection. True picture will, however, emerge once the relief measures end.
- **Banks are relatively less affected by the pandemic-induced disruptions**, due to various government measures.
- **Public finances have been affected** due to increased expenses and substantial reduction in tax revenue. Moreover, the debt-to-GDP ratio is also rising.
- Our country's net Foreign Portfolio Investment (**FPI**) **increased** due to
  - Stable financial market
  - Favourable economic prospects
  - Easy liquidity condition
- Our **foreign exchange is at all time high** crossing \$ 600 billion, thus providing respite from the global turbulence.
- **MSME sector has seen a growth in FY 21** largely due to ECLGS (Emergency Credit Line Guarantee Scheme).
- In the pandemic, **bank deposits have increased** reflecting precautionary savings by the people.
- **The Gross Non-Performing Assets (GNPA), as of March 2021, has been lower** than what was earlier predicted in June 2020. The actual GNPA is 7.5% against the predicted 14.7%.
- Credit growth may take time to recover due to the sluggish demand, which has been a cause of concern since before the pandemic hit us.
- **Capital to risk-weighted asset ratio (CRAR) has increased to 16%** in March 2021.
- **Systemic Risk Survey**, which depicts risks of Indian financial system has put the overall risk perception to be '**medium**'.
- RBI has asked for a comprehensive approach to deal with climate risk assessment in India, similar to the steps taken by the developed countries.

## What is Financial Stability Report

- It is a report published by RBI **twice in a year**.
- It presents picture of the **status of financial sector** in our country.
- It looks at bank operations and their sustainability to provide credit support to different sectors.

### Significance of the report

- It provides coverage of **macro-financial risks**, which our economy is facing.
- The data allows RBI to assess the state of domestic economy.
- RBI conducts **Stress Tests** of banks to determine whether banks have enough capital, if there is a situation of negative economic shock.

## Fishery Subsidy

### Context

- A key meeting of trade ministers at the World Trade Organisation (WTO) is underway in Geneva where negotiations are on the matter of **declining global fish stock**, which is also encouraged by government subsidies.

### Key points

- The negotiations were first started at the **Doha ministerial conference** in 2001.
- The mandate was further expanded **in 2005 at the Hong Kong meet**, which also included call for prohibiting certain forms of fisheries subsidies that contribute to overcapacity and overfishing.
- In the WTO's 11th Ministerial Conference held in **Buenos Aires in 2017**, negotiators were given the task of finding ways to eliminate subsidies for illegal, unreported and unregulated fishing.
- It was also aimed to secure pacts to **prohibit certain forms of fishery subsidies** that contribute to overcapacity and overfishing.
- Proposal is to **prohibit subsidies for fishing in exclusive economic zones (EEZ) and completely exempt fishing activities in territorial waters**, which is considered as 12 nautical miles from the sea shore.

### Reasons for subsidy prohibition

- According to a report by The UN Food and Agriculture Organization (FAO), the world's fish ecosystem is at a risk of collapsing due to **overexploitation**.
- One of the key reasons for the above stated problem is **massive subsidies** provided by governments each year across the globe per year, which largely benefits large-scale fishing operations while discriminating against smaller ones.

### Importance of fisheries in India

- Fisheries sector provides livelihood to about **16 million fishermen** at the primary level, apart from contributing hugely to the value chain.
- The share of the fisheries sector in the total GDP (at current prices) increased from 0.40 percent in 1950-51 to **1.03 percent in 2017-18**.
- India ranks among the **top seven producing countries** of global capture fisheries, which account for almost 50% of total captures.

### India's view

- While developed nations like the US and UK are pushing for total ban on fisheries subsidies, India, along with some developing countries, argues for an **equitable and balanced outcome**.
- It is because our country provides support to its **small and marginal fishermen** who depend on the sector for sustenance.
- Such a measure would be detrimental to the **food security** of the nation.
- India also argues that such treatments will amount to dilution of **Special and Differential treatment Rights** of developing countries—a provision that provides flexibility to developing countries for implementing these agreements.
- Unlike some developed nations that provide billions of dollars of subsidies to their fishermen, India's subsidy amounts to **only about Rs 770 crore**—that too on things like fuel and boats.
- India will oppose developed nations' proposal of forging government-to-government access agreements wherein two countries can **sign a pact for fishing activities**. India is critical of such agreements as they will lead to **exploitation of least developed nations**.
- India is also of the view that developed nations should assume **more responsibility** for the huge amounts of subsidies and should cut it down to reduce overfishing.

### Way forward

- Subsidies per se **do not lead to trade distortions**. Subsidies for food security needs to be treated differently than the subsidies for exports.

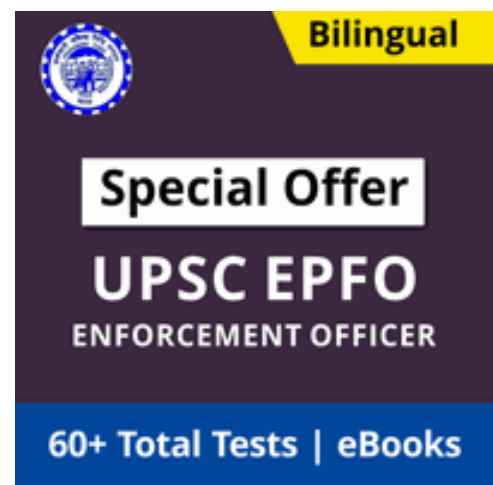
### Insolvency and Bankruptcy Code (Amendment) Bill 2021

#### Context

- Recently, the parliament has passed the **Insolvency and Bankruptcy Code (Amendment) Bill 2021**, replacing the Insolvency and Bankruptcy Code (Amendment) Ordinance 2021.
- It amends the **Insolvency and Bankruptcy Code, 2016**.
- It has **introduced 'pre-packs' as an insolvency resolution mechanism for Micro, Small and Medium Enterprises (MSMEs)**.

#### Pre-packaged insolvency resolution Process (PIRP)

- **Definition:** PIRP is an alternate insolvency resolution process for Micro, Small and Medium Enterprises (MSMEs) with defaults up to Rs 1 crore.
  - The pre pack is merely an informal way of providing a corporate rescue plan for which approval from the National Company Law Tribunal (NCLT) will be sought.
- **Minimum default amount** for initiating the PIRP is 1 lakh rupees which can further be increased up to Rs 1 crore by the central government.
- **Eligibility for debtor:** PIRP may be initiated in the event of a default by a corporate debtor classified as an MSME under the MSME Development Act, 2006.
- **Initiation process:** the corporate debtor himself is required to apply to the adjudicating NCLT who must approve or reject the application for PIRP within 14 days of its receipt.





- **Approval of creditors:** Prior approval of 66% of creditors (who is not related to debtors) is to be taken by the debtors before submission of a resolution plan in the NCLT.
  - The debtor must also propose the name of the resolution professional (RP) who then must be approved by at least 66% of the financial creditors.
- **Moratorium:** During PIRP, the debtor will be provided with a moratorium under which certain actions against the debtor will be prohibited.

#### How it is different from the corporate insolvency resolution process (CIRP)?

- **Initiation:** Unlike CIRP, PIRP may be initiated only by debtors. The debtor should have a base resolution plan in place.
- **Duration of resolution process:** For PIRP, it is limited to a maximum of 120 days while in CIRP, it is 270 days. At the end of March 2021, 79% of the ongoing insolvency resolution proceedings had crossed the 270-day threshold.
- **Control:** In CIRP, a resolution professional takes control of the debtor as a representative of financial creditors but in PIRP, the existing management retains control, ensuring minimal disruption of operations relative to a CIRP.
- **Initiation of CIRP:** At any time from the PIRP commencement date but before the approval of the resolution plan, the committee of creditors may decide to terminate PIRP and instead initiate CIRP in respect of the debtor (by a vote of at least 66% of the voting shares).

#### Advantages of PIRP

- Quick resolution process, aimed to be completed within 120 days.
- Offers a way for MSMEs to restructure their debts.
- **Reducing the workload of NCLT:** by providing an alternate speedy mechanism CIRPs, for debt resolution.
- **Business friendly:** results in minimum disruption to businesses as control remains under existing management, unlike CIRPs where resolution professionals take over the control of the business.
- **Prevents job losses:** Under PIRP, there is less probability of liquidation. Thereby ensuring continuity of business and resulting in fewer layoffs for workers.

#### Associated challenges with the PIRP

- **Difficulty in meeting timeline:** It is challenging for CoC (Committee of Creditors) and NCLT to complete the process within just 120 days (similar to CIRP mechanism).
- **Issue with NPA status:** firm can restructure its outstanding debt through a PIRP with the existing management retaining control. So, the NPA status of the company's account with lenders may not be automatically upgraded under RBI guidelines.

#### Way forward

- The amendment will be beneficial for the small players and would encourage time-bound resolution of stressed assets similar to the IBC model. However, further improvement and augmentation is necessary for its success.
- Government should **increase the manpower of NCLT along with setting up regional centres** aimed at ensuring easy access to resolution mechanism and timely completion of the resolution process.
- Introduction of PIRP is a step in the right direction. Its **scope and coverage must be widened** in order to ensure optimum benefits to businesses and Indian economy.

### MSME definition expanded: Importance and Associated Challenges of MSME in Indian economy

#### Context

The Ministry of MSME (Micro, Small and Medium Enterprises) has revised the MSME guidelines and included **retail and wholesale traders** under the ambit of MSME. Earlier, only manufacturing and service enterprises were considered MSME

#### Why it is a significant move

- It was a long-standing demand of the trader associations and will support the community to survive, revive and thrive.
- It will benefit the traders to avail the benefits of **priority sector lending** of RBI.
- The decision is expected to benefit **2.5 crore** retail and wholesale traders in the country.
- It will allow them to register themselves in the **Udyam Registration portal** and avail the benefits of various schemes of the ministry.

## Classification of MSME

	Micro	Small	Medium
Investment	1 crore	10 crores	50 crores
Turnover	5 crores	50 crores	100 crores

## Importance of the MSME sector in the Indian economy:

- **Employment provider:** It employs around 120 million people. It is the country's **second-largest** employment generating sector, second only to agriculture.
- **The backbone of the Indian economy:** MSME sector, in our country, act as a bulwark against the global economic shocks, besides providing an **entrepreneurial base** to a large section of people.
- **Checks rural-urban migration:** A stable and growing MSME sector reduces immigration in urban areas, thus reducing the **resource stress** in these areas.
- **GDP and exports:** the sector contribute **6.11%** of the manufacturing GDP and around **25%** of the service sector GDP and around **9%** of the overall GDP. Moreover, they constitute around 45% of India's overall exports.
- **Inclusive Development:** MSME ensures **equitable distribution** of national income and checks regional imbalances. Around 20% of MSMEs are based in rural areas, which indicates a significant rural workforce in the sector.

## Challenges faced by the MSME:

- **Finance crunch:** It is estimated that more than **90% of the MSME lacks credit facilities from formal institutions**. They rely more on informal institutions like money lenders, who charge exorbitant interest rates.
- **Lack of basic infrastructure:** Though MSME has been growing rapidly, the lack of basic facilities like **power, roads, connectivity** to towns etc have been hindering their growth potential.
- **Lack of technology:** We are, presently, in an era of a digital revolution. MSMEs, however, remains detached from technological advancements and hence produces **low-quality products with high capital**.
- **Lack of skill development and training:** MSMEs, in our country, are more like a **family business**. The skills get carried over by the next generation and the process goes on. With time, their adaptability to the present situation remains a cause of concern.

- **Ripple effect of a few government steps:** The steps like **Demonetisation, GST and the COVID-19 induced lockdown**, though had noble intentions, have adversely affected the operation of MSMEs

## Steps needed:

- **Improve the penetration of institutional credit:** The government has been expediting this through measures like the **Mudra scheme, Stand-up India, Credit Linked Subsidy Scheme and the ECLGS**. NGOs should be roped in for better implementation of these schemes.
- **Promote Research and Development:** To align with the international standards, innovation is a must. This needs pro-active government support. Schemes like **ASPIRE** (A Scheme for Promotion of Innovation, Rural Industry and Entrepreneurship) are a welcome step.
- **Improve marketability:** The products of MSME needs to be made global, which needs skill upgrade. Schemes like **SFURTI** (Scheme of Fund for Regeneration of Traditional Industries) need to be implemented well to achieve this objective.
- **Special provisions** should be made under GST to ease the burden on this sector.
- **Improve the quality of products produced by the MSMEs.** The **Zero Defect Zero-Zero Effect** scheme needs to be implemented well.

## Production Linked Incentive Scheme: A Complete Analysis

### Context

- Union Cabinet has approved the Production Linked Incentive (PLI) Scheme for **speciality steel**.

### Key points

- The duration of the scheme will be from **2023-24 to 2027-28**.
- It is expected to bring in an investment of approximately **₹40,000 crores**.
- It will give employment to about 5,25,000 people of which 68,000 will be direct employment.
- By becoming Aatmanirbhar in producing speciality steel, India will **move up the steel value chain** and come at par with advanced steelmaking countries like Korea and Japan.

### What is Speciality Steel?

- Speciality steel is value-added steel wherein **normal finished steel is worked upon** by way of coating, plating, heat treatment, etc to convert it into **high value-added steel** that can be used in various strategic applications like Defence, Space, Power, apart from the automobile sector, specialized capital goods etc.

### What is PLI Scheme?

- It was launched as a part of the **National Policy on Electronics 2019**.
- The objective is to give incentives of **4-6% to electronic companies** especially for the companies which are indulged in manufacturing electronic components like mobile phones, diodes, transistors, among others.

### Expansion of the scheme

- Initially, the focus of the scheme was on **three sectors**—Mobile Manufacturing and Specified Electronic Components, Critical Drug Intermediaries, Active Pharmaceutical Ingredients, and Manufacturing of Medical Devices.
- In 2020, the Government decided to introduce the PLI Scheme for **another 10 key sectors**, namely, Electronic/Technology Products, Pharmaceutical drugs, Telecom & Networking Products, Food Products, White Goods (ACs & LED), High-Efficiency Solar PV Modules, Automobiles & Auto Components, Advance Chemistry Cell (ACC) Battery, Textile Products, and **Speciality Steel**.

### Advantages of this scheme

- It will **expand the present output** and will further augur the achievements. For example, Textile Industry in India is one of the largest in the world and this scheme will contribute to further growth of this sector.
- PLI Scheme will provide **low-cost indigenous raw materials** for schemes like Smart City, Digital India mission.
- It will give a **shot in the arm for the local manufacturing** units of our country.
- It will **create skilled manpower** for the masses and **reduce the unemployment ratio** as these manufacturing sectors are labour-intensive.

### Challenges

- Higher cost manufacturing** in India. According to a study by Ernst & Young, if the cost of production of one mobile is Rs.100, then the effective cost of manufacturing the mobile is 79.55 in China, 89.05 in Vietnam, and 92.51 in India (including PLI).
- The **market share of domestic companies** is not promising. In such cases, this scheme could benefit international companies more than domestic companies.
- These schemes might get **challenged in WTO** for contravening the **national treatment principle**.

### Way forward

- The scheme must focus on **both the service and manufacturing** sectors and, both the sectors must not be seen as a trade-off.
- The focus should also be on **the co-location of the companies** to balance the regional economic growth.
- The Government need to cooperate with the states and encourage them not to indulge in **trade-restrictive practices** like job reservation for locals.
- Implement **structural reforms** like land reforms, single-window clearance etc.
- India, to be an **international hub of manufacturing companies**, the PLI scheme must be coupled with other systemic reforms.

### Project BOLD and Importance of Bamboo in India

#### Context

KVIC (Khadi and Village Industries Commission) has launched Project BOLD (**Bamboo Oasis on Lands in Draught**), a first-of-its-kind exercise, to create **bamboo-based green patches in arid and semi-arid land zones**.

#### Key Points

- KVIC has launched this project from **Rajasthan**.
- Under this project, **5000 saplings** of bamboo species—*Bambusa Tulda* and *Bambusa Polymorpha*—has been planted on vacant and **arid land in Udaipur**, Rajasthan. Notably, the bamboo species have been specially brought from Assam.
- The step will help in preventing desertification in the country and thus meet the targets under UNCCD (United Nations Convention to Combat Desertification).
- The initiative is a part of KVIC's "**Khadi Bamboo Festival**"—a program to celebrate 75 years of independence.

### Why to choose bamboo

- Bamboo **grows very fast** and can be harvested within 3 years.
- They are famous for **conserving water** and reducing water evaporation from the land, making it perfect to grow in arid regions.

### What is bamboo

These are a group of **woody perennial evergreen plants**. Although it appears like a tree, taxonomically, it is **grass**. In India, **North-eastern states** grow around **70%** of the country's total bamboo production.

### Benefits

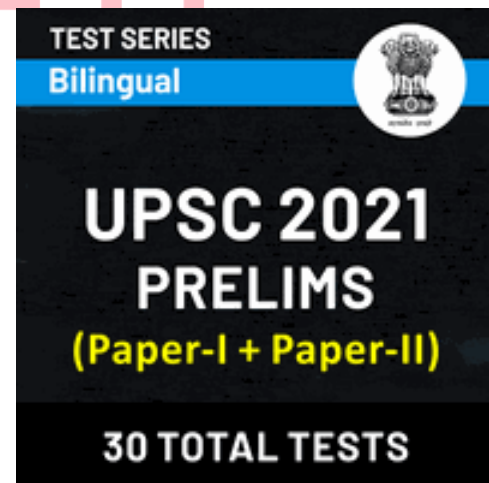
- Ecological benefit
  - It conserves water and hence can show a path for the future in the water-stressed districts of our country.
  - It could perform the function of **carbon sequestration** (Green House Gases) from the atmosphere and thus reduce global warming.
- Economic benefits
  - It contributes significantly to **sustainable development** and ensuring **food security**.
  - It can be used as a **food, a wood substitute, building and construction material, making handicrafts and paper** or, even can be used in making **artefacts**.
  - It creates **self-employment** for the farmers, hence leading to an increase in farmer's income.
  - It is part of the rural economy of many developing countries, including India. Due to its multipronged uses, it is often referred to as **poor man's timber**.
- Social Benefits
  - It ensures equity among the rural people as it benefits a large section of **women and unemployed people**.
  - Bamboo, historically, is mostly grown in tribal areas. Using bamboo can help the tribals connect with the mainstream population and hence be a part of **inclusive development**.

### Steps taken by the government to support bamboo cultivation

- **National Bamboo Mission** was launched in 2007. It emphasised mainly on propagation and cultivation of bamboo. The project, however, had limited success as it did not focus enough on bamboo's processing, product development and value-addition. Taking into consideration these limitations, a **restructured National Bamboo Mission** was launched in 2018.
- In 2017, the government passed **the Indian Forest (Amendment) Act** and relaxed the restrictions on harvesting, transit and trade of bamboo, in non-forest areas.
- The government allocated **\$200 million in the budget 2018** to support bamboo cultivation, especially in North-Eastern states.

### Way forward

- Bamboo is often referred to as '**green gold**' due to its variety of applications.
- We can use bamboo in the schemes **PMAY (PM Awas Yojana)** as a construction material.
- **Bamboo-based cuisines** are very famous in Asian regions. We need to tap such opportunities, which could contribute to boosting tourism.
- We can **learn from China** how it achieved success in growing bamboo forests on barren slopes.





## Social Issues

### Migrant labour Crises: Supreme Court Guidelines, Issues and the Proposed Solutions

#### Context

- Recently, Supreme Court has **laid down a few guidelines** while pronouncing its judgement in the migrant labour case.

#### The guidelines

- The Supreme Court has asked the states to **formulate their migrant policies** and guarantee food grains to the migrants.
- The court also directed that **dry ration** should be provided to migrants, who are returning to their homes.
- It said that **identity proof should not** hinder the assistance of migrant labourers.
- It asked the **states to arrange for the transportation** of migrant labourers.

#### Who is a migrant?

- According to the International Organization for Migration (IOM), a migrant is a person who is moving or has moved across an international border or within a state away from his/her habitual place of residence.
- They constitute **20% of the total workforce** and contribute to around **10% of the national GDP**.

#### Why this crisis is different?

- The lockdown induced migrant crisis is an issue of **reverse migration**—people going back from urban areas to rural areas, to their homes.

#### Issues of reverse migration

- Rural areas cannot employ such a large workforce, thus leading to **disguised unemployment**.
- The industries started facing a labour shortage and they are eagerly waiting for **the reverse migration to reverse**.
- The heavy flux of labourers has brought stress to the availability of **essential resources**.

#### Migrant labour issues

- Economic issue**
  - The migrant labourers live in deprivation in urban areas due to limited opportunity, inflation and high living standard in the urban areas.

#### • Social issue

- The influx of people from 'foreign' land induces friction of the native people from the migrant labourers. The migrants, due to this reason, face social isolation in urban areas.

#### • Political issue

- Migrant labourers are always wandering in search of better opportunities. Due to this nature of employment, they are rarely able to vote. The political leaders too did not feel necessary to vouch for their just cause.

#### Government steps

- Inter-State Migrant Workmen Act, 1979** aims to prevent the exploitation of migrant labour.
- NITI Aayog** has recently prepared a draft document on policy for migrant labour.
- Two new cabinet committees have been formed to give a renewed focus on employment. One is the **cabinet committee on investment & growth** and the other is the **cabinet committee on employment & skill development**.

#### Solution needed

- Corrective measures need to be taken to **reduce the disparities and inequalities** in the development process.
- Providing **social security** to migrant labours.
- Create a **universal registration system** and, issue **smart social security** cards, as recommended by **National Commission for Enterprises in the Unorganised Sector (NCEUS)**.
- The **4 new Labour Codes** should contain special clauses for the migrant labourers.
- Need **employment guarantee scheme** for urban areas, similar to MGNREGA of rural areas.
- Need to develop the rural areas of our country to reduce **the push factors of migration**.

#### Way forward

We need a comprehensive strategy to formulate a national policy on migrant labour, which addresses the socio-economic needs of the labours holistically. This would be a step towards achieving **SDG 8**.

## Mental Health Care

### Context

- Recently, the Supreme Court asked the government to ensure that patients in mental health institutions are tested for COVID-19 and vaccinated.

### Mental health disease

- Definition:** World Health Organization (WHO) defines mental health as a state of well-being in which an individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively, and is able to make a contribution to his or her community.
  - The WHO stress that mental health is “more than just the absence of mental disorders or disabilities.”
  - Peak mental health is about not only avoiding active conditions but also looking after ongoing wellness and happiness.

### Challenges of mental healthcare in India

- Severity:** According to The Lancet report published in February 2020, there were 197.3 million people with mental disorders in India in 2017.
  - WHO estimate: Mental health illness makes about 15% of the total disease conditions around the world.
  - In 2018 the WHO labelled India as the world’s ‘most depressing country’.
- Lack of access to mental healthcare resources:**
  - Human resources for healthcare:** Low proportion of mental health workforce in India (per 100,000 population) include psychiatrists (0.3), nurses (0.12), psychologists (0.07) and social workers (0.07).
  - Poor budgetary allocation:** India is barely spending 0.5% of the health budget on the mental health sector, creating further impediments in public access to affordable mental healthcare.
  - Poor health infrastructure and lack of mental healthcare facilities:** even available mental healthcare institutions have inadequacy in terms of quality mental healthcare professionals and other infrastructural facilities.
  - According to estimates, nearly 92% of the people who need mental health care and treatment do not have access to any form of mental health care.
  - Rural-urban divide:** most of the mental healthcare facilities and professionals are located in urban areas.

- Lack of awareness and sensitivity about mental health issues:** leading to high prevalence of social stigma and abandonment of being mentally ill in India.
- Post-treatment gap:** in terms of proper rehabilitation of the mentally ill persons post his/her treatment which is currently not present.
- Role of health (COVID-19) and Economic disasters:** they further intensify and enhances the numbers and severity of the mental health problem.
  - For example, Practo (a healthcare company) reported a 665% jump in the number of mental health consultation. Further, more than two-thirds of these consultations belongs to the age of 21-40.

**Impact of Mental health conditions:** It has disastrous impacts on the suffering individual, economy and the society as shown by WHO data. For example-

- Depression:** is one of the leading causes of disability.
- Suicide:** is the second leading cause of death among 15-29-year-olds.
- People with severe mental health conditions die prematurely-** as much as two decades early – due to preventable physical conditions.
- Limits the achievements of national and global developmental goals** (including Sustainable Development Goals).
- Leads to low self-confidence and societal neglect of the suffering individuals.
- Loss of economy:** as youth population (most productive) is most affected by mental health disease, leading to loss of individual/national productivity and economy.

### Steps taken to improve the mental healthcare

- Globally:**
  - WHO:**
    - launched ‘Mental Health Atlas’ in 2017.
    - WHO Special Initiative for Mental Health (2019-2023):** Universal Health Coverage for Mental Health to ensure access to quality and affordable care for mental health conditions in 12 priority countries to 100 million more people.
  - Target 3.4 and 3.5 of the Sustainable Development Goals (SDGs)** talk about reducing mental health illness for the global community.



- **Indian government:**
  - **National Mental Health Program (NMHP), 1982:** to improve the status of mental health in India, focusing on three main components:
    1. Treatment of the Mentally ill,
    2. Rehabilitation and
    3. Prevention and promotion of positive mental health.
  - **The Mental Health Care Act (MHCA) 2017:** repealed the Mental Health Act, 1987. The Act seeks to ensure the rights of the person with mental illness to receive care and to live a life with dignity.
    - ♦ **Decriminalizes suicide under section 309 of Indian Penal Code:** by presuming suicidal person to be “suffering from severe stress”. The person will also not subject to any investigation or prosecution.
    - ♦ **Right to mental healthcare:** is provided under the Act in order to ensure access to mental healthcare facilities to suffering individuals.

#### Way forward:

- **Improving the supply side:** by ensuring adequate mental healthcare facilities, professionals and funds for treatment and care of mentally ill individuals.
- **Sensitization:** of medical professionals and people in general to eliminate stigma against mentally ill persons and re-integration in the broader society.
- **Awareness campaign and community partnership:** by forming their self-help groups of carers families along with NGO's which brings community participation and helps reduction in social stigma associated with mental illness.
- **Centre-states cooperation:** as health is a state subject, will help in effectively eliminating the mental health challenge from India.

### India's demographic opportunities and issues faced by women

#### Context

- In these troubled times of the COVID-19 pandemic, the World Population Day on July 11 brings some positive news — India has entered a demographic sweet spot that will continue for another two to three decades.
- **Drivers of economic growth and social progress:** as more than half of the India's population is under 29 years of age.

- **Sexual and reproductive health and rights (SRHR) (defined by the Guttmacher-Lancet Commission):** includes issues such as violence, stigma and respect for bodily autonomy, which greatly impact the psychological, emotional and social well-being of individuals along with SRHR.

#### India's demography: achievements

- **Stabilization of population:** due to decline in the Total Fertility Rate (TFR) (presently at 2.2 children), which will soon reach replacement level (2.1).
  - But due to 'population momentum' effect, Indian population will continue to grow.
  - **Population momentum:** occurs when a country's fertility rate declines to or below replacement level, yet the population size continues to grow due to the age structure of the population.
- **Improved rates of institutional delivery and a decline in maternal mortality ratio (MMR):** MMR has declined from 327 in 1999-2001 to 113 per 100,000 live births in 2016-18, as per Sample Registration System (SRS) data.
- **Improved family planning:** for instance, contraceptive prevalence has improved in most States (the National Health Family Survey 5 for the year 2019-20).

#### Challenges faced by women:

- **Rural-urban divide:** as TFR in rural women is higher than the national average of 2.2 children.
  - This is due to lack of formal education and poverty, as most of them live in the poorer states.
- **Limited access to SRHR:** due to pervasive negative social norms, health system barriers and gender inequality.
- **Inadequate information and access to SRH services:**
  - Two million adolescent girls (15-19 years) each year had a pregnancy, and of these, nearly 63% were unwanted or unintended (Guttmacher Institute, 2021).
  - 22.2% adolescent girls had an unmet need for contraception, according to NFHS-4.
- **Denial of bodily autonomy to women:** socially sanctioned harmful practices such as child marriage, gender-based violence are often rooted in social norms, beliefs and practices.
  - For instance, 26.8% of women aged 20-24 years are married before they turn 18, often having their first child within the first year of marriage.

- **Poor performance on The World Economic Forum's (WEF) Global Gender Gap Report (2021):** India has slipped 28 places to rank 140th among 156 countries, becoming the third-worst performer in South Asia.

#### Way forward

- **Government should -**
  - Ensure that youth of the nation is healthy, knowledgeable and skilled.
  - Provide youth with the rights and choices to develop to their fullest potential, including, and especially, sexual and reproductive health and rights (SRHR).
  - **Triggering positive ripple effects:** by placing youth, women and girls at the centre of policymaking and services.
- **Ensure adequate provisions for sexual and reproductive health (SRH) services:** as any further delays will curtail the health and well-being of women and girls, the consequences of which can last a lifetime.
- **Collaborative approach:** all sections of society must embrace this call for positive change, each doing their part, from the individual to the institution level.
- **Investment in social causes must go alongside economic progress:** as highlighted by the success of programmes such as Beti Bachao Beti Padhao (BBBP).
- **Ensuring woman bodily autonomy:** which will result in advances in her health, education, income and safety. She is more likely to thrive, and so is her family.

### Elderly Population of India: Expert Committee on Longevity Finance

#### Context

- International Financial Services Centres Authority (IFSCA) constituted an **Expert Committee on Longevity Finance Hub** to develop a roadmap for creating a Longevity Finance Hub in GIFT (Gujarat International Finance Tec-City) IFSC.

#### Key points

- According to global estimates, currently, there are **one billion people** who has age 60 or above—referred as silver generation.
- Development in medicinal science and technology will support their longevity and extend their lifespan.

- According to an estimate, by 2040, there will be **more members of the silver generation** than those under 20.
- Development of **Longevity Finance Hub** is a step towards providing them a quality life.

#### Longitudinal Ageing Study of India (LASI) Report

- *About the report*
  - The Ministry of Health and Family Welfare (**MoH&FW**) released the LASI Wave-1 Report in December 2020.
  - It was **India's first ever** and the world's largest survey to provide a longitudinal database of senior citizens to enable the government to form more responsive policies for them.
  - It covered the **population of age 45** and above.
- *Findings*
  - The number of elderly people will rise to **319 million** in 2050, growing **3% annually**.
  - **75% of the elderly people** suffer from some form of chronic disease.
  - **40% of them have some disability** issue and, 20% have issues related to mental health.
  - The **multi-morbidity conditions** are more prevalent among the silver population in the states/UTs of Kerala, Chandigarh, Lakshadweep, Goa and Andaman & Nicobar Islands.

#### Issues of elderly population

- **Economic**
  - **Poor financial status** of family often puts elderly people at the receiving end. They do not get the required nutrition and suffer from various health issues.
  - **Increase in health care cost:** With increasing age, the cost of healthcare increases. Families could not take care of their health as their situation demands, sometimes out of financial issue while sometimes due to complete insensitivity.
- **Social**
  - **Lack of space:** With increase in family member, the elderly people are often left out and are not provided requisite space.
  - **Declining moral value system:** The concept of nuclear family has reduced the importance of elderly population in the family. The social isolation has put these people in a mental stress.



**Health**

- **Chronic diseases** of elder people are another reason why they become immobile and members perceive them to be burden on the family.
- **Elderly women issues:** Women, unlike men, faces more isolation due to social isolation and some health issues specific to women

**Solution needed**

- **Change the social dynamics:** Staying connected with family and friends and making sure their financial and legal affairs are in order should be a priority for every family member.
- **Maintenance and Welfare of Parents and Senior Citizens Act 2007** should be effectively amended to make it more relevant in the present times.
- Implementation of programs like **PM Vaya Vandana Yojana, Rashtriya Vayoshri Yojana, Atal Pension Yojana** should be regularly monitored and the true beneficiary should be benefited.
- The **geriatric care health infrastructure** should be taken care of, especially in the rural areas.
- **Entertainment facilities** like libraries and clubs should be arranged at the grassroot level.
- Senior citizens should be made priority while implementing schemes like **PM Awas Yojana**.

**Way forward**

Social security comes in the **concurrent list** of if Schedule VII. This means both central and state government has the responsibility to take care of the silver generation.

The **National Policy on Senior Citizens, 2011** must be replaced with a new policy, which addresses this issue comprehensively.

**The History of Backward Classes Commission And the Sub-Categorisation of OBCs****Context**

- The Union Cabinet has recently **extended the term of the commission** for six months, for the eleventh time, to examine the sub-categorisation of OBCs.

**Background**

- Union Government constituted **Rohini Commission** under **Article 340** of our Constitution to examine the **sub-categorisation of Other Backward Classes (OBCs)** and the **equitable distribution** of benefits among the various strata.

- Earlier, under the same provision, two commissions were set up to investigate the conditions of backward classes.
  - **The first Backward Classes Commission** was set up in 1953 under the chairmanship of **Kaka Kalelkar**. Its report, however, was never implemented.
  - **Second Backward Classes Commission** was set up in 1979 under **B.P.Mandal**. The commission decided to give **27% reservation** in jobs and education to the OBCs. In 1990, the Union Government decided to implement the proposals of the commission.
  - The decision to implement the Mandal Commission met with **protests across India**. The issue was then raised in the Supreme Court. The case is often called **Indira Sawney judgement**. In this judgement, Supreme Court **upheld the 27% reservation** to OBCs. It, however, advocated not to decide upon the social and educational backwardness of a community on the **sole basis of caste**.
  - To promote equitable distribution of benefits, the concept of **creamy-layer and non-creamy layer** emerged. The judgement excluded the creamy layer from accruing the benefits of reservation.
- **National Commission for Backward Classes (NCBC)**, in 2015, gave the proposal to sub-categorise the OBCs to ensure that the benefits of reservation could reach the desired beneficiary.
- The **Constitution (102nd Amendment Act), 2018** made NCBC constitutional and inserted a new **Article 338B** in the Constitution. It was placed under the Ministry of Social Justice and Empowerment.

**OBC: Who are they?**

- They are **socially and educationally backward classes**, different from Scheduled Castes (SCs) or Scheduled Tribes (STs). **The union government maintains the list** of castes, which are to be included OBCs.

**Constitutional Provisions**

- **Article 14** of the Indian Constitution provides equality before the law. This means the government could practice affirmative discrimination to uplift the backward classes.
- **Article 16(4)** mentions that State can make any provision for the reservation of appointments or posts in favour of any backward class of citizens who, in the opinion of the State, are not adequately represented in the services under the State.

**Why sub-categorisation?**

- It will ensure that the **more deserving people**—those belonging to the **Extremely Backward Classes**—reap the benefits of reservation.
- 27% reservation to a large community would mean the **socially affluent people** are getting the benefits at the cost of those who need it.
- It will attest that **caste is not the only factor** to determine the socio-economic status of a community.
- It will **ensure equitable distribution** of government resources.

**Criticism**

- Sub-categorisation, however, is criticised as it can be used as a **populistic measure** and, community appeasement could overshadow its just cause.
- The process of sub-categorisation is **too complex** at the grass-root level. Extension of the third Backward Commission, for the eleventh time, provides a glimpse of the difficulty.

**Way forward**

- Sub-categorisation, with adequate safeguards to prevent it from becoming an electoral tool, can empower communities and bring them to par with others.

## Environment & Biodiversity

### Microplastic Pollution: Severity of the Problem, Its Impacts and Suggestive Measures

**Context**

- A new study by an NGO has found evidence of a modern-day scourge, microplastics, in the river Ganga, with **the highest concentrations in Varanasi and Kanpur, followed by Haridwar**.
  - **'Quantitative analysis of Microplastics along River Ganga'** study was conducted and published by **Delhi-based environment NGO Toxics Link**.

**Key findings of the report**

- **Microbeads** were observed in Varanasi and Kanpur, while no beads were found in Haridwar.
- The shapes and nature of the observed resins ranged from fibres to fragments, films and beads.
- Fragments were the predominant shape in all locations, followed by film and fibre.
- Their sources could be from tyres, clothing, food packaging, bags, to cosmetics with microbeads, garland covers and other municipal waste.

**About Microplastics:**

- **Microplastics** are small pieces of plastic, **less than 5 mm (0.2 inch) in length**, that occur in the environment as a consequence of plastic pollution.
- Microplastics are **present in a variety of products, from cosmetics to synthetic clothing to plastic bags and bottles**. Many of these products readily enter the environment in wastes.
- They can be **classified in two categories based on their origin-**

1. **Primary microplastics:** include microbeads found in personal care products, plastic pellets (or nurdles) used in industrial manufacturing, and plastic fibres used in synthetic textiles (e.g., nylon).
2. **Secondary microplastics:** originate from the breakdown of larger plastics. Plastic bottles, bags, fishing nets, and food packaging are some examples of the larger pieces that break down into microplastics, eventually finding their way into the soil, water and the air we breathe.

**Microplastic Pollution in the World**

- **Microplastic pollution in the Arctic:** was discovered by a study. Wind acted as transporting agent for this.
  - The study claims to be the first that contains data on contamination of snow by microplastics.
- According to an estimate, an average **human ends up consuming at least 50,000 particles of microplastics in food every year**.
- **Marine plastic pollution:** According to the International Union for Conservation of Nature (IUCN), **at least 8 million tons of plastic end up in the oceans every year**.
- Measurements of the top 200 meters of the Atlantic found 11.6 - 21.1 million tonnes of microscopic particles.
- **In India:** Average Indian consumes approximately 11 kg of plastic products in various forms every year. Though it is much less than what an American or a Chinese does, it still is a problem.

**Impacts of microplastic pollution****• On human health:**

- **Human exposure to microplastics** likely to come from airborne dust, drinking water (including treated tap water and bottled water)
- **Microplastics can reach our stomach** where they can either excreted, get entrapped in stomach and intestinal lining or move freely in body fluids such as blood, thereby reaching various organs and tissues of the body.
- **Negatively affects** nervous system, hormones, immune system and have cancer-inducing properties.

**• On marine ecosystem:**

- **On marine organisms:** when consumed, microplastics stuck in their digestive tracts and also alter their feeding behavior.
- Accumulation of toxic plastics in the stomach leads to starvation and death, resulting in reduced growth and reproductive outputs.
- **Magnify marine pollution:** by acting as a binding and transporting agent for heavy metals and organic pollutants because of its water-repellant properties.

**Way forward**

- **Reduce, reuse and recycle:** this should be the mantra to eliminate menace of the microplastics in the world.
  - open landfills and open-air burning that are often practiced to manage domestic waste should be banned and replaced with 100% collection and recycling of the used plastics.
- **Promote bioplastics as an alternative to microplastics:** this can be done by investing in the industry and government support which will reduce its cost of production and enhance its attractiveness to various industries.
- **Awareness generation:** among the masses on the lines of Swachha Bharat Mission (SBM), about microplastic derived products, harmful impacts, and ways to reduce its usage should be done on priority basis.
- **Cooperative and collaborative partnership among all stakeholders** (the community, industry, government and civil society organizations) with an aim to ensure effective plastic waste management and the subsequent reduction in microplastic pollution.

To deal with a planetary crisis like Microplastic pollution, a global collaboration on the lines of Paris agreement is the need of the hour. Collective public efforts aimed at stopping plastic pollution and

safeguarding our ecosystem is the way forward for ensuring a safe and sustainable planet earth.

**National Mission for Clean Ganga****Context:**

- Recent **National Mission for Clean Ganga (NMCG) guidelines** directs cities situated on river banks to incorporate river conservation plans when they prepare their Master Plans.
- The recommendations are currently for towns that are on the main stem of the river Ganga (97 towns encompassing 5 States — Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, West Bengal).

**About NMCG**

- **Origin:** it is registered as a society under the Societies Registration Act 1860. It acted as implementation arm of **National Ganga Council** (which replaced National Ganga River Basin Authority in 2016).
  - **National Ganga Council:** constituted in 2016 under the Environment (Protection) Act (EPA), 1986 and headed by the Prime Minister of India.
- **Administrative structure:**
  - It is part of the five-tier governance structure envisaged under EPA act to ensure a clean river Ganga. They are-
    1. National Ganga Council under chairmanship of Hon'ble Prime Minister of India.
    2. Empowered Task Force (ETF) on river Ganga under chairmanship of Hon'ble Union Minister of Jal Shakti
    3. National Mission for Clean Ganga (NMCG).
    4. State Ganga Committees and
    5. District Ganga Committees in every specified district abutting river Ganga and its tributaries in the states.



- **NMCG has two wings**, both of them headed by Director General, NMCG (a Additional Secretary in Government of India).
  1. Governing Council
  2. Executive Committee: authorized to accord approval for all projects up to Rs.1000 crore.
- Similar to structure at national level, State Program Management Groups (SPMGs) acts as implementing arm of State Ganga Committees.
- **Key objectives**
  - To ensure effective abatement of pollution and rejuvenation of the river Ganga by adopting a river basin approach to promote inter-sectoral co-ordination for comprehensive planning and management and
  - To maintain minimum ecological flows in the river Ganga with the aim of ensuring water quality and environmentally sustainable development.
- **Key function to achieve above objectives:**
  - Implement the work program of National Ganga Council (NGC).
  - Implement the World Bank supported National Ganga River Basin Project.
  - Coordinate and oversee the implementation of projects sanctioned by Government of India under NGC.
  - Undertake any additional work or functions as may be assigned by MoWR, RD & GJ in the area of conservation of river Ganga.
  - Accept or to provide any grant of money, loan securities or property of any kind and to undertake and accept the management of any endowment trust, fund or donation not inconsistent with the objectives of NMCG.
  - Take all such action and to enter all such actions as may appear necessary or incidental for the achievements of the objectives of the NGC.

#### Associated concerns

- **Widespread pollution:** as many cities across the five states are present on the banks of the ganga river, polluting it indiscriminately. For example-
  - **Industrial pollution:** from tanneries in Kanpur, distilleries, paper and sugar mills in the Kosi, Ramganga and Kali-river catchments are major contributors.

- **Untreated Sewerages flow:** which brings many types of degradable and non-degradable pollutions from the habitations along the river banks.
- **Illegal Construction:** The problem of illegal and rampant construction near river beds led to encroachment of the river banks, obstructing the river flow and has become a major hurdle in cleaning the river.
- **Violation of ecological- flow (e-flow) of the river:** mainly due to unscientific construction of hydro power projects.
  - **Central Water Commission (CWC) findings:** 4 of the 11 hydro power projects on the upper reaches of the river Ganga's tributaries are violating Ganga's e-flow norms which is further interrupting the natural flow of the river
- **Poor Governance:** There is less utilization of funds allotted under the programs due to lack of monitoring and super-vision.

#### Steps needed to ensure clean and rejuvenated Ganga river system

- **Building and effectively operation critical Sewerage Treatment Plants (STP):** in this context, World Bank funded initiative to build sewerage infrastructure in 20 pollution hotspots along the river is noteworthy.
  - The government should prepare a proper plan and ensure effective monitoring of the running STPs to ensure proper treatment of city sewerage before it gets into the rivers.
- **Sensitization and awareness campaign:** to make it a 'Jan Andolan' so that each and every individual is aware about importance of clean and e-flow of the rivers in a sustainable future of humankind.
  - In this context, Swachha Bharat Mission (SBM) is a notable step forward.
- **Collaborative approach:** Government should further build on the success of SBM initiative through a collaborative approach with concerned states, civil societies and other motivated individuals.

#### Ozone Pollution: Causes, Impacts and Steps taken to Reduce Ozone Pollution

##### Context

- Recently, a study conducted by **Centre for Science and Environment** has found that **ozone levels** are exceeding the permitted levels even during winter in Delhi-NCR, **making the smog more "toxic"**.
  - The study was done by analyzing the **Central Pollution Control Board (CPCB)** data.



**Key findings of the study**

- **Despite the pandemic and lockdowns**, more days and locations witnessed **higher and longer duration of ozone spells**.
- Contrary to the notion that ozone is predominantly a summer phenomenon, the analysis finds the gas has emerged as an **equally strong concern during winter as well**.
- Even smaller towns of NCR, including **Bulandshahar in Uttar Pradesh and Bhiwani in Haryana**, appeared in the **top 20 list of ozone-afflicted towns and cities**.
- **South Delhi locations** dominate the list with **four mentions in top 10**.

**About Ground-level Ozone**

- **Ozone (O<sub>3</sub>)** is a colourless, reactive oxidant gas that is a major constituent of **atmospheric smog**.
  - It is ground-level ozone which is known as **Tropospheric ozone**.
- **Formation:** Ozone is produced **photochemically** from interaction between gases in the presence of sunlight.
  - It is created by chemical reactions between **oxides of nitrogen (NO<sub>x</sub>) and volatile organic compounds (VOC)** in the presence of **sunlight**.
  - **Major sources of NO<sub>x</sub> and VOC:** Emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents.
- **A sunny weather problem in India:** as the **presence of sunlight has a direct impact** on the formation of ground-level ozone.
  - **Heat acts as a catalyst**, facilitating photochemical reactions. Hence, higher concentrations of ozone are seen during the summer months.

**Impact of Ozone pollution**

- **On health:**
  - Highly reactive gas and even short-term exposure of an hour is dangerous for those with respiratory conditions and asthma.
  - Exposure to Ozone can cause chest pain, coughing, throat irritation and airway inflammation.
  - Long-term breathing of Ozone may cause cardiovascular diseases and result in premature death.

**On Environment**

- **Can reduce species diversity** among animals, plants, insects, fish, etc.
- **Damage to crops:** make vegetation prone to various diseases, leading to poor quality and quantity of grains produced.
- **Damage to forests:** it may result in reduced forest growth and negatively affect habitat quality in the forests. It also results in **reduced commercial forest yields**.

**Efforts taken to control ground-level Ozone pollution**

- **Adoption of BS-VI standards:** Government has directed mandatory adoption of BS VI norms for vehicles in India with an aim to control vehicular pollution including the Ozone pollution.
- **Graded Response Action Plan (GRAP) for Delhi:** it was prepared by the Ministry of Environment, Forests & Climate Change (MoEFCC) after the order of Supreme Court of December 2016.
  - Environmental Pollution (Prevention and Control) Authority (EPCA) is responsible for its implementation.
  - It aims to **prevent worsening of Air Quality of Delhi-NCR** including Ozone pollution.
- **National Clean Air Programme (NCAP):** government launched this campaign to reduce air pollution in 102 non-attainment cities including Ozone pollution.
  - **Non-attainment cities:** cities that have fallen short of the National Ambient Air Quality Standards (NAAQS) for over five years.

**Way forward:**

- **Promoting sustainable and healthier mode of transportation system** like cycling and walking along with electric and CNG vehicles.
  - Government should **also incentivize use of public transportation** through various measures.
- **Awareness generation:** about various ill-effects of pollution in general and ozone pollution in particular will go a long way in ensuring a sustainable future.
- **Effective implementation of programs and policies:** including extensive real-time monitoring infrastructure across cities.

## SDG India Index

### Context

- Recently, the third edition of the **Sustainable Development Goals (SDG) India Index and Dashboard 2020–21** was released by NITI Aayog.
  - Title of the report - *SDG India Index and Dashboard 2020–21: Partnerships in the Decade of Action*.
- NITI Aayog has the mandate for coordinating the adoption and monitoring of SDGs at the national and sub-national levels.

### About SDG India index

- It is an **annual index** launched in 2018 by NITI Aayog on the lines of annual **Sustainable Development Report** prepared by the **Sustainable Development Solutions Network (SDSN)**.
  - SDG India index represents **the articulation of the comprehensive nature of the Global Goals under the 2030 Agenda** while being **attuned to the national priorities**.
- **Aim:** twin aim of the NITI Aayog-
  1. To monitor the country's progress on the goals through data-driven assessment, and
  2. To foster a cooperative and competitive spirit among the States and Union Territories in achieving them.
- **Ranking method:**
  - The SDG India Index computes goal-wise scores on the 16 SDGs for each State and Union Territory.
  - **Measurement of aggregate performance:** Overall State and UT scores are generated from **goal-wise scores at the sub-national unit based on its performance across the 16 SDGs**.
  - **Scores range between 0–100:** The higher the score of a State/UT, the greater the distance to target achieved. A score of 100 signifies achievement of 2030 SDG targets.
- **Classification of states/UTs:** based on their performance on the SDG India index, they are classified into four categories-
  1. **Aspirant: 0–49**
  2. **Performer: 50–64**
  3. **Front-Runner: 65–99**
  4. **Achiever: 100**

### SDG India Index 2020–21:

- Developed in collaboration with the **United Nations in India**.
- The **index tracks progress of all States and UTs on 115 indicators** that are aligned to Ministry of Statistics and Program Implementation (MoSPI)'s **National Indicator Framework (NIF)**.
  - These 115 indicators **incorporate 16 out of 17 SDGs**, with a qualitative assessment on Goal 17, and **cover 70 SDG targets**.
  - **2018-19 index-** utilized 62 indicators across 39 targets and 13 Goals; **2019-20 index-** 100 indicators across 54 targets and 16 Goals

### Analysis of the SDG India index 2020-21

- **At national level:**
  - **Positives:** The country's overall SDG score improved by 6 points—from 60 in 2019 to 66 in 2020–21, mainly driven by excellent performance on **Goal 6 (Clean Water and Sanitation)** and **Goal 7 (Affordable and Clean Energy)**.
  - **Poor performance:** there has been a major decline in the areas of **industry, innovation and infrastructure (Goal 9)** as well as **decent work and economic growth (Goal 8)**.
  - Currently, there are no states in the aspirant and achiever category; 15 states/UTs are in the performer category and 22 states/UTs in the front runner category.
- **State/UT performance:**
  - **Top performers- states:** Kerala retained its position (score 72) followed by Tamil Nadu and Himachal Pradesh, both scoring 72.
  - **Top performing UTs:** Chandigarh maintained its top spot among the UTs with a score of 79, followed by Delhi (68).
  - **Worst performers:** Bihar (52), Jharkhand (56) and Assam (57).
  - **Top gainers in comparison to 2019-20:** Mizoram, Haryana, and Uttarakhand with an increase of 12, 10 and 8 points, respectively.

### Significance of SDG India index

- It helps in identifying crucial gaps related to tracking the SDGs and the need for India to develop its statistical systems.
- **Act as a Key Policy tool:** for focused policy dialogue, formulation and implementation through development actions, in line with the global SDG framework.

- The SDG India Index 2020–21 is **also live on an online dashboard**, which has cross-sectoral relevance across policy, civil society, business, and academia.
- **Upcoming North Eastern Region (NER) District SDG Index:** The Index is presently being adapted and developed by NITI Aayog at the granular level of districts for NER.
- **Encouraging evidence-based policymaking:** by supporting States and UTs to benchmark their progress, identify the priority areas and share good practices.

### The Editorial Analysis: Let's make room for the river

#### Context

- Recent **flood in few European countries**, namely Germany, Belgium, Netherlands, Luxembourg and Switzerland have killed many people while many remain missing.

#### Key points

- The flood is being referred as one of the **worst such event** in a century.
- A **month's rain poured in just a span of 24 hours** and the regions of Germany and Belgium were the most affected regions.
- This '**flash flood**' led to bursting of river banks that further led to floods in Netherlands and Luxembourg.
- The floods find resemblance with the **Kerala floods** of 2018.

#### Reasons for the flood

- Experts are linking this flood with the **climate change** as more CO<sub>2</sub> the world emits into the atmosphere, the warmer will be the air temperature. Warmer air holds more moisture and results in excess rainfall, which leads to flooding.
- Also, **increasing temperatures at the poles** result in slower movement of storms in the mid-latitudes. As a result, storms stay for a longer duration at a specific place. The combination of a slow-moving storm and the presence of surplus moisture in the atmosphere leads to intense rainfall in one location within a short period of time.

#### Responses from the countries

- Netherlands was less-affected due to **superior organisation, better preparedness** and an **advanced flood management system**.

- Germany has advanced flood warning system that forecasts heavy rain and forecasts possibility of floods. The recent flood, however, was so quick that there was **no time to evacuate** all residents to safety and fully deploy the formidable rescue and relief infrastructure that they possessed.
- People demand that such warnings must be communicated to the **general public in simple language** and **specific information** regarding the extent of damage to property and life should be conveyed. It would likely encourage affected communities to remain alert and respond quickly.

#### Lessons for India

- We must think **beyond the conventional dependence** on dikes, dams, walls and gates to protect ourselves from floods.
- Just like Dutch, our current disaster resilience mantra should be **live with water, build with nature and make room for the river**.
- **Flood-prone areas should be identified**, and projects should be initiated to create room for rivers.
- The **United Nations Development Programme-World Bank-European Union Post Disaster Needs Assessment** report prepared for Kerala after the 2018 floods pointed out that the drainage capacity of the rivers and canals must be increased by creating more room for the water to flow.
  - It called for **removing obstructions and encroachments** from existing water channels, the proper maintenance of such channels and creating additional channels for water to flow.
- We must create **adequate space for rivers** to overflow by protecting floodplains from human interference, deepening riverbeds and creating alternate channels for excess water.
- It is worth noting that after two major floods in 1993 and 1995, the Dutch embarked on several projects to **widen riverbanks and reshape the areas** around rivers.
- Low-risk areas such as **playgrounds, maidans, or agricultural fields** should be earmarked to store excess rainwater.
- Drains must be built for diverting water into these storage units. This will relieve the stress on the existing **drainage infrastructure**. The stored water can later be discharged back into the drainage channel once the high water subsides.

- In the short term, strengthened **disaster readiness**, planning and preparation would help us in dealing with sudden, intense rain and consequent floods.
- There is need for a higher degree of **coordination and preparation** across all levels of government.
- **Practice drills** need to be conducted in flood-prone areas.

### Urban Flooding: Overview, Causes and Suggestive Measures

#### Context

- Recently many people have lost their lives due to incessant rain in the Mumbai, Maharashtra, reinforcing the gravity problem of urban flooding in Indian cities.
- Earlier, in October 2020, similar incident happened in the Hyderabad, Telangana, resulting in the deaths of more than 50 people.

#### Urban flooding

- **Definition:** Flood is defined as “an overflow of a large body of water over areas not usually inundated”. Thus, flooding in urban areas is caused by intense and/or prolonged rainfall, which **overwhelms the capacity of the drainage system**.
- **Urban flooding is different from rural flooding, both in respect magnitude and size of population affected:** this is because-
  - Urbanization increases flood risk by up to 3 times, **increased peak flow** result in flooding very quickly.
  - It affects large number of people due to **high population density** in urban areas.

#### Natural factors causing Urban flooding

- **Meteorological Factors:** Heavy rainfall, cyclonic storms and thunderstorms causes water to flow quickly through paved urban areas and impound in low lying areas.
- **Hydrological Factors:** Overbank flow channel networks, occurrence of high tides impeding the drainage in coastal cities are major hydrological factors responsible for urban flooding.
- **Changes in the rainfall pattern driven by Climate Change:** The rainfall intensity, duration and frequency are going to increase in the future, suggests the International Panel for Climate Change.
  - **Flash floods:** often caused by the **incidence of cyclonic circulations and cloud bursts** are increasing due to **climate change**. Recent **flash flood in Germany** is a case in point.

#### Anthropogenic factors responsible for Urban Flooding

- **Unplanned urbanization:** it results in excessive and unplanned use of available resources, leading to overstressed city infrastructure, including drainage system, reduced seepage and encroachment by builders and contractors.
- **Poor waste management system:** Domestic, commercial and industrial waste and dumping of construction debris into the drains without proper collection and treatment, contribute significantly to reducing capacities of the drainage system.
  - Improper waste management system, clogging of storm-water drains because of silting, accumulation of non-biodegradable wastes and construction debris are major concerns.
- **Indiscriminate encroachment of waterways and wetlands:** Growing habitations into towns and cities alongside rivers and watercourses, led to their encroachment, causing urban flooding during high rainfall scenario.
  - **Unauthorized colonies and excess construction:** results in reduced infiltration and decreased ground absorption and increases the speed and amount of surface flow, causing urban floods.
- **Issue with city drainage infrastructure:** there is an issue with city drainage system at both capacity and management level.
  - There is lack of adequate drainage infrastructure in the cities, leading to urban flooding during high intensity rainfall.
  - **Lack of maintenance of existing drainage infrastructure:** for example, de-clogging the storm-water drains before monsoon season results malfunctioning drainage system, leading to urban flooding.





- **Neglect of pre-disaster planning:** in India, focus is mainly on post-disaster relief efforts rather than pre-planning to counter urban floods.
- **Lack of community participation:** Indian cities lack participation from people, right from planning to implantation stages. This is mainly due to apathy on the part of government officials, members of municipal bodies and lack of awareness among people of the city.
- **Reducing Seepage:** Indian cities are becoming increasingly impervious to water, not just because of increasing built up but also because of the nature of materials used.

#### **Suggestive measure: mitigation of urban floods**

- **Better forecasting of rainfall:** by concerned organization. This must be followed real-time dissemination of flood warning to concerned authorities and people in general.
- **Effective pre-disaster planning:** for each city on local level by involving all the stakeholders, including inhabitants of the city.
  - Concerned authorities should **highlight flooding prone areas** in the cities and avoid building any emergency infrastructure in that area. People in that locality should also be informed and trained to effectively deal with such situations.
  - **Each city** should have their **Flood mitigation plans** strongly **embedded within the master plan of the city**.
- **Drainage infrastructure:** adequate drainage infrastructure must be created and existing ones should be well-maintained.
  - Role of local bodies in this respect becomes very important.
- **Develop 'sponge' cities in line with cities in China:** it envisages replacing concrete pavements with porous pavements to insure better infiltration of surface water. It further aims to restore wetlands, develop rain gardens and rooftop gardens for better absorption of rainwater.
- **Effective implementation of National Disaster Management (NDMA) Guidelines on Urban Flood Management.**
- **Better waste management system:** by ensuring adequate collection and treatment infrastructure in each city. This will solve the issue of clogging of drainage system.

## **Rainwater harvesting: Countering Water Scarcity**

### **Context**

- The rainwater harvesting structures in the villages of Rajasthan, including ponds, anicuts, check dams, 'johads' and 'nadis', will be studied to find out their contribution to the increase in groundwater level.

### **About Rainwater harvesting**

- **Definition:** Rainwater harvesting is the collection and storing of rain water that runs off from tops of roofs, open spaces like parks and roads or especially prepared ground.
- **Traditional rainwater harvesting methods:** due to temporal and spatial variation in the rainfall pattern across the country, many **traditional methods** were developed since ancient times to conserve and store water. Some of these are:
  - **Tanks in Karnataka:** these are **artificial reservoirs to store water** taking advantage of depression.
  - **Zing -Tanks:** for collecting water from melted ice in **Ladakh**.
  - **Stepwell:** these are found in **Rajasthan and Gujarat**.
  - **Baoris / bers** – they are community wells in **Rajasthan**.
  - **Apatani** -Terraced plots connected by inlet and outlet channels in **Arunachal Pradesh**.
  - **Pyne-ahar:** system of **south Bihar** on which the **cultivation of paddy depends**.
  - **Kuls:** Often spanning long distances, with some over 10 km long, kuls have been around for centuries. They are present in mountain **areas Jammu, Himachal Pradesh**.
  - **Tanka system:** it is **used in Rajasthan**, which is a cylindrical ground pit which receives rainwater from the nearby catchment area.
  - **Bamboo drip irrigation:** used in the **northeast**, suitable for **irrigation in hilly terrains**.

### **Need for rain water harvesting (RWH) systems**

- **To Counter water scarcity:** as per a report of NITI Aayog in 2018, 21 major cities are racing to reach zero groundwater levels by 2020, affecting access for 100 million people.
  - Water collected through RWH can be used for recharging groundwater, that is replenishing the water that has been extracted from the aquifers.
  - Hence, RWH is a sustainable and reliable method to effectively use rain water towards meeting the growing needs of vast Indian population.

- **Rapid urbanization and industrialization:** will need more fresh water supply from already crumbling public water supply infrastructure.
  - This problem can be solved through effective implementation of RWH techniques in collaboration with community.
  - **Rooftop RWH technique** can be the most effective method in this regard, where rainwater is captured from the roof catchments and stored in reservoirs.
- **To fulfill irrigation needs of agriculture sector:** as 60% of India's net sown area is unirrigated (rising cases of drought in the dry belt of India) meaning depended on rainfall. In India, most of rainfall happens during monsoon season, leaving farmers vulnerable in other seasons.
  - RWH can help in providing regular water supply for irrigation needs of the farmers. This will further ensure food security in the long term.
  - This water can also be used variously **for purposes like drinking (after treatment), household use, and for livestock.**
- **To reduce Runoff loss:** More than 3/4th of the precipitation In India comes during 4 months (monsoon). A significant part of which is lost in runoff and evaporation, this can be controlled by rain water harvesting.

#### Advantages of rainwater harvesting

- **Counter disasters like flood and drought:** as it stores access water during monsoon season which reduces the chances of flooding and secures community from the adversity during a drought.
- **Reliable and cheap mechanism for recharging groundwater:** as no land is wasted for storage purpose and no population displacement is involved. Under Ground water is not directly exposed to evaporation and pollution.
- **Reduces soil erosion:** as it restricts unhindered flow of rainwater. Methods like check dams, are very effective in reducing soil erosion and loss of soil nutrients.
- **Underground stored water in urban areas** also acts as a cheaper method for water supply for household needs after their treatment.

#### Associated challenges with rainwater harvesting in India

- **Lack of community participation:** governments often ignore local participation and needs while framing and implementing RWH policies. This results in poor implementation and lack of any significant change on the ground.

- For example, laws relating to water harvesting in metros such as Delhi, Mumbai and Bengaluru exist but only on paper.
- **Lack of participation by private sector:** this is mainly due to lack of clear guidelines and framework by the government for private participation in construction and maintenance of RWH systems.
- **Lack of financial and technical support** to community by the government towards construction and maintenance of RWH structures.
- **Poor literacy and awareness about water conservation:** this results in not only wastage of water but also negligence towards water conservation methods like RWH. Many times, it becomes the prime reason for failure of many good government policies and programs for water conservation.

#### Way forward

- **Ensure widespread awareness campaign:** towards water conservation in general and methods of water conservation like RWH in particular. Making RWH a '**Jan Andolan**' through '**Jan Bhagidari**' will go a long way in ensuring sustainable water use and future for India.
  - '**Catch the Rain**' Awareness Generation Campaign, under National Water Mission, Ministry of Jal Shakti is a step in the right direction.
- **Government should provide incentives and logistical support** towards creation of RWH structures around the country.
  - As RWH not only provides the **most sustainable and efficient way of water management** but also opens the vista of several other **economic activities** leading to **Empowerment of people at grass root.**

#### Wetland Ecosystem: Importance, Concerns and Conservation Measure

##### Context:

- The Mumbai Metropolitan Region is likely to get its first Ramsar site at the Thane Creek Flamingo Sanctuary. The Maharashtra Mangrove Cell submits the proposal for approval to the State Wetland Authority.

### About Wetlands

- **Definition:** As per the Ramsar Convention on Wetlands, "...wetlands are areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres."
  - They are transition zones- they lie between deep water and terrestrial ecosystems.
- **Major characteristics** that describe a wetland:
  - **Hydrology:** The sources of water into wetlands include precipitation, surface water (from rivers and sea) and groundwater.
  - **Soil Type:** Wetlands are covered with hydric soils. In such soils, the spaces between each grain of soil are filled with water. These soils are anaerobic- the soil lacks oxygen.
  - **Biota:** Plants that live in wetlands and are adapted to the hydric soil are called **hydrophytes**. Examples: cypress, silver maple, mangroves.
- **Classification of wetlands:**
  - **Marine:** coastal wetlands including coastal lagoons, rocky shores, seagrass beds and coral reefs
  - **Estuarine:** wetlands associated with deltas, tidal marshes and mudflats, and mangrove swamps.
  - **Lacustrine:** wetlands associated with lakes.
  - **Riverine:** wetlands along rivers and streams.
  - **Palustrine:** wetlands like marshes, swamps and bogs.

### Importance of wetlands

- **Biological supermarkets:** Wetlands are amongst the most productive ecosystems and often called the "biological supermarkets" as they produce a huge amount of food which attracts many animal species.
- **Flood control:** they act as natural sponges, helping in avoiding floods. They temporarily storing and gradually releasing stormwater.
- **Water purification:** They help in improving water quality through removing or retaining inorganic nutrients or by processing organic wastes and reducing suspended nutrients.
  - For this function, wetlands are often referred to as "**Kidneys of the Earth**".

- **Help in carbon sequestration:** they act as carbon sinks and wetland soil contains a high amount of carbon.
  - They also provide the conditions needed for the removal of nitrogen and phosphorus from surface water.
- **Ground water recharge:** by storing water, they help in increasing the water level by recharging the groundwater aquifers. Further, they discharge groundwater into lakes, rivers, and streams during dry periods, helping in fulfilling the freshwater needs of the people.
- **Helps in ecological conservation:** by hosting of a large number of species of microbes, plants, insects, amphibians, reptiles, birds, fish and mammals.
  - They also help in **countering certain environmental problems** such as algal blooms, dead zones, and fish kills that are generally related to nutrient overloading.
- **Economic benefits:**
  - Support various plants and animals having medicinal and commercial values.
  - Many countries have their fishing and shell fishing industries dependent on wetlands.
  - Acts as a source of livelihood for local people as many of them are dependent upon wetlands resources for their employment.
- **Provides recreational, educational and tourism opportunities:** for example, many people visit these places for birdwatching or wildlife photography.

### Associated concerns

- **Unplanned urbanization and encroachments:** results in increasing pressure on urban wetlands due to growing demands and widespread encroachment of these bodies.
- **Increasing pollution:** They are unable to clean growing mercury, plastic and other industrial pollutions, hence, reports of worsening of the problem of groundwater pollution.
- **Introduction of alien species:** results in damaging the natural ecological balance of a particular wetland ecosystem. For example, introduction of exotic plant species such as water hyacinth and Salvinia have resulted in clogging of waterways and extinction of many native vegetation.
- **Climate change:** Increased air temperature; shifts in precipitation; increased frequency of storms, droughts, and floods; and sea level rise could also affect wetlands.

- **Drainage of wetlands for agricultural and construction activities** causes harm to wetlands.
  - Construction of a large number of reservoirs, canals and dams to provide for irrigation significantly altered the hydrology of the associated wetlands.

#### Conservation measures

- **At international level**
  - **Ramsar Convention:** also known as 'convention on wetlands', it was adopted in 1971 in the Iranian City Ramsar for protection and preservation of national and international wetlands.
    - ♦ Wetlands declared as Ramsar sites are protected under strict guidelines of the convention.
    - ♦ Presently India has 37 Ramsar wetland sites.
  - **Montreux Record: maintained as a part of the Ramsar list.**
    - ♦ It is a register of wetland sites on the List of Wetlands of International Importance where changes in ecological character have occurred, are occurring, or are likely to occur as a result of technological developments, pollution or other human interference.
- **By India:** over the period of time India has taken various conservation measures to protect ecological sanctity of the wetlands. Few of them are –

- **Wetlands (Conservation and Management) Rules, 2017:** along with other things, it prohibits-
  - ♦ conversion wetlands for non-wetland uses,
  - ♦ setting up or expansion of industries in wetland areas and
  - ♦ disposal of construction and demolition waste within the wetlands.
- **National Plan for Conservation of Aquatic Ecosystems (NPCA):** launched in 2015, aims at holistic conservation and restoration of lakes and wetlands.
- **Wetland health cards:** In 2019, the government identified 130 wetlands in the country to be restored in the next five years. Each wetland will be issued a health card, which will denote its health.
  - ♦ **Wetland Mitras to be selected** for taking care of the 130 identified wetlands across India.
- **Centre for Wetland Conservation and Management (CWCM):** established in 2021 as a part of the National Centre for Sustainable Coastal Management (NCSCM).
  - ♦ Aims to address specific research needs and knowledge gaps and will aid in the application of integrated approaches for conservation, management and wise use of the wetlands.

## Science & Technology

### 5G Technology: Everything You Need to Know

#### Context

- The telecom companies have been urging the Department of Telecommunication (DoT) to **reduce the spectrum prices**.
- The companies have also warned that in the absence of a cut in the base price of 5G spectrum, country could be staring at a **third failed auction** in the near future.

#### What is 5G technology?

- 5G or fifth generation is the **latest upgrade** in the long-term evolution (LTE) mobile broadband networks. It works in 3 bands, namely **low, mid and high frequency spectrum** — all of which have their own uses as well as limitations.
- The maximum speed in the **low band spectrum** is 100mbps. So, while it can be used and installed for cell phone users who may not have specific demands

for very high-speed internet, the low band spectrum may **not be optimal for specialised** needs of the industry.

- The **mid-band spectrum** offers higher speeds compared to the low band. It, however, has **limitations in terms of coverage** area and penetration of signals.
- The **high-band spectrum** offers the **highest speed** of all the three bands, but has **extremely limited coverage** and signal penetration strength.

#### Evolution

- **1G**
  - 1G is the **first generation** of wireless cellular technology, which began in 1980s. 1G supports **voice only calls**.
  - The maximum speed of 1G technology is 2.4 Kbps.



**• 2G**

- Cell phones received their first major upgrade—from **analog to digital** communications—when their technology went from 1G to 2G.
- 2G introduced **call and text encryption**, besides data services such as SMS, picture messages, and MMS.
- The maximum speed offered by 2G with **General Packet Radio Service (GPRS)** is 50 Kbps.

**• 3G**

- The urge for **faster data-transmission** gave birth to 3G technology. Here, people could use their cell phones for **video calling** and mobile internet access.
- The term “**mobile broadband**” was first applied in this technology.
- The maximum speed of 3G is around 2 Mbps for non-moving devices and 384 Kbps for moving vehicles.

**• 4G**

- Besides providing all the services like 3G, it also provides **gaming services, video conferencing, 3D TV, HD mobile** and other features that demand high speeds.
- The max speed of a 4G network in a moving vehicle is 100 Mbps but the speed is 1 Gbps for low-mobility communication such as when the caller is standing or walking.

**Advantages**

- Latency measures how long a signal takes to go from its source to its receiver, and then back again. One of the goals for each wireless generation has been to reduce latency. New 5G networks will have even lower latency than 4G LTE, with the round-trip transmission of data taking less than five milliseconds.
- 5G latency will be faster than human visual processing, making it possible to control devices remotely in near-real time. Human reaction speed will become the limiting factor for remote applications that use 5G and IoT—and many new applications will involve machine-to-machine communication that isn't limited by how quickly humans can respond.
- Across industries, from the **public sector to business** and more, 5G promises to provide certain advantages over today's 4G networks. For instance, the **Internet of Things (IoT), Artificial**

**Intelligence, Big Data** need more speed to process than 4G can offer.

- With 5G, users can **stay connected** despite being on a network where thousands of other devices are competing for the bandwidth.
- 5G could save money on addressing issues like **water supply, infrastructure**, by way of smart meters, sensors, among others ways.
- The **hurdles to filmmaking**—huge crews, expensive equipment and big budgets—would fall away with the use of 5G technology.
- 5G connection could make the remote collaboration applications like **Augmented Reality, Virtual Reality** available, accessible and affordable.
- 5G can make the concept of **ghost kitchen**—chef-led kitchens that exist exclusively for online ordering and delivery—a reality.

**Challenges**

- Few studies claims that 5G waves will emit more radiation and can cause **harm to humans** as well as other living beings.
- 5G frequency is interrupted by **physical obstructions** such as trees, towers, walls and buildings, which will block, disrupt or absorb the high-frequency signals.
- The customers might bear the brunt of **high initial costs** for roll-out.
- The roll-out would happen more in urban areas than in rural areas thus further **widening the digital divide**.
- Current **battery technology** is not suitable for this advanced connectivity.

**Way forward**

- World is moving towards 5G and India must be in the race to be a global superpower. It, however, should be implemented not in a haste and all the challenges should be carefully taken care of, before a nationwide roll-out.

**Artificial Intelligence: A Detailed Analysis****Context**

- According to a NASSCOM study, India has witnessed a substantial rise in the number of Artificial Intelligence patents filed in the last 5 years—**6 times higher than those filed between 2011 and 2015**.

### Key points

- On a global level, India was **ranked at 8** among the top 10 AI-related patent filers. Notably, India had no AI-related patent filing till 2002.
- More than 5,000 patents filed in the last decade, **94% of them in the last 5 years**.
- More than **60% of them has origin in India**.
- Machine learning** is the most popular AI technique followed by computer vision.
- 5-fold increase in funding in those Indian AI firms, which are held privately.

### What it is?

- Artificial intelligence is a branch of computer science, which makes **machines behave like humans** and help these machines perform **cognitive functions** like decision making, thinking and perceiving, problem-solving among others.

### Benefits

- Economic growth driver:** NITI Aayog stated that the adoption of AI could increase the Gross Value Addition (GVA) of our economy by 15%.
- Agriculture:** The use of AI-based technology can improve the efficiency of **precision farming** and remote sensing in crop selection.
- Manufacturing:** The Make-in-India programme could get a shot in the arm with AI-assisted technology.
- Transport:** The driver-less car has the potential to reduce the number of road accidents and thus achieve the targets set by the **Brasilia Declaration**.
- Education:** AI-based technology can help in assessing the reasonableness of the learning gap and recommend measures to reduce the same. It can also help automate the assessment activities.
- Health:** AI tools help in analysing data and diagnose diseases with much accuracy and help solve the complex issues in the healthcare system.
- Banking sector:** With AI, banking would get more streamlined and the issues of risk management, customer experience would get a comprehensive solution.
- Weather forecast:** AI-based technology could enhance weather predictability and thus can help strengthen our **climate-resilient practices**.
- AI can also help in **mining and exploration**. For example, the exploration of shale gas is difficult due to the uncertainties revolving around it. AI could help reduce the economic drain in such processes.

### Challenges

- Data Centre:** AI-based technologies work on big data, which has high computational capacity. Establishing such a centre in our country, with the current technology is challenging.
- Energy Consumption:** To reduce energy consumption, IT companies are shifting their data centres to cooler locations like Siberia as around 40% of the energy consumption is directed towards cooling IT equipment.
- Sovereign Laws:** Data localisation is becoming a norm lately. Example: EU GDPR. In such a situation it is becoming increasingly difficult for the companies to store data in the countries of their convenience.
- Environmental Impact:** The coolants are made of hazardous chemicals which produce toxic gases, thus increasing the carbon footprint.
- Widening gap:** The technology gap between developed and developing countries is furthering the gap among the countries. AI-assisted technologies will widen this gap.
- Privacy concerns:** AI uses digital footprints, which could help exploit the consumers without their consent.

### Steps by government

- In 2014, a laboratory of the DRDO, **Centre for Artificial Intelligence and Robotics (CAIR)** was established for research and development in AI.
- The Indo-US Science and Technology Forum (IUSSTF) launched the **US-India Artificial Intelligence Initiative** to foster AI innovation through collaboration.



- **Responsible AI for Youth** was launched for government schools to empower the young generation to become AI-ready and reduce the skill gap in India.
- NITI Aayog started a program called **National Programme on AI** to guide research and development in this rising technology.
- NITI Aayog set up a platform named **AIRAWAT** (Artificial Intelligence Research, Analytics and Knowledge Assimilation Platform) for cloud computing.

### Geospatial Technologies in Water Sector

#### Context

- National Mission for Clean Ganga recently released a detailed report on how use of **Geospatial technologies** can benefit the water sector in India.

#### What are geo-spatial technologies?

- Technologies like Satellite based **Remote Sensing**, Surveying and Mapping, **GPS based equipment and sensors**, **GIS and Spatial Analytics**, **Artificial Intelligence**, **Big Data Analytics**, **Internet of Things**, **5G**, **Robotics and Digital Twin**, are collectively called geo-spatial technologies.

#### Why needed?

- India is heavily dependent on groundwater due to its **population** and requirement of water in **agriculture**.
- India is the **largest user of groundwater** in the world and is one of the **worst hit countries** by water crisis.
- World Economic Forum (WEF) has regarded water crisis as one of the **major global issues** of this century.
- The hydroelectricity projects in Alaknanda and Bhagirathi have turned upper Ganga into **ecological deserts**.
- **Uranium contamination** in groundwater due to mining in Rajasthan and Gujarat.
- **The energy sector** in the country is highly water dependent.
- NITI Aayog reported 30% **Himalayan springs already dried up** due to receding glaciers.
- NITI Aayog's composite water management index reported that persistent water crises will lead to 6% **loss in the country's GDP by 2030**.

### Geo-Spatial Technology for Water Sector

- These are extremely critical for the water sector.
- Besides collecting data about assets and resources, it also enables **analysis, reporting and monitoring, planning and decision making** and to take informed action to tackle the issue.
- It can also help in **process efficiencies, reducing time for project deployment**, ensure better **resource management**, and it also offers an integrated platform for assimilating data from varied sources for informed decision making.

### Application of geo-spatial technologies in various undergoing schemes

- **Jal Jeevan Mission**: These technologies can help in mapping population density vis-a-vis water source/pipelines, mapping of piped water network, water metering etc.
- **Namami Gange**: GIS ready database of wetlands, flood plain with 10 km buffer on both sides of river Ganga using LiDAR, Water quality mapping using IoT sensors into GIS system, Real time river water quality, etc.
- **National River Linking Project**: High-Resolution Satellite Imagery datasets can be used to identify the potential routes in geospatial domain for interlinking. These images can be used for delineating drought prone areas.
- **Atal Mission for Rejuvenation and Urban Transformation (AMRUT)**: Mapping of piped water network distribution and movement of water, scanning of underground utilities using GPR, Real time communication and collaboration platforms for city administrations.
- **National Water Mission**: Mapping of catchments and surveying land use patterns while emphasising on drainage, vegetation cover, silting, encroachment, conservation of mangrove areas, human settlements and, human activities and its impact on catchments and water bodies.
- **Atal Bhujal Yojana (ABHY)**: High resolution images can be used for understanding terrain, soil texture, GW potential zones, rainwater infiltration capacity, site selection for water extraction, rainwater harvesting.

#### Way forward

- Water crisis should be seen as a **need-based approach** instead of right-based approach.
- A just and comprehensive solution is must to promote the **inter-generational justice**.

## Malaria Disease

### Context:

- The World Health Organization (WHO) declared China as “malaria-free” which followed a seven decade-long, multi-pronged health strategy that was able to entirely eliminate indigenous cases for four straight years.
- “Malaria-free” certificate by WHO requires four consecutive years of no malaria cases in the concerned country which is to be verified by an independent panel.

### About Malaria:

- Malaria is a potentially life-threatening **disease caused by parasites** (Plasmodium vivax, Plasmodium falciparum, Plasmodium malariae and Plasmodium ovale) that **are transmitted through the bite of infected female Anopheles mosquitoes**.
- **Symptoms:** usually appear 10–15 days after the infective mosquito bite.
  - The first symptoms – fever, headache, and chills – may be mild and difficult to recognize as malaria. If not treated within 24 hours, P. falciparum malaria can progress to severe illness, often leading to death.
  - **Children with severe malaria:** frequently develop one or more of the following symptoms- severe anaemia, respiratory distress in relation to metabolic acidosis, or cerebral malaria
- **Geographical spread:** It is predominantly found in the tropical and subtropical areas of Africa, South America as well as Asia. It is preventable as well as curable.
  - In 2019, **The WHO African** region was home to 94% of malaria cases and deaths.
- **Severity of the disease: The World malaria report 2020 estimates**
  - In 2019, there were an estimated 229 million cases of malaria worldwide.
  - The estimated number of malaria deaths stood at 409 000 in 2019.
  - Children aged under 5 years are the most vulnerable group affected by malaria; in 2019, they accounted for 67% (274 000) of all malaria deaths worldwide.

### Malaria in India:

- **WHO South-East Asia Region (accounts for 3.4% of the cases globally):** main contributor being India (58%), followed by Indonesia (30%) and Myanmar (10%).

### • Performance of India: The World Malaria Report 2020-

- India showed a reduction in reported malaria cases of 49% and deaths of 50.5% compared with 2017.
- The estimated malaria cases were reduced by 24% in 2017 compared to 2016 and 28% in 2018 compared to 2017.
- Malaria cases reduced by 73% in the region, from 23 million in 2000 to about 6.3 million in 2019.
- Malaria deaths in India declined from about 29,500 in 2000 to about 7,700 in 2019.

### Steps taken to eliminate malaria:

#### • By WHO:

- **WHO Global technical strategy for malaria 2016-2030:** provides a technical framework for all malaria-endemic countries and intended to guide and support regional and country programmes as they work towards malaria control and elimination.
  - ♦ The Strategy sets ambitious but achievable global targets, including:
    1. reducing malaria case incidence by at least 90% by 2030;
    2. reducing malaria mortality rates by at least 90% by 2030;
    3. eliminating malaria in at least 35 countries by 2030;
    4. preventing a resurgence of malaria in all countries that are malaria-free.
- **WHO Global Malaria Programme:** coordinates WHO's global efforts to control and eliminate malaria.
  - ♦ It is supported and advised by the Malaria Policy Advisory Committee (MPAC), a group of global malaria experts appointed following an open nomination process.
- **E-2025 Initiative:** based on the successes of E-20 initiative (aimed at eliminating malaria in 21 countries across five regions).
  - ♦ **Aim:** WHO identified 25 countries having potential to stamp out malaria within a 5-year timeline (by 2025).



**By India:**

- **National Strategic Plan for Malaria Elimination (2017):** shifted focus from Malaria control to elimination and provided a roadmap to end malaria in 571 districts out of India's 678 districts by 2022.
- **Malaria Elimination Research Alliance-India (MERA-India):** a conglomeration of partners working on malaria control (established by Indian Council of Medical Research (ICMR)).

**Ways to eliminate malaria disease:****Prevention:**

- **Insecticide treated nets (LLINs) by people at risk and indoor residual spraying (IRS) with insecticide** to control the vector mosquitoes are useful.

- **RTS,S vaccine (branded as Mosquirix):** found to be safe and reducing the risk of malaria by nearly 40%, the best ever recorded. It has been approved by the European Medicines Agency in 2015.
  - ◆ It trains the immune system to attack the malaria parasite (*Plasmodium* (P.) falciparum, the most-deadly species of the malaria parasite).
- **Treatment:** best available treatment is artemisinin-based combination therapy (ACT).
- **Early diagnosis and complete treatment:** of malaria reduces disease and prevents deaths along with reducing malaria transmission. Increased malaria prevention and control measures have dramatically reduced malaria in India.

## Security

### Assam-Mizoram Border Dispute

**Context**

- The border dispute between Assam and Mizoram **turned violent** leading to the death of at least 6- Assam policemen, while injuring around 50 individuals.

**Key points**

- The current issue began when Assam police allegedly took control over 'Aitlanghar', accusing the people of Mizoram of **encroaching on its territory**.
- Since then, the region is witnessing **frequent clashes** from the people and the police of both the sides.

**Border of Assam with Mizoram**

- Three districts of Assam, namely **Cachar, Hailakandi and Karimganj**, share boundary with three districts of Mizoram, namely **Kolasib, Mamit, and Aizawl**.
- Both sides have a **different perception** of the border line, which is an imaginary line through rivers, hills, forests, and valleys.

**Background**

- The boundary dispute between Assam and Mizoram is nearly a **150-year-old issue**.
- There are two boundary demarcations, one in **1875** and the other in **1933**, which are the **root cause** of the current tension.

- The 1875 demarcations, when Mizoram was known as **Lushai Hills**, was derived from the **Bengal Eastern Frontier Regulation (BEFR) Act, 1873**.
- It differentiated Lushai Hills from the plains of Cachar in Assam's Barak Valley.
- The whole demarcation was done **in consultation with the Mizo chiefs**, and it became the basis for the Inner Line Reserve Forest demarcation in the Gazette two years later.
- The **1933 demarcation** marks a boundary between **Lushai Hills and Manipur**, beginning at the tri-junction of Lushai Hills, Cachar district and Manipur.
- The **Mizos do not accept this demarcation** on the ground that **their chiefs were not consulted** this time.

**Different border perceptions**

- While the **Mizo leaders** believes that the only acceptable boundary is the **Inner Line of 1875**, the people of **Assam consider the demarcation of 1933** to be the actual boundary.

**Simmering of the dispute**

- The dispute started becoming bitter when **Mizoram was made a Union Territory** in 1972, and eventually a **state in 1987**, on the **basis of 1933 demarcation**. The two states signed an agreement that **status quo** should be maintained at no-man's land set up in the boundaries.

- In 1995, the **first major tension** was reported in Lushai Hills along the border when the Mizoram government tried to settle people there as per the 1875 demarcation.
- Again, in 2018, nearly 50 persons were injured in action by Assam police after some Mizo civil society groups tried to **set up a hut on the disputed boundary**.
- These skirmishes again resulted in the two states agreeing to **maintain a status quo** and have no man's land in the disputed area.
- Recent tensions, however, **exposed the pent-up issues** of the border demarcation.

#### Way forward

- This is not a one-off issue and Assam has border disputes with all the states that were carved out of it, namely **Nagaland, Meghalaya, and Arunachal Pradesh**.
- The issue finds its **roots in the British rule**. It, however, need to be resolved soon as India is a **Union of states** and ensuring peace and stability in the region is the prerogative of the Union Government.
- A **multistakeholder approach**, whereby no affected community is left out, is the need of the hour.

### Menace of Drug/Substance abuse in India: Causes, Impacts and Solutions

#### Context

- Recently, India has signed 26 bilateral pacts, 15 memoranda of understanding and two agreements on security cooperation with different countries for combating illicit trafficking of narcotic, drugs and psychotropic substances.
- The Narcotics Control Bureau (NCB) coordinated with various international organizations for sharing information and intelligence to combat transnational drug trafficking.

#### Drug/Substance abuse in India

- **Definition:** World Health Organization (WHO) defines Drug Abuse as the harmful or hazardous use of psychoactive substances, including alcohol and illicit drugs.
  - Addiction is an advanced stage of substance abuse where the addict develops a compulsion to take the drug, persists in its use despite harmful consequences and exhibits a determination to obtain the drug by almost any means.

#### Severity of drug abuse problem in India:

- According to a survey by the Ministry of Social Justice and Empowerment, India has more than **70 million drug addicts**.
- **An AIIMS study in February 2019:** found that around 5 crore Indians reported to have used cannabis and opioids at the time of the survey.
  - ♦ Alcohol is the most commonly abused psychoactive substance followed by cannabis, opioids (heroin, opium) and inhalers.
  - ♦ It has been estimated that there are about 8.5 lakh people who inject drugs.
- **As per National Crime Records Bureau's (NCRB)'s suicide data,** In the year 2019, 7719 out of the total 7860 suicide victims due to drug abuse/alcohol addiction were male.

#### Causes of growing drug menace in India

- **Location of the country:** India is sandwiched **between two largest Opium producing regions** of the world that is **the Golden triangle (comprises Thailand, Myanmar, Vietnam and Laos)** on one side and **the Golden crescent (includes Pakistan, Afghanistan and Iran)** on other.
- **Peer pressure and on the pretext of being stress buster:** school and college students often starts using drugs under peer pressure and on the pretext of being immense exam pressure.
- **Poor implementation of laws:** drug trafficking across the borders, corruption in policing system, negligence on the part of law enforcement agencies (for example use of drugs in rave parties), etc. are few of the example of poor implementation of laws.
- **Changing traditional societal values:** The processes of industrialization, urbanization and migration have led to loosening of the traditional methods of social control rendering an individual vulnerable to the stresses and strains of modern life.
- **Financial problems and social neglect:** it often found that people under immense financial pressure, especially unemployed youth start consuming drugs.
  - When an adolescent does not get adequate attention and love in the family or from friends/intimate partner, s/he often feels neglected and to cope up with this, they start using drugs.

### Impacts of rampant drug abuse

- **On society:** Rampant drugs use among people, especially youth affect relationships with family, friends creating emotional and social problems.
  - Drug use have also linked with rise in the domestic abuse of women in the family.
- **On national economy:** it results in the wastage of demographic dividend that India has as drug use harms individual's mental, physical and emotional capabilities, hence, negatively affecting the Indian economy.
- **On health:** drug use often results in unintentional injuries, accidents, incidents, medical problems, and death.
- **Internal security:** terrorists and other extremist organizations often sell drugs to garner money for their terrorist activities, hence, harming India's national security and sovereignty.

### Important government steps to check drug menace in India

- **Narco-Coordination Centre (NCORD):** established in 2016 by Ministry of Home Affairs (MHA) for effective drug law enforcement. This NCORD system has been restructured into a four-tier scheme up to district level in 2019, for better coordination.
- **E-portal 'SIMS' (Seizure Information Management System):** launched in 2019 by MHA for digitization of pan-India drug seizure data which is to be used by all the drug law enforcement agencies under the mandate of NDPS Act.
- **Narcotics Drugs and Psychotropic Substances (NDPS) Act, 1985:** It prohibits a person from producing, possessing, selling, purchasing, transporting, storing, and/or consuming any narcotic drug or psychotropic substance.
  - It also applies to all Indian citizens outside India and to all persons on ships and aircraft registered in India.
  - It empowers the Directorate of Revenue Intelligence, the Border Security Force, Sashastra Seema Bal, Indian Coast Guard, Railway Protection Force and the National Investigation Agency for making drug seizures.
- **Role of Ministry of Social Justice and Empowerment:** it is the nodal ministry for drug demand reduction that coordinates and monitors all aspects of drug abuse prevention which include assessment of the extent of the problem, preventive action, treatment and rehabilitation of addicts.

- About 350 to 400 **Integrated Rehabilitation Centres for Addicts (IRCA)**s are functioning with the support of the Ministry.
- **National Centre for Drug Abuse Prevention** has been set up for capacity building and training of NGOs running De-addiction centres.

### Way forward

- Drug menace is the manifestation of deep-rooted distortions in the socio-cultural, economic and political system. Being systemic and multi-dimensional, its **solution shall have to be systemic and multi-pronged.**
- **Reducing the stigma attached to drug problem:** by being empathetic towards victims of drug addicts and should not treat them criminals.
- **Awareness:** should be done by the government with the coordination of civil societies in this field.
  - Educational curriculum should be revised and chapter on drug addiction and ways to counter it should be included.
- **Strengthening the rehabilitation and other health infrastructure** to ensure quality care to drug addicts and re-integration in the society.

### Unlawful Activities (Prevention) Act (UAPA), 1967

#### Context

- Father Stan Swamy died in jail as he **could not get bail** under the UAPA Act. This brings the Act to attention, again.

#### Key points

- Stan Swamy was a Jesuit priest, who died **waiting for bail for nine months.**
- He was **booked by National Investigative Agency (NIA)** under UAPA concerning **Bhima Koregaon violence.**
- His death has, again, brought the spotlight on the credibility of UAPA.

#### Background of UAPA

- The, 1967 was enacted to provide **prevention of certain unlawful activities** of individuals and associations.
- The 1967 version of the Act gave **certain powers to the central government** to deal with activities that are meant to undermine the sovereignty and integrity of India.
- **Originally, the act was not a terror law** and it became so after the amendment in 2004 when Parliament inserted a chapter to punish terror activities.

- The act was subsequently amended many times to broaden its scope, the last being the amendment in 2019 when it was decided to include not only certain groups as a terrorist organisation, but also **certain individuals as terrorists**.

#### Importance of UAPA

- The act forms the **foundation of India's legislative policy against terrorism**.
- It ensures the government's responsibility towards **upholding the security of individuals**.
- It helps in maintaining the **sovereignty and integrity of India**.
- It puts **law enforcement agencies one step ahead of the terrorists**. This increases the morale of our security forces.

#### Criticism

- The act **makes bail difficult**. Moreover, it extends the pre-charge sheet custody period from 90 days to 180 days.

- It violates one of our cardinal Fundamental Rights, freedom of speech and expression guaranteed under **Article 19(1)(a)**.
- It has a **low conviction rate**. According to the data of the Home Ministry, only 2.2% of cases registered under the Act led to conviction by courts.
- It **undermines federalism** because 'police' is a state subject and the act has a limited role of state police.

#### Way forward

- The Act should be implemented in **letter and spirit** to prevent its misuse.
- There is a need to maintain a **balance between the freedom of the individual and national security**. Ensuring both is sine-qua-non to India's democracy.
- Since the issue is of interpretation of the Act, the **role of the judiciary** becomes important. Arbitrariness and ulterior motive should be decided from the lens of constitutionalism. Example- Guwahati High Court observed that **civil disturbance, which arises out of protests cannot be considered as an act of terror**.

## History, Art & Culture

### Dholavira: A City of Harappan Civilization

#### Context

- Dholavira**, the archaeological site of a **Harappan-era city**, received the **UNESCO world heritage site tag** during 44th meeting of UNESCO's World Heritage Committee.
  - It is locally as **Kotada timba**.
- Earlier, Government of India had submitted nomination dossier of '**Dholavira: A Harappan City**' for inclusion in the World Heritage List for the year 2020.
- Dholavira has now **become 40<sup>th</sup> Indian site to be on the UNESCO's World Heritage List**.

#### About Dholavira site

- Location:** It is located on a hillock near present-day Dholavira village in **Kutch district**, from which it gets its name.
  - It is located in the **Khadir Bet Island** of the **Kutch Desert Wildlife Sanctuary**.
  - Dholavira's location is on the **Tropic of Cancer**.
- Discovery:** discovered in **1968** by archaeologist **Jagat Pati Joshi**. The site's excavation between **1990 and 2005** under the supervision of archaeologist **Ravindra Singh Bisht** uncovered the ancient city.

#### Importance of the Dholavira site:

- It is **the first site** of the ancient **Indus Valley Civilisation (IVC)** in India to get the tag.
- It was a **commercial and manufacturing hub** for about 1,500 years before its decline and eventual ruin in 1500 BC.
- Dholavira is **the fifth largest metropolis of IVC** after Mohen-jo-Daro, Ganweriwala and Harappa in Pakistan and Rakhigarhi in Haryana of India.

#### Key features/findings

- Only Harappan site to be divided into three parts:** it has a **fortified citadel**, a **middle town** and a **lower town with walls made of sandstone or limestone** instead of mud bricks in many other Harappan sites.
- Cascading series of water reservoirs:** Dholavira appears to have had several large reservoirs, and an elaborate system of drains to collect water from the city walls and house tops to fill these water tanks.
- Two multi-purpose grounds** — one of which was used for festivities and as a marketplace.
- Nine gates with unique designs.
- Funerary architecture featuring tumulus** — hemispherical structures like the Buddhist Stupas.



- **No mortal remains** of humans have been discovered at Dholavira **unlike other graves at other IVC sites**. Memorials contain no bones or ashes but offerings of precious stones, etc.
- **Other findings:** include painted pottery, seals, stone figures, weights, sign board etc.
- **Knowledge of metallurgy:** as indicated by the remains of a copper smelter in Dholavira.
  - It is believed that traders of Dholavira used to **source copper ore from present-day Rajasthan and Oman and UAE and export finished products**.
- It was also a **hub of manufacturing jewellery** made of shells and semi-precious stones, like agate **and used to export timber**.
- **Trade with the Mesopotamia:** as beads peculiar to the Harappan workmanship have been found in the royal graves of Mesopotamia.

#### Other Harappan sites in Gujrat

- **Lothal:** located in Saragwala village **on the bank of Sabarmati** in Dholka taluka of **Ahmedabad district**.
  - It was **excavated between 1955 and 1960**.
  - It is **an important port city of the ancient civilisation**, with **structures made of mud bricks**.
  - **Key discoveries:** 21 human skeletons from a graveyard, Foundries for making copperware, Ornaments made of semi-precious stones, gold etc.
- **Rangpur** on the **bank of Bhadar river** in **Surendranagar district** was the **first Harappan site in the state to be excavated**.
- **Other sites:** **Rojdi** in Rajkot district, **Prabhas** near Veraval in Gir Somnath district, **Lakhabaval** in Jamnagar, and **Deshalpar** in Bhuj taluka of Kutch.

#### Possible Reasons for downfall of the city

- **Collapse of Mesopotamia:** due to integrated economic system between the two civilizations, downfall of Mesopotamia may have caused the downfall of Dholavira.

- Harappans lost a huge market, affecting the local mining, manufacturing, marketing and export businesses once Mesopotamia fell.
- **Climate Change:** from 2000 BC, Dholavira entered a phase of severe aridity due to climate change and rivers like Saraswati drying up.
  - **Drought like situation resulted in large-scale migration** from Dholavira toward the Ganges valley or towards south Gujarat and further beyond in Maharashtra.
- The Great Rann of Kutch, which surrounds the Khadir island on which Dholavira is located, used to be navigable, but the sea receded gradually and the Rann became a mudflat.

#### Conservation status

- **Remained free from encroachment** in the historical period as well as in the modern times.
  - **UNESCO termed Dholavira as one of the most remarkable and well-preserved urban settlements in South Asia** dating from the 3rd to mid-2nd millennium BCE.
- **Development of a museum** here by the Archeological Survey of India (ASI).
- **Fossil Park:** near the Dholavira city has been developed where wood fossils are preserved.



## Prelims Booster Articles

### Catch the Rain Campaign

#### Context

- Odisha has come up with more than 10,000 rainwater harvesting structures (RWHS) to facilitate water conservation and groundwater recharge before onset of southwest monsoon.
  - These were created under '**Catch the Rain**' campaign.

#### Key points

- "Catch the Rain" campaign:** a nation-wide campaign by **National Water Mission (NWM)** Ministry of Jal Shakti.
  - Focus:** on saving and conserving rainwater in the pre-monsoon and monsoon periods of 2021, covering both urban and rural areas of all the districts in the country.
  - Tagline:** "Catch the rain, where it falls, when it falls".
  - Aim:** to nudge the states and all stakeholders to create RWHS suitable to the climatic conditions and sub-soil strata, with people's active participation.
- Awareness campaign:** in collaboration with the "Nehru Yuva Kendra Sangathan" (NYKS), Ministry of Youth Affairs and Sports involving youth clubs.

#### Miscellaneous

- Water is a state subject under seventh schedule of the constitutional:** Hence, Central government provides only technical and financial assistance to states through various schemes and programs.
- Composite Water Management Index (CWMI) report:** released by the NITI Aayog since 2018.
  - Second edition (2019) ranked all states in the index on the composite water management, comprising 9 broad sectors with 28 different indicators.

### Crocodile Conservation

#### Context

- 194 crocodiles have been relocated from the **Panchmuli lake** near the Statue of Unity, Gujarat, in the last two years for the safety of tourists who come to enjoy boat rides there.

**About Crocodiles:** three species of the crocodiles are found in India.

#### 1. Gharial:

- Habitat:** mostly found in fresh water. In India, the Chambal river of the Vindhya mountains (Madhya Pradesh) is considered primary habitat. They are also found in rivers like Ghagra, Gandak, Girwa, Ramganga and the Sone.
- Threats:** Illegal sand mining, poaching, increased river pollution, dam construction, etc.
- Protection status:**
  - IUCN List of Threatened Species:** Critically Endangered
  - CITES:** Appendix I
  - Wildlife Protection Act, 1972:** Schedule I

#### 2. Mugger or Marsh Crocodile:

- Habitat:** can be found in both freshwater habitats (like rivers, lakes and marshes) and saltwater habitats (like coastal saltwater lagoons and estuaries).
- Threats:** Habitat destruction, fishing activities and use of crocodile parts for medicinal purposes. It is already extinct in Bhutan and Myanmar.
- Protection status:**
  - IUCN List of Threatened Species:** Vulnerable
  - CITES:** Appendix I
  - Wildlife Protection Act, 1972:** Schedule I

#### 3. Estuarine or Saltwater Crocodile:

- Habitat:**
  - India:** Odisha's **Bhitarkanika National Park**, the **Sundarbans** in West Bengal and the **Andamans and Nicobar Islands**.
  - Globally:** found across Southeast Asia and northern Australia.
- Threats:** Illegal hunting, habitat loss, and antipathy toward the species (as it is considered as man-eater).
- Protection status:**
  - IUCN List of Threatened Species:** Least Concern
  - CITES:** Appendix I (except the populations of Australia, Indonesia and Papua New Guinea, which are included in Appendix II).
  - Wildlife Protection Act, 1972:** Schedule I

### NIPUN Bharat Programme

#### Context

- The Ministry of Education has launched NIPUN Bharat Programme to cover learning needs of children belonging to age group of **3-9 years**.

#### Key Points

- National Initiative for Proficiency in Reading with Understanding and Numeracy** (NIPUN Bharat), aims at ensuring that every child attains **foundational literacy and numeracy** by the end of **Grade 3, by 2026-27**.
- The program is expected to transform learning at the foundational level and make it Holistic, Integrated, Inclusive, Enjoyable, and Engaging.
- It has been launched under **Samagra Siksha Scheme**, a centrally sponsored scheme.

#### Miscellaneous

- Samagra Siksha Abhiyan**
  - It was launched in Union Budget 2018-19
  - It aims to treat education holistically, without segmentation, from pre-nursery to Class 12.
  - It subsumes three schemes, namely, Sarva Siksha Abhiyan (SSA), Rashtriya Madhyamik Shiksha Abhiyan (RMSA), and Teacher Education (TE).

### Harit Dhara and Tamarin Plus

#### Context

- ICAR (Indian Council of Education and Research) has launched Harit Dhara and Tamarin Plus—anti-methanogenic feed supplements for livestock.

#### Key Points

- It could reduce methane emissions by 20% when mixed with livestock feed.
- It is expected to overcome production inefficiency, thus leading to higher milk yield, and stabilise global warming.

#### Miscellaneous

- Methane is a Green-House Gas (GHG) and its global warming potential is 25 times more than Carbon Dioxide over 100 years.
- ICAR**
  - Earlier known as Imperial Council of Agricultural Research, it was established in 1929 as a society registered under the Societies Registration Act, 1860.

- It reports to the Department of Agricultural Research and Education, Ministry of Agriculture and Farmer Welfare.
- Union Agriculture Minister is its ex-officio president.
- Headquarter: New Delhi
- It is the apex body responsible for agriculture education and research, and farm extension.
- It acts as a nodal agency for Krishi Vigyan Kendras.

### Relics of Georgian Queen St. Ketevan

#### Context

- Recently, foreign minister of India handed over relics of **17th century Georgian Queen St. Ketevan** to Georgia.
  - It is the **first-ever visit by Indian External Affairs Minister** since the country's independence in 1991.

#### About the relics

- St. Queen Ketevan's relics were **found in 2005** at the **St. Augustine Convent in Old Goa**.
- The relics are believed to have been **brought to Goa in 1627** and interred in **St. Augustine Complex**.
  - The relics were **authenticated by the CSIR-Centre for Cellular and Molecular Biology, Hyderabad**, on the insistence of the Archaeological Survey of India (ASI).

#### About Georgia:

- Georgia declared its independence in the wake of disintegration of USSR in 1991. India recognized Georgia on 26th December 1991.
- Strategic location:** it is a country at the **intersection of Europe and Asia**.
  - It is bounded on the **north and northeast by Russia**, on the **east and southeast by Azerbaijan**, on the **south by Armenia and Turkey**, and on the **west by the Black Sea**.

### Supernovae

#### Context

- Indian researchers have spotted an extremely bright, hydrogen deficient, fast-evolving **supernova (named SN 2020ank)** that **shines with the energy borrowed from an exotic type of neutron star** with an ultra-powerful magnetic field.
- It was studied by scientists from Aryabhata Research Institute of Observational Sciences (ARIES), Department of Science and Technology (DST).

- These observations were made using three Indian telescope:
  1. Devasthal Optical Telescope (recently commissioned)
  2. Sampurnanand Telescope
  3. Himalayan Chandra Telescope

#### About supernova

- Supernovae (SNe) are highly energetic explosions in the Universe releasing an enormous amount of energy.
  - It is the explosion of a star. It is the largest explosion that takes place in space.
- Supernovas are often seen in other galaxies. But supernovas are difficult to see in our own Milky Way galaxy because dust blocks our view.
- A supernova happens where there is a change in the core, or centre, of a star. A change can occur in two different ways, with both resulting in a supernova.
  1. **In binary star system:** binary stars are two stars that orbit the same point. One of them, a carbon-oxygen white-dwarf, steals matter from its companion star, eventually leading to accumulation of matter on the white dwarf, causing it to explode, resulting in a supernova.
  2. **Occurring at the end of a single star's lifetime:** as the star runs out of nuclear fuel, some of its mass flows into its core. This results in core becoming so heavy that it can't withstand its own gravitational force. Eventually core collapses resulting in the giant explosion of a supernova.

#### Additional information

- **Aryabhata Research Institute of Observational Sciences (ARIES):**
  - It is an autonomous institute of the Department of Science & Technology (DST), Government of India.
  - It is one of the leading research Institutes which specializes in observational Astronomy & Astrophysics and Atmospheric Sciences.
  - The unique position of ARIES (79° East), places it at almost in the middle of 180° wide longitude band, between Canary Island (20° West) and Eastern Australia (157° East), and therefore complements observations which might not be possible from either of these two places.

- Recently it established its own indigenously designed and developed the Devasthal Optical Telescope. the largest optical telescope of its kind in Asia. It will be used to study star structures and magnetic field structures of stars.

#### Right to Repair Movement

##### Context

- Developed countries like the US and the UK are pushing forward the concept of 'right to repair' which allow the consumers to fix their gadgets themselves.

##### Key points

- **'Right to repair' movement**
  - Consumers depend a lot on the manufacturers for repairing the gadgets, which sometimes are inaccessible for most of us.
  - Activists around the world have been voicing this concern since 1950s—dawn of the era of computers.
  - The goal of this movement is to urge the companies to make spare parts, tools and also make the information available for the common people, to increase the life span of these products and thus reduce the e-waste.
- Manufacturing is a highly polluting process and when gadgets become obsolete quickly, this process becomes frequent and thus contribute significantly to the heap of e-waste generated across the world.
- Activists accuse the companies of 'planned obsolescence', which means these companies deliberately make gadgets that do not last long, so that people fall in their trap and are left at the mercy of these companies.
- With no surprise, this movement has been facing resistance from the tech-giants like Microsoft and Apple.
- The activists of this movement also argue that the implementation of this movement will help create employment opportunities at the grassroot level.

##### Additional information

- **Basel convention** is an international effort to reduce the e-waste generation around the world.
- **Mobile Phone Partnership Initiative (MPPI)** is a project under Basel Convention to address the issue of end-of life mobile phones.



## Sustainable Development Goals Report 2021

### Context

- Recently, UN Sustainable Development Solutions Network (SDSN) has released the **6<sup>th</sup> edition** of Sustainable Development Report 2021.

### Key points

- Ranking and Score**
  - Finland** topped the report followed by Sweden and Denmark.
  - India has secured the **120<sup>th</sup> rank** among the 165 countries with a score of **60.1**.
- Other inference**
  - It is the first time since the launch of this report that **all the countries have shown a reversal in progress** in achieving the goals, owing the COVID-19.
  - The **low-income countries are lacking the financial capacity** to achieve the goals under SDG, the pandemic has only worsened the situation.
  - East and South Asia** have been showing more progress in achieving the SDGs than any other region.
  - 3 countries have shown a remarkable progress since 2015—**Bangladesh, Ivory Coast, and Afghanistan**.

### Additional information

- Sustainable Development Goals are a set of **17 goals and 169 targets**, which are set to be achieved by 2030.
- Recently, NITI Aayog has released the **3<sup>rd</sup> edition of SDG India index**. In this index, Kerala has retained the top position and Bihar is named as the worst performer.

## Tokyo Summer Olympics 2020

### Context

- The **Summer Olympics 2020** is being held in Tokyo, Japan **between 23 July-08 August, 2021**. With no fans permitted in Japan, foreign or local, it has the distinction of being the first Games without spectators.
- Even after postponement, the Olympics Games will keep the name Olympic and Paralympic Games Tokyo 2020.

## Key facts about Tokyo Summer Olympics 2020

- Background:**
  - Historic postponement:** This is the first time that the Olympic Games have been postponed and rescheduled.
  - It is also considered as the **first postponement of an Olympics in peacetime**.
- Tokyo was selected as the host city during the 125th IOC Session in Buenos Aires, Argentina in 2013.
- Hosting Olympics in Tokyo in 1964 making this the **first city in Asia to host the Summer Games twice**.
- Tokyo 2020 medals** have been crafted with **recycled electronic waste**.
- Athletes representing 206 National Olympic Committees, including a refugee Olympic team, are expected to participate. Indian contingent will compete across 18 disciplines.
- Manpreet Singh and Mary Com will be the flag-bearers for India at the opening ceremony.

### About Olympics:

- The first modern Olympic Games were held in 1896 at Athens (Greece)** and the **architect of the modern Olympics Games was Pierre, baron de Coubertin**.
- Missing Olympic:** In 1940, Japan was about to become the first Asian country to host Olympics but it got canceled due to its military aggression in Asia.
  - 1940 Olympics also called '**Missing Olympics**' as it later got cancelled due to World War 2.

### Additional information

- International Olympic Committee (IOC):** it was **created in 1894** and is the supreme authority of the Olympic Movement.
  - It is a **non-governmental sports organisation** based in **Lausanne, Switzerland**, and responsible for organising the Summer and Winter Olympic Games.

## UNESCO's list of world heritage sites

- Context:** Recently, the **English city of Liverpool** has been **removed from UNESCO's list of world heritage sites** after the United Nations' cultural agency found new buildings, including a football stadium, undermined the attractiveness of its Victorian docks.
- The city is **only the third place to be removed** from the prestigious list, other two being- a wildlife sanctuary in Oman in 2007 and the Dresden Elbe valley in Germany in 2009.

**Key facts**

- **About UNESCO's list of world heritage sites:** A World Heritage site is officially classified as a natural or man-made area or a structure that is of international importance and requires special protection. These sites are officially recognized by the UNESCO.
  - The list is maintained by the **international World Heritage Program** administered by the **UNESCO World Heritage Committee**, composed of **21 UNESCO member states** which are **elected by the General Assembly**.
- **Criteria for selection:** To be included in the list, a World Heritage Site must be an already classified landmark, unique in some respect as a geographically and historically identifiable place having special cultural or physical significance.
- **Benefits:** The heritage label gives historic sites access to UN conservation funding as well as featuring in tourist guidebooks across the world.

**India and UNESCO's World Heritage Sites**

- At present, India has **38 World Heritage Sites**. These include **30 Cultural properties, 7 Natural properties and 1 mixed site**.
- Recently, **six Indian sites** have been added to the **tentative list** of UNESCO's world heritage sites. These are –
  1. **Ganga ghats** in Varanasi, U.P.
  2. **Temples of Kanchipuram** in Tamil Nadu.
  3. **Satpura Tiger Reserve** in Madhya Pradesh,
  4. **Maratha military architecture** in Maharashtra
  5. **Hire Bengal megalithic site** in Karnataka and
  6. **Bhedaghat-Lameta Ghat of Narmada Valley** in Madhya Pradesh.

**Nirbhaya Fund****Context**

- Ministry of Women and Child Development (MOW&CD) recently reported that out of the allocation of around **Rs.6200 crore till date**, under Nirbhaya Fund, a sum of approx. **Rs. 4100 crores have been disbursed/** released by the concerned Ministries/ Departments and approx. **Rs. 2800 crores** have been reported to be utilized.

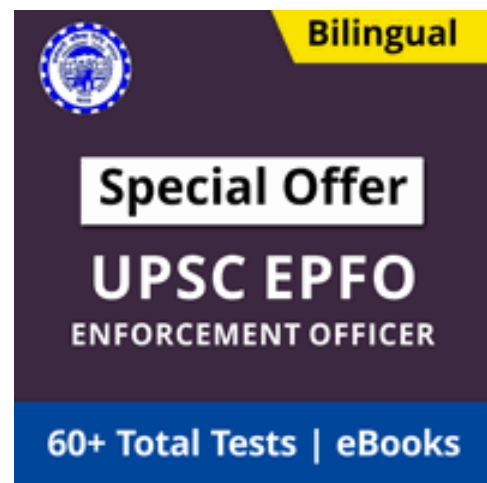
**Key points**

- Since the inception of Nirbhaya Fund, schemes/ projects worth Rs. 9764.30 Cr. have been appraised by the **Empowered Committee (EC)**.

- **Empowered Committee of officers:**
  - They are constituted to appraise and recommend the proposals for funding under Nirbhaya Fund.
  - They also review the status of implementation of approved projects from time to time in collaboration with the concerned **Implementing Agencies**.
- After appraisal by the EC, the concerned Ministries (or Departments) obtain approval of the **Competent Financial Authority (CFA)**, release funds and implement the project /scheme either directly or through various Implementing Agencies.

**Additional information**

- **Nirbhaya Fund:**
- It was set up in **2013** to implement the initiatives, which are aimed at improving the **security and safety of women** in our country.
- It is a **non-lapsable** corpus fund where the government contributed **Rs. 1000 crores**.
- Administration of the fund rests with the **Department of Economic Affairs** under the Ministry of Finance, while the **MW&CD is the nodal agency** for expenditure from this fund.
- Under this scheme, the Centre grants money to the states, which in turn spend it on women safety programs.
- **3 schemes** have been implemented by the Ministry of Women and Child Development from this fund.
  - **'One Stop Centre'**
  - **'Universalisation of Women Helpline'**
  - **'Mahila Police Volunteer'**



## Stand-Up India Scheme

### Context

Government has recently decided to extend the duration of this scheme till **2025**.

### Key points

Till now, banks have sanctioned **Rs 26,204 crore to 1,16,266 beneficiaries** under the Scheme in the last five years.

The scheme has benefited **more than 93,000 women** entrepreneurs till date.

### Additional information

Stand Up India Scheme was launched on **05th April, 2016**.

### Objective:

- The objective of the Stand-Up India Scheme is to facilitate loans between **Rs. 10 lakh and Rs.1 Crore** to at least one **Scheduled Caste (SC)** or **Scheduled Tribe (ST)** borrower and one **woman borrower** per bank branch for setting up **only a green field enterprise** in **manufacturing, services or trading sector**.

### Eligibility:

- The SC/ST or Women entrepreneur should be **above 18 years of age**.
- In case of non-individual enterprises, **51% of the shareholding** should be held either by SC/ST and/or Women entrepreneur.

### Margin Money:

- In the budget 2021-22, the margin money requirement for loans under the Scheme has been reduced from 'upto 25%' to '**upto 15%**' and activities allied to agriculture have been included in the Scheme.

## Ramappa temple

### Context

- Recently, the 13th century Ramappa temple in Palampet, Telangana was inscribed as a UNESCO World Heritage Site at the ongoing online meeting of the World Heritage Committee (WHC) in Fuzhou, China.
  - It was the only nomination by India in 2019 for the World Heritage Site selection process.

### Key points about the Ramappa temple

- It is Dedicated to **Lord Shiva**, it is situated in Palampet Village, Warangal (Telangana). It is also known by the name **Ramalingeshwara Temple**.
  - The temple has its name after its architect/sculpture, Ramappa.
  - It is perhaps the only one in the country that is known by the name of the architect rather than the king who commissioned it or its presiding deity.
- it was built under the supervision of **Chief Commander Recherla Rudra**, during the reign of Ganapati Deva from Kakatiya dynasty in 1213 century AD.
- The stunning dance sculptures and friezes of the temple appear as if they have been machined into shape on black dolomite, rather than being chiseled.
- The temple is built on a valley and it rests on bricks that are scientifically shown to float in water.

### Additional information

- UNESCO World Heritage Committee (WHC):**
  - It is composed of **representatives of 21 States Parties** to the World Heritage Convention and **meets once in year**.
- Key functions of the Committee-**
  - Responsible for the implementation of the World Heritage Convention,
  - Defines the use of the World Heritage Fund and
  - Allocates financial assistance upon requests from States Parties.
  - It has the final say on whether a property is inscribed on the World Heritage List.
  - Examines reports on the state of conservation of inscribed properties and asks States Parties to take action when properties are not being properly managed.
  - Decides on the inscription or deletion of properties on the List of World Heritage in Danger.

## AZADI KA AMRIT MAHOTSAV (INDIA@75)

### Context

- Prime Minister of India has urged Indians to participate in the **"Amrit Mahotsav"** launched to mark the 75th year of Independence.
- He asked citizens to **forge a unity of purpose** or **"Bharat Jodo Andolan"** in the same manner as Mahatma Gandhi's **"Quit India"** or **"Bharat Chhodo Andolan"**.

**Key points about Amrit Mahotsav**

- The Prime Minister, in march 2021, flagged off the 'Padyatra' (Freedom March) from Sabarmati Ashram, Ahmedabad and inaugurated the curtain raiser activities of the 'Azadi Ka Amrit Mahotsav' (India@75).
  - It is a symbolic 386-km "Dandi March" from Sabarmati Ashram in Ahmedabad to Dandi in Navsari district of South Gujarat.
  - It has marked the 91st anniversary of the historic salt march led by Mahatma Gandhi.
- The launch of the 'Azadi ka Amrit Mahotsav' 75 weeks before 15 August 2022 will continue till 15 August, 2023.
- Under it, a series of events to be organised by the Government of India to commemorate the 75th Anniversary of India's Independence.
- It is based on five pillars i.e. Freedom Struggle, Ideas at 75, Achievements at 75, Actions at 75 and Resolves at 75 as guiding force for moving forward keeping dreams and duties as inspiration.

**Additional information**

- **Quit India movement (Bharat Chhodo Andolan):**
  - On 8th August 1942, Mahatma Gandhi gave a clarion call to end the British rule by launching the **Quit India Movement** at the session of the All-India Congress Committee in Mumbai.
  - Here, he gave the clerical call of 'Do or Die' at the **Gowalia Tank Maidan**, now popularly known as **August Kranti Maidan**.
  - The slogan 'Quit India' was coined by Yusuf Meherally, a socialist and trade unionist who also served as Mayor of Mumbai.

**Renewables Integration in India 2021****Context**

- The report was jointly launched by **NITI Aayog and IEA** (International Energy Agency). The report is based on the outcome of three states workshops held with the Governments of **Maharashtra, Karnataka and Gujarat** to understand the specific **energy transition challenges** faced by these renewable-rich states.

**Key points**

- According to the report, India is **the third largest energy-consuming** country in the world.
- India's power system can efficiently integrate renewables (175 GW by 2022 and 450 GW by 2030), but it would require identification of resources and **proper planning, regulatory, policy and**

**institutional support, energy storage and advance technology initiatives.**

- Per capita electricity consumption in India is around a **third of the world average**, and is expected to continue increasing despite the government's energy efficient initiatives, including LED lighting, efficient cooling and building standards.
- **Solar and wind** form the majority of India's renewable capacity.
- Renewable energy penetration is **highly variable in the states** of India. The share of solar and wind in India's ten renewables-rich states (Tamil Nadu, Karnataka, Gujarat, Rajasthan, Andhra Pradesh, Maharashtra, Madhya Pradesh, Telangana, Punjab and Kerala) is significantly higher than the national average of 8.2%.

**Recommendations**

- The report recommended to **remove the barriers**—both technical and economic—between inter-state trading.
- Indian states should **leverage all potential sources** of power system flexibility to maximise the value of solar and wind.
- **Rooftop solar systems** need to be monitored and managed.

**Periodic Labour Force Survey (PLFS) – Annual Report****Context**

- National Statistical Office (NSO) launched the **third Annual Report** on the basis of Periodic Labour Force Survey conducted during July 2019-June 2020.

**Key points**

- Considering the importance of availability of labour force data at more frequent time intervals, National Statistical Office (NSO) launched Periodic Labour Force Survey (PLFS) in April 2017.
- The objective of PLFS is primarily twofold:
  - to estimate the key employment and unemployment indicators (viz. **Worker Population Ratio, Labour Force Participation Rate, Unemployment Rate**) in the short time interval of three months for the urban areas only in the '**Current Weekly Status**' (CWS) and,
  - to estimate employment and unemployment indicators in both '**Usual Status**' (ps+ss) and CWS in both rural and urban areas annually.



## Key Findings:

Rates	Rural			Urban			Rural+Urban		
	male	female	person	male	female	person	male	female	person
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
PLFS 2019-20									
LFPR	56.3	24.7	40.8	57.8	18.5	38.6	56.8	22.8	40.1
WPR	53.8	24.0	39.2	54.1	16.8	35.9	53.9	21.8	38.2
UR	4.5	2.6	4.0	6.4	8.9	7.0	5.1	4.2	4.8

## Additional information

- **Labour Force Participation Rate (LFPR):** LFPR is defined as the percentage of persons in labour force (working or seeking or available for work) in the population.
- **Worker Population Ratio (WPR):** WPR is defined as the percentage of employed persons in the population.
- **Unemployment Rate (UR):** UR is defined as the percentage of persons unemployed among the persons in the labour force.
- **Activity Status- Usual Status:** The activity status of a person is determined on the basis of the activities pursued by the person during the specified reference period. When the activity status is determined on the basis of the reference period of last 365 days preceding the date of survey, it is known as the usual activity status of the person.

**Activity Status- Current Weekly Status (CWS):** The activity status determined on the basis of a reference period of last 7 days preceding the date of survey is known as the current weekly status (CWS) of the person.

## Hepatitis Disease

### Context

- **World Hepatitis Day** is observed each year on **28th July** to enhance awareness of **viral hepatitis**.
- **Theme** of World Hepatitis Day **2021** is '**Hepatitis Can't Wait**'.

## Key points

- **Hepatitis:** it refers to any inflammation of the liver — the irritation or swelling of the liver cells from any cause. It **disturbs various metabolic processes** such as bile production, excretion, fat and protein metabolism, activation of enzymes and synthesis of proteins.
  - Recently, an automated coronavirus testing device named '**COBAS 6800**' was launched which can also **detect viral Hepatitis B & C, among others**.
- **Causes:**
  - **Viral causes:** caused by a group of viruses known as the "**hepatotropic**" viruses, including A, B, C, D and E.
  - **Other causes:** can be caused by drugs and alcohol abuse, fatty liver hepatitis or an autoimmune process in which a person's body makes antibodies that attack the liver (autoimmune hepatitis).
  - **Covid-19 virus SARS-CoV-2** has also been found to injure the liver.
- **Types:** there are five types- Hepatitis A, Hepatitis B, Hepatitis C, Hepatitis D, Hepatitis E.
  - **Hepatitis A-**
    - ♦ **Symptoms** include vomiting, nausea, fever, severe abdominal pain, jaundice, weakness and these symptoms might last longer till eight weeks.
    - ♦ **Treatment:** Hepatitis A is a self-limiting disease and require no specific antiviral medications.
  - **Hepatitis B:**

- ♦ **Symptoms:** include abdominal pain, fatigue, and jaundice. Symptoms do not come to limelight until one to six months.
- ♦ **Treatment:** effective **medications are available. Hepatitis B Vaccine** could be done for both adults and children as a preventive measure. Hepatitis B vaccination is **included under India's Universal Immunization Program (UIP).**
- **Hepatitis C:**
  - ♦ **Symptoms:** loss of appetite, tiredness, frequently occurring fever, yellowing of your skin or eyes, joint pain, abnormalities in urine and abdominal pain.
  - ♦ **Treatment:** like Hepatitis B, effective **medications are available for its treatment.**
  - ♦ **Hepatitis D: caused by a virus Hepatitis D.** It spreads from infected blood or wound. Sometimes it might occur in conjunction with Hepatitis B. So, its symptoms and treatment are similar to Hepatitis D/B as the case may be.
  - ♦ **Hepatitis E:** They are self-limiting diseases (go away on their own) and require no specific antiviral medications.

### 'Drink From Tap' Mission

#### Context

- **Odisha's Puri**, the holy land of **Lord Jagannatha**, became the **first city in India** where people can avail **high-quality drinking water** directly from **the tap on a 24-hour basis.**
  - This feat was achieved under **Odisha government's the 'Drink From Tap' mission.**

#### Key points

- **Coverage:** The initiative is set to provide drinking water to every household in Odisha across all 114 urban local bodies, with an inclusive mandate covering all slum households.
- **Quality potable water:** provide water supply adhering to **"Quality Standards of IS 10500"** and will benefit the city's 2.5- lakh population and 2 crore tourists who visit the holy place annually.
- **Reduce plastic waste:** as provision of safe drinking water will help prevent the use of three crore plastic bottles, and **reducing the state's carbon footprint.**

- **Participation of Self-Help Groups (SHGs):** underprivileged women from self-help groups who **are designated as 'Jalsaathis'** have been hired and trained for meter reading, revenue collection, conducting field water quality tests, and sensitising people.
- **Display of Real-time water quality:** at public places by way of LCD screens to ensure public confidence and a mass shift from bottled water to tap water.

### Agarwood

#### Context

- The Tripura government has approved the **'Tripura Agarwood Policy, 2021'** to promote agarwood business in the state with an aim to develop a Rs 2000 crore economy in the state within 2025.

#### Key points

- The project's worth is Rs 100 crore, and has been undertaken as part of the **'Atmanirbhar Bharat'** and **'Vocal for Local'** initiatives of the Centre.
- It has received the necessary clearance from the Union Ministry of Environment, Forest, and Climate Change.
- Steps has been taken to **legalize marketing of agarwoods** and oil used as chips and in perfume industries respectively in the gulf countries.
- The government has stated that Agarwood species have a huge potential of creating an **Economic Revolution** in Tripura.

#### Additional information

- **Aquilaria malaccensis** or Agar Tree is a substratum of **economic prosperity** in the North-Eastern region in India, besides being an aromatic plant.
- Agarwood is an economically important and **fast-growing evergreen** tree species native to North East India.
- Apart from India, the Agar tree's distribution ranges from the **foothills of the Himalayas to Papua New Guinea.**
- It is the **most expensive raw material** in the world.
- Agarwood oil is also known as **liquid gold.**

### National Research Foundation

#### Context

- Recently, the Government proposes to set up a **National Research Foundation (NRF)** to strengthen the **research ecosystem** in the country.

**Key points**

- NRF is being envisaged as an umbrella structure that will **improve linkages between R&D, academia and industry**.
- The total proposed outlay of NRF is **Rs 50,000 crore** over a period of **five years**.
- One of its main objectives is to seed, grow and **facilitate research** at academic institutions, particularly at universities and colleges, where research capacity is currently in a nascent stage.
- It will also **fund and support** high-impact, large-scale, multi-investigator, multi-institution and, in some cases, interdisciplinary or multi-nation projects in collaboration with relevant Ministries, Departments, and other Governmental and non-Governmental entities, especially industry.

**Additional information**

- NRF is envisaged under **National Education Policy 2020**.
- NEP 2020: It is the 3<sup>rd</sup> NEP, other two were launched in 1968 and 1986.
  - It proposes a **5+3+3+4 model** of school system.
  - It proposes a **universal foundational literacy** by 2025.
  - It proposes a **Higher Education Commission of India (HECI)**, which would be mandated to regulate the educational institutions of the country.
  - It proposes **100% Gross Enrolment Ratio** in preschool to secondary by 2030.

**Human Rights Watch****Context**

- Recently, Human Rights Watch accused the Israeli military for committing war crimes in Gaza during an 11-day war in May, 2021 against the Hamas militant group.
- The international human rights organization issued its conclusions after investigating three Israeli airstrikes that it said killed 62 Palestinian civilians.

**Key points**

- **About Human Rights Watch (HRW):** it is an **international non-governmental organization**, headquartered in New York City.
- It was founded in **1978** as "**Helsinki Watch**".

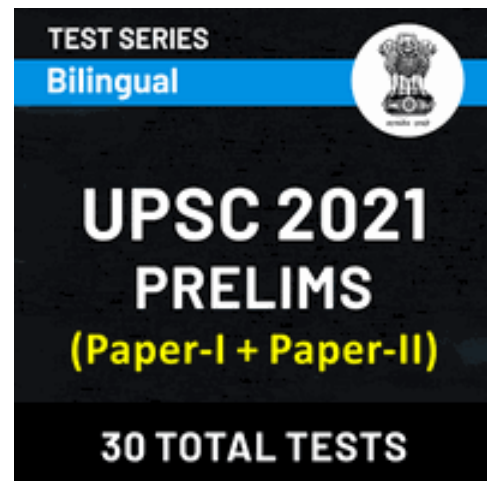
- HRW in 1997 shared in the **Nobel Peace Prize** as a founding member of the **International Campaign to Ban Landmines**, and it played a leading role in the 2008 **treaty banning cluster munitions**.
- **Functions:**
  - The group conducts research and advocacy on human rights.
  - HRW investigates and reports on human rights abuses happening in all corners of the world.
  - The group pressures governments, policy makers, companies, and individual human rights abusers to denounce abuse and respect human rights.
  - It coordinates with governments, the United Nations, rebel groups, corporations, and others to see that policy is changed, laws are enforced, and justice is served.
  - The group **often works on behalf of refugees, children, migrants, and political prisoners**

**Vultures in India****Context**

- A recent study of the population of vultures in the Sigur plateau has found that the population of all four resident vulture species have seemingly been on the rise over the past few years.
  - White-rumped vultures were the most frequently recorded, followed by the populations of long-billed vultures, Asian king vultures and Egyptian vultures using the landscape was increasing.

**Key facts**

- **Vultures in India:** Out of 23 species of vultures in the world, India is home to 9 species of Vulture namely the Oriental white-backed, Long-billed, Slender-billed, Himalayan, Red-headed, Egyptian, Bearded, Cinereous and the Eurasian Griffon.



- **Conservation status as per IUCN red list of threatened species**
  - **Critically endangered:** Oriental white-backed vultures, Slender-billed vultures, Long-billed vultures, Red-headed vultures
  - **Endangered:** Egyptian Vultures
  - **Near threatened:** Himalayan Vultures, Bearded Vultures, Cinereous Vultures
  - **Least Concerned:** Indian Griffon Vultures
- **Wildlife Protection Act 1972:**
  - **Schedule-1:** Bearded vultures, Long-billed vultures, Slender-billed vultures, Oriental white-backed vultures.
  - **Schedule IV:** Egyptian Vultures, Red-headed vultures, Himalayan Vultures, Cinereous Vultures, Indian Griffon Vultures.
- **Threats to their survival**
  - Increasing anthropogenic activities leading to loss of natural habitats.
  - **Widespread use of Diclofenac** as a medicine for livestock. Vultures consuming carcasses of these livestock, get exposed to Diclofenac which has been found to cause kidney failure in vultures.
  - Food Dearth and Contaminated Food.
  - Electrocution by Power lines.

### Making Water Sensitive Cities in Ganga Basin

#### Context

- It is a new **capacity building initiative** to improve river health/flow.
- It is launched by **National Mission for Clean Ganga (NMCG)** in association with Centre for Science and Environment (CSE).

#### Key points

- The key focus areas of the programme will be to develop **Water Sensitive Urban Design and Planning**, Urban Water Efficiency and Conservation, Decentralized Wastewater Treatment and Local Reuse, Urban Groundwater Management and Urban Waterbodies / Lake Management.
- There will be more than **40 training programs** supported with development of learning material/practitioner's guides and spread over a period of 3 years.
- It is launched because there is a need for respecting traditions and focusing on the **basics of water cycle in urban areas**.

- In urban areas the need is of **protecting, conserving and restoring ecosystem** and not just pollution abatement.
- There is a huge need **for public spaces in urban spaces**. River fronts can be a boon in such situation as it connects community with water bodies in cities.
- **"River Cities Alliance"** need to be developed that will provide a unique platform for river cities to collaborate for collectively achieving river rejuvenation through sustainable development and capacity building.

#### Additional information

- Water Sensitive Urban Design and Planning (WSUDP) is an emerging urban development paradigm aimed to **minimize hydrological impacts** of urban development on environment.
- NMCG is the implementing agency of **Namami Ganga Programme**
  - It is the implementation wing of **National Ganga River Basin Authority (NGRBA)**. It is a registered society originally formed by Ministry of Environment, Forests and Climate Change (MoEFCC) in 2011, under the Societies Registration Act, 1860.
  - At present it comes under Ministry of Jal Shakti.

### Russian 'Nauka' Module

#### Context

- **Russia is sending its biggest space laboratory, 'Nauka', to the International Space Station (ISS).**

#### Key points

- **'Nauka' means science** in Russian. It will **replace Pirs**, which was recently detached from the ISS.
- It will serve as the **country's main research facility** on the space station.

#### Additional information

- ISS: It is a collaborative effort between five participating space agencies: NASA (United States), **Roscosmos** (Russia), **JAXA** (Japan), **ESA** (Europe) and **CSA** (Canada).
  - It is a **low-earth orbit** space station, launched in **1998**.
  - It serves as a microgravity and **space environment research laboratory** where crew members conduct experiments in human biology, physics, astronomy, meteorology, among other fields.



- **China** is set to complete its permanent space station, **Tiangong station**, by the end of 2022.
- **Russia**, on the other hand, is planning to launch its own launch satellite by **2025**.
- **India**, in 2019, announced that it will **not be a part of ISS** and instead will set up its own small module space station.
  - The proposed space station will be developed in **5-7 years'** time frame.

### Sanjay Gandhi National Park

#### Context

- The **Sanjay Gandhi National Park (SGNP)** has **invited citizens, corporates and institutions** to adopt animals such as lion, tiger, leopard, rusty-spotted cat, blue bull, barking deer and spotted deer **for up to one year upon paying a fee**.
- This scheme **started in 2013** and have been approved by **the Central Zoo Authority** and till last year 20 animals have been adopted at a total charge of Rs 16.6 lakh annually.

#### Key points about Sanjay Gandhi National Park

- It is a **protected area within the metropolis limit of Mumbai** in Maharashtra.
- It is **part of the Western Ghats biodiversity**, forming roughly 20 per cent of Mumbai's geographical area.
- It was formerly known as Borivali National Park.
- **Presence of two lakes named Vihar and Tulsi**: they are places of immense natural beauty and also harbor a thriving population of mugger crocodiles and are throbbing with migratory bird life throughout the year.
- **'Kanheri Caves'**: around 160 rock-cut caves are situated within the national park.
  - They are carved from basalt rock and date from the 1st century BCE to the 10th century CE.
- **Biodiversity**
- **Flora**: The Mauve flower is native to the park and the surrounding regions. Karvi or karvy, a flowering plant that flowers once in seven/eight years, can be found in the park.
- **Fauna**: Spotted Deer, solitary Sambhar, darting Barking Deer, Black-naped Hare, Leopards, Rhesus Macaque, etc. **The Indian flying fox is the biggest of the 17 bat species** found in the park.
  - There are a wide variety of reptiles including crocodiles and avifauna.
  - There is high biodiversity of butterflies including the blue Mormon.

### EXERCISE INDRA-21

#### Context

- **12th Edition of Indo-Russia joint military Exercise INDRA 2021** will be held at **Volgograd, Russia** from 01 to 13 August **2021**.
- The exercise will entail **conduct of counter terror operations under the United Nations mandate** by a joint force **against international terror groups**.

#### Key points

- The **INDRA series** of exercise began in **2003** and the **first joint Tri Services Exercise** was conducted in **2017**. The last joint, tri-services exercise between India and Russia was conducted in India in December **2019**.
- The exercise is conducted **alternatively in India and Russia**.
- **Significance**:
  - Strengthen mutual trust and confidence between military forces and also between the two countries in general.
  - **Enhanced interoperability**: between the Indian & Russian Armies **and enable sharing of best practices** between the contingents of both the countries.
  - Promotes brotherhood and camaraderie between soldiers and militaries.

#### Other military exercises between India and Russia

- **Exercise Aviaindra**: it is an Air Force level exercise between India and the Russian Federation. First Aviaindra was conducted in 2014.
- **Passage Exercise (PASSEX)**: It is a **naval exercise** which **Indian navy** conducts with **other friendly countries**. In **September 2020, India conducts PASSEX with Russia**.
- It is aimed at enhancing interoperability, improving understanding and imbibing best practices from each other.
- Recently, Navies of **India and the U.K. participated** in a two-day **bilateral Passage Exercise (PASSEX)** in the Bay of Bengal from July 21 to 22, 2021.

### Secured Logistics Document Exchange

#### Context

- Ministry of Commerce & Industry has launched this initiative to further **improve ease of doing business**.

**Key points**

- It is set to improve **logistics efficiency**, **reduce logistics cost**, and promote multi-modality and sustainability.
- These digital initiatives have been launched to **fill the gap areas** where no action has yet been taken either by private players or any of the line ministries.
- It will **replace the present manual process** of generation, exchange and compliance of logistics documents with a digitized, secure and seamless document exchange system.
- It will enable generation, storage and interchange of **logistics-related documents digitally** using Aadhaar and blockchain-based security protocols for data security and authentication.
- It will also provide a complete **audit trail** of document transfer, faster execution of transaction, lower cost of shipping and overall carbon footprint, easy verification of authenticity of documents, lowered risk of fraud, among other benefits.

**Green House Gas Emission Calculator**

- Along with the above initiative, Green House Gas (GHG) Emission calculator was also launched.
- It is an efficient, user-friendly tool and provides for calculating and comparing GHG emissions across different modes.
- It allows for **commodity-wise comparison** of GHG emissions and **total cost of transportation**, including their environmental cost, between movement by road and rail.

**Additional information**

- Ease of Doing Business and Logistics Performance index are released by the **World Bank**.

**Earth Overshoot Day****Context**

- According to the World Wide Fund for Nature (WWF), this day shifted back to **29<sup>th</sup> July** this year, the same date as in 2019.

**Key points**

- Earth Overshoot Day (EOD), calculated by the **Global Footprint Network** (GFN), marks the date when **humanity's demand** for ecological resources and services in a given year **exceeds what Earth can regenerate** in that year.

- In 2020, this day took place later in the year, on **22 August**.
- GFN says that humanity's "**ecological footprint**" has increased by 6.6 per cent over the last year due to easing of COVID restrictions.
- Humanity currently uses 74 per cent more resources than what the planet's ecosystems can regenerate each year — or **1.7 Earths**.
- **Ecological Deficit**: From 29 July until the end of the 2021, the global economy will be operating in an "ecological deficit".
- **Global forest biocapacity** has decreased by 0.5% since 2020, due to spike in deforestation of the Amazon rainforest.
- This year EOD highlighted that the **wealthy countries are exhausting much more** ecological resources than the less developing countries. For example- if the world's population lived like the US, EOD would fall on 14 March. It, however, would be 18 December, if humanity lived like the people of Indonesia.

**Additional information**

- Global Footprint Network: It is an **international research organisation** that observes humanity's use of natural materials.
- The **26<sup>th</sup> COP** (Conference Of Parties) of UNFCCC (United Nations Framework for Climate Change) will be held in **Glasgow, Scotland** in November this year.

**Qutub Minar****Context**

- Recently, the Delhi High Court has directed South Delhi Municipal Corporation (SDMC) to submit a report on the properties being constructed in the vicinity of Qutub Minar.
- It has also directed SDMC commissioner to fix responsibility on officers who have permitted illegal and unauthorised constructions.

**Key points about Qutub Minar**

- **Construction**: the foundation of **Qutub Minar** was laid down by **Qutub-ud-din-Aibak**- the **mamluk (slave) commander-in-chief of Muhammad of Ghori**, and founder of Muslim rule in India
  - **Shamsu'd-din Iltutmish (1211-36)**, successor of the **Qutub-ud-din-Aibak**, added three more storeys.
  - **Firoz Shah Tughlaq (1351-88)** constructed the **topmost part**, a fine specimen of workmanship in **white marble and red sandstone**.

- It was later also repaired by Sikandar Lodi.
- It has a diameter of 14.32m at the base and about 2.75m on the top with a height of 72.5m. It is an architectural marvel of ancient India.
- **Location:** Mehrauli, New Delhi.
- **Alai Darwaja:** located in Qutub Complex. It was built by Ala-ud-din Khilji in 1311 AD.
- **Mehrauli Iron Pillar:** is also located in the Qutub-Minar complex. It was built by **Chandragupta II, in the 4th century.**
- **Alai Darwaza-** located in the Qutub Minar Complex, It was built by Ala-ud-din Khilji in 1311 AD.
  - It is the earliest known example of a true Mughal arch, with hollow minarets and a unique dome housing a small cupola on top of the larger one.
  - It is built of red sandstone and white marble and extensively decorated with jaali (lattice-screen) patterns, and geometric and floral designs.
- **Other important monuments in the Qutub Minar complex:** Quwwat-ul-Islam Mosque; the tombs of Altamish, Ala-ud-din Khalji and Imam Zamin; the Alai Minar, etc.

### Chandrayaan 3 Mission

#### Context

- Recently, the government has informed the Lok Sabha that Chandrayaan 3 is scheduled to be launched during the third quarter of 2022.

#### Key points

- The Chandrayaan-3 is the successor to the Chandrayaan-2 mission and it will **likely attempt another soft-landing on the lunar surface.**
- ISRO is planning to land the Chandrayaan 3 at **the lunar South Pole (similar to Chandrayaan 2)**, which is a singularly promising part of the moon's surface.
- Unlike its predecessor, Chandrayaan-3 **will not have an orbiter.** However, it will **have a lander and rover** similar to that of Chandrayaan-2.
  - **The Chandrayaan-3 lander** will also be equipped with a **Laser Doppler Velocimeter (LDV).**
- It will **communicate with Earth via the existing orbiter from Chandrayaan-2** whose lifespan has been estimated to be seven years.

#### Additional information

##### • Chandrayan-2:

- **It was India's first lander mission.** Unfortunately, it failed to successfully land at the desired location on the moon. **Vikram lander** crash-landed on the lunar surface.
- It also carried a **rover** named **Pragyan.**
- It aimed to **attempt soft landing at the south pole of the moon**-a site where no earlier mission had gone.

### CA|TS accreditation

#### Context

- **14 tiger reserves** in India have received accreditation of the **Global Conservation Assured Tiger Standards (CA|TS).**

#### Key points

- CA|TS is a **globally accepted conservation** tool that sets best practice and standards to manage tigers and encourages assessments to benchmark progress.
- It is being implemented across **125 sites in seven tiger range** countries and **India** has the highest **94 sites**, out of which assessment was completed for 20 tiger reserves this year.
- The 14 tiger reserves, which have been accredited, are **Manas, Kaziranga and Orang** in Assam; **Satpura, Kanha and Panna** in Madhya Pradesh; **Pench** in Maharashtra; **Valmiki Tiger Reserve** in Bihar; **Dudhwa** in Uttar Pradesh; **Sunderbans** in West Bengal; **Parambikulam** in Kerala; **Bandipur Tiger Reserve** in Karnataka; and **Mudumalai and Anamalai Tiger Reserves** in Tamil Nadu.
- We now have **51 tiger reserves** across **18 states.**

#### Additional information

- **Project Tiger** is a tiger conservation programme launched in April 1973.
- It was launched in **Jim Corbett National Park, Uttarakhand.**
- Recently, **Manas tiger reserve** of Assam has achieved a rare feat by increasing its tiger population from **zero to 48** in just 2 decades.



## NEFT, RTGS for Non-banks

### Context

- RBI has **allowed non-banks**—Prepaid Payment Instrument issuers, White label ATM operators—to participate in its **Centralised Payment Systems** through **RTGS** (Real Time Gross Settlement) and **NEFT** (National Electronic Fund Transfer).

### Key points

- Both RTGS and NEFT are instruments of RBI's Centralised Payment Systems.
- Till now, **only banks** were allowed to deal with these payment facilities.
- Beside banks only few non-banks were allowed to participate in CPS. Those are **financial institutions** like NABARD, EXIM Bank, **clearing corporations** of stock exchanges, standalone primary dealers, retail payment system organisations and **DICGC** (Deposit Insurance and Credit Guarantee Corporation).

- Nature of transactions that can be executed shall depend upon the **type of membership** approved for RTGS.
- Non-banks to be allotted a **separate IFSC** (Indian Financial System Code) for the same purpose.
- They will also be allocated a **current account** by the RBI and a **settlement account** is also to be maintained by the RBI.

### Additional information

- NEFT: It is a **nation-wide centralised payment system** owned and operated by the RBI.
  - It was made **available on all days of the year** from December, 2019.
  - It was launched in November **2005**.
- RTGS: It is a **Funds transfer system** where money is transacted from one bank to another in '**real-time**', and on **gross basis**.
  - It is used for **high-value fund transfers**.
  - It is **the fastest possible way** to transfer money, if we are using the banking method.

**BILINGUAL**

UPSC CSE Prelims 2021  
Cracker Batch

Starts July 14, 2021 1PM to 5 PM

TEST SERIES  
Bilingual

UPSC 2021  
PRELIMS  
(Paper-I + Paper-II)

30 TOTAL TESTS

**HINGLISH**

UPSC EPFO  
Crash Course

Pre Recorded Videos

**WORRIED ABOUT UPSC PREPARATION?**  
**DO YOU WANT TO CLEAR UPSC 2021?**

HERE IS THE SOLUTION  
**UPSC ADDA247**

COMPLETE ONLINE FREE COURSES FOR GS & CSAT

**GS PAPER 1**

- DAILY CURRENT AFFAIRS
- THE HINDU EDITORIAL ANALYSIS
- YOJANA
- KURUKSHETRA
- POLITY BY LAXMIKANTH
- HISTORY BY SPECTRUM
- MEDIEVAL, ANCIENT & MODERN HISTORY
- INDIAN ECONOMY
- GENERAL SCIENCE INCLUDING PHYSICS, CHEMISTRY & BIOLOGY

**SUBJECTS COVERED**

- SCIENCE & TECHNOLOGY
- GEOGRAPHY INCLUDING WORLD
- GEOGRAPHY THROUGH MAPS
- ENVIRONMENT
- INTERNATIONAL RELATIONS

**CSAT PAPER 2**

- QUANTITATIVE APTITUDE
- REASONING
- ENGLISH
- INTERPERSONAL SKILLS

SPECIAL REFERENCE TO UNION BUDGET 2021 EXAM PREPARATION IS NOW SIMPLIFIED BY UPSCADDA247

SUBSCRIBE

UPSC  
adda247  
You Tube Channel





**Govt. Job in your pocket**

Prepare for  
**UPSC & State PSC Exams**

Join **FREE**  **YouTube Classes**

**& also get UPSC 2021 Prelims Test Series**

