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NOTE:

Dear Students,

Memorisation and recollection of information in Current Affairs is as important as understanding the articles. In order to enhance the learning outcomes from the Monthly Current Affairs Magazine, we are introducing following additions:



A thematic based colors has been used in the document in the boxes, tables etc to enable easy identification and recollection of various concepts and topics.



Questions are an important tool to assess and retain information. To enable this we are adding a Smart Quiz at the end of each section in the document for practicing the questions.



A wide variety of infographics have been added to ensure smoother learning experience and enhanced retention of the information. This will also help in effective presentation of information in the answer writing as well.



Places and persons in news are being presented in an objective manner through Maps, Tables & Pictures. This will help in easier recollection of factual information.

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1. POLITY AND GOVERNANCE

1.1. SUB-CATEGORISATION OF OTHER BACKWARD CLASSES

Why in news?

Union Cabinet has approved an extension by six months of the term of **Justice Rohini Commission** examining the possibility of sub-categorisation within the Other Backward Classes (OBCs) in the Central list.

Background

- The Union Government constituted a four-member commission headed by Justice G. Rohini in 2017 under **Article 340** with an aim to improve the equitability of sharing of benefits among OBCs.
 - The article 340 of the Indian Constitution lays down conditions for the appointment of a Commission to investigate the conditions of backward classes.
- Mandate of the Commission:**
 - Examining the extent of inequitable distribution of benefits of reservation (i.e. 27 percent reservation in jobs and education) among the castes or communities with reference to the central OBC list.
 - Work out the mechanism, criteria, norms and parameters in a scientific approach for sub-categorization of OBCs.

Who are OBCs?

- OBC is a collective term used by the Government to classify castes which are **educationally or socially disadvantaged**. (OBCs are referred to as Socially and Educationally Backward Classes).
- OBCs are a **vastly heterogeneous group**. There are various jaatis or sub-castes which vary significantly in the societal and economic status.
 - For instance, OBCs include land-owning communities in both north and south India alongside poorer sections of the society living on subsistence labour.
- There are **two lists of OBCs — central and state**, with former identified by the Union government dealing with the quotas in the central jobs, while the state lists are the mandate of state governments catering to local reservations.

Need for sub-categorization of OBCs

- Benefits of reservations have reached only limited sections:** The Rohini commission highlighted that from about 2,633 central list OBCs, about 1900 castes have not proportionately benefitted.
 - Half of these 1900 castes have not availed the benefits of reservation at all**, and the other half include those that have availed less than 3 per cent share in the OBC quota.
 - The commission highlighted that **25% of benefits from OBC reservations** have been availed by only **10 sub-castes**.
 - According to the committee, the communities that have got almost no benefits of reservations include profession-based castes such as **Kalaigars**, a community that traditionally polishes tins; and **Sikligars and Saranias**, communities that traditionally sharpen knives; **apart from several other marginalised groups**.
- Benefits are tilted towards economically stronger sub-sections:** Research suggests that the Mandal Commission recommendations helped the economically better positioned OBCs more than the most backward castes.

Tentative recommendations of the commission for sub-categorization of OBCs:

Category 1	1,674 caste groups- largely those who have not benefited from the quota.	2% reservation
Category 2	534 caste groups	6% reservation
Category 3	328 caste groups	9% reservation
Category 4	97 caste groups- mostly considered dominant OBCs with large population	10% reservation

Background: The Mandal Commission

- In 1990, the then Union government announced that Other Backward Classes (OBCs) would get **27 percent reservation in jobs in central government services and public sector units (under Article 16(4) of the Constitution)**.
- The decision was based on **Mandal Commission Report (1980)**, which was set up in 1979 and chaired by B.P. Mandal. The mandate of the Mandal Commission was to identify **socially or educationally backward classes** to address caste discrimination.
- The recommendation for OBC reservations in central government institutions was implemented in 1992 while the **education quota came into force in 2006 (under Article 15(4) of the Constitution)**.
- To ensure that benefits of the recommendations of the Mandal Commission percolated down to the most backward communities, the **creamy layer criteria** was invoked by Supreme Court in the ruling called the '**Indira Sawhney**

Judgment' (1992).

- A household with an **annual income of Rs 8 lakh or above** is classified as belonging to the 'creamy layer' among OBCs and hence is not eligible for reservations.

Evolution of the idea of sub-categorization

- The First Backward Class Commission report of 1955 had proposed sub-categorization of OBCs into **backward and extremely backward communities**.
- In the Mandal Commission report of 1979, a **dissent note** by member L R Naik proposed sub-categorization in **intermediate and depressed backward classes**.
- In 2015, the **NCBC had proposed** that OBCs be divided into the following three categories:
 - a. **Extremely Backward Classes (EBC-Group A)** facing social, educational and economic backwardness even within the OBCs, consisting of aboriginal tribes, nomadic and semi-nomadic tribes who have been carrying on with their traditional occupations;
 - b. **More Backward Classes (MBC-Group B)** consisting of vocational groups carrying on with their traditional occupations; and
 - c. **Backward Classes (BC-Group C)** comprising of those comparatively more forward.
- According to the NCBC, **11 states/UTs** (Andhra Pradesh, Telangana, Puducherry, Karnataka, Haryana, Jharkhand, West Bengal, Bihar, Maharashtra, Rajasthan and Tamil Nadu) have **subcategorized OBC for reservations** in state-government-owned institutions.

Challenges in implementation of OBC sub-categorisation

- **Political sensitivity of the issue:** The move to sub-categorize OBCs **may create agitation in some sections of OBCs** as the benefits get redistributed.
 - OBC reservations have caused political turmoil in the past.
- **Use of older and unreliable estimates:** The commission has based its recommendations on quota within quota on the **population figures from the 1931 Census**, and not on the more recent Socio-Economic Caste Census (SECC) 2011.
 - Since the implementation of the Mandal Commission report, over **500 new castes have been added to the Central list of OBCs**. The 1931 Census does not have the population for these new additions.
 - The 1931 census also **does not have population of princely states** that were **not ruled by the British**.
- **Information unavailability on social and educational status:** There is lack of availability of information regarding the social and educational backwardness of various castes.
- It could be a very **difficult exercise statistically** due to following reason: Apart from a large number of castes, there are **significant variations within castes from state to state** which implies data collection needs to be larger and more robust.

National Commission for Backward Classes (NCBC)

- The NCBC was set up as a **statutory body** under the NCBC Act, 1993.
- **102nd Constitutional Amendment Act made it a constitutional body** as per Article 338B of the Constitution.
- Key functions performed by the panel:
 - In the case of **grievances** related to non-implementation of reservations, economic grievances, violence, etc. people will be able to move the Commission.
 - To **inquire into complaints of deprivation of rights and safeguards**.

Way forward

- Sub-categorization to **be based on relative benefits among the OBCs and not on social backwardness**, this may help deprived sections to be able to avail of their fair share of the quota.
- **Revising the creamy layer ceiling:** National Commission for Backward Classes (NCBC) demanded that the income ceiling be further revised as the current limit is not in up to date with the associated purchasing power.

Related developments with regard to 102nd Amendment Act

- The 102nd amendment inserted Articles 338B and 342A in the Constitution.
 - **Article 338B** deals with the structure, duties and powers of the National Commission for Backward Classes commission (NCBC), and
 - **Article 342A** (with two clauses), gives the President the power to notify a class as SEBC and the power of Parliament to alter the central SEBC list.
- Recently, **Ministry of Social Justice and Empowerment has framed an amendment to Article 342A** to introduce a third clause - Article 342A (3) **to restore power of states to identify OBCs** to be included on the respective state lists.
 - Until now, state governments were free to decide which castes would be part of the OBC list in their own state. The central government had no role in these decisions. The OBC lists of many states have such castes and

communities that haven't found a place in the central government's OBC list for those states.

- However, the Supreme Court ruling on the Maratha reservation held that only the President can declare any community as OBC and that too only on the recommendation of the National Commission for Backward Classes (NCBC).
- Additionally, Supreme Court have also remarked about there being in future a **"single list" of OBCs** that should be issued by the President on the recommendations of the National Commission for Backward Classes.

Related news

Other Backward Classes (OBC) And Economically Weaker Section (EWS) Get Quotas Under All India Quota (AIQ) Scheme For Medical Courses

- **Union Health Ministry has announced 27% reservation for OBCs and 10% quota for EWS in AIQ scheme for undergraduate (UG) and postgraduate (PG) state-run Medical and Dental colleges.**
- AIQ scheme was **introduced in 1986 for domicile-free, merit-based opportunities to students from any state to study in a good medical college in any other state.**
 - It comprises 15% of UG seats and 50% of PG seats in government medical colleges.
 - Initially, there was **no reservation in the AIQ scheme up to 2007.**
 - ✓ In 2007, reservation for SCs (15% of AIQ seats) and STs (7.5% of AIQ seats) was made under the scheme.

1.2. JUVENILE JUSTICE (CARE AND PROTECTION OF CHILDREN) AMENDMENT BILL

Why in news?

Parliament passed Juvenile Justice (Care and Protection of Children) Amendment Bill, 2021, which seeks to amend the Juvenile Justice Act, 2015.

Brief Background

- A juvenile is a **person less than 18 years** of age. The Juvenile Justice (Care and Protection of Children) Act, 2015 addresses **children in conflict with law and children in need of care and protection**. It provided for the **trial of juveniles in conflict with law in the age group of 16-18 years** as adults in certain cases.
- The Act was brought to **replace the Juvenile Delinquency Law and the Juvenile Justice (Care and Protection of Children Act) 2000.**
- It fulfils India's commitment as a signatory to the **United Nations Convention on the rights of the child, the Hague Convention on Protection of Children and Co-operation in respect of Inter-country Adoption (1993)**, and other related international instruments.
- The recent amendment has been brought based on a **report filed by the NCPDR in 2018-19** in which the over 7,000 Child Care Institutions (or children's homes) were surveyed and **several inadequacies** prevailing in the system were highlighted.

Changes made by the Bill

	Related Provisions in JJ Act, 2015	Features of Bill
Adoption	<ul style="list-style-type: none"> ● Adoption of a child is final once a civil court issues an adoption order. 	<ul style="list-style-type: none"> ● District Magistrates, including Additional District Magistrates, can issue adoption orders (both for intra-country and intercountry adoptions) in order to ensure speedy disposal of cases and enhance accountability. ● Additional functions of DM: <ul style="list-style-type: none"> ○ Empowers the DM including ADM to effectively coordinate and monitor the functions of various agencies responsible for implementation of the provision of the principal act. ○ They have been empowered to supervise the District Child Protection Units and Special Juvenile Protection Units, and conduct a quarterly review of the functioning of CWC, JJ Boards.
Appeals	<ul style="list-style-type: none"> ● There will be no appeal for any order made by a Child Welfare Committee concluding that a person is not a child in need of care and protection. The Bill removes this provision. 	<ul style="list-style-type: none"> ● The Bill removes this provision. ● Any person aggrieved by an adoption order passed by the district magistrate may file an appeal before the Divisional Commissioner, within 30 days of such order. Such appeals should be disposed within four weeks from the date of filing of the appeal.

Serious Offences	<ul style="list-style-type: none"> Offences committed by juveniles are categorised as: <ul style="list-style-type: none"> Heinous offences (those with minimum punishment of seven years of imprisonment under IPC or any other law), Serious offences (three to seven years of imprisonment), and Petty offences (below three years of imprisonment). Juvenile Justice Board will inquire about a child who is accused of a serious offence. 	<ul style="list-style-type: none"> Redefines 'serious offences' to include such offences for which the punishment is: <ul style="list-style-type: none"> Minimum imprisonment for a term of 3-7 years; Maximum imprisonment for a term more than 7 years but no minimum imprisonment or minimum imprisonment of less than 7 years. This has been done to give effect to recommendation of Supreme court in <i>Shilpa Mittal v. State of NCT of Delhi</i> case.
Designated Court	<ul style="list-style-type: none"> Offences against children that are punishable with imprisonment of more than seven years, will be tried in the Children's Court (equivalent to a Sessions Court). Other offences (punishable with imprisonment of less than seven years) will be tried by a Judicial Magistrate. 	<ul style="list-style-type: none"> Provides that all offences under the Act will be tried in the Children's Court.
Offences against children	<ul style="list-style-type: none"> An offence under the Act, which is punishable with imprisonment between three to seven years will be cognizable (where arrest is allowed without warrant) and non-bailable. 	<ul style="list-style-type: none"> Such offences will be non-cognizable and non-bailable.
Child Welfare Committees (CWCs)	<ul style="list-style-type: none"> States must constitute one or more CWCs for each district for dealing with children in need of care and protection. Provides certain criteria for the appointment of members to CWC. For instance, a member should be: <ul style="list-style-type: none"> involved in health, education, or welfare of children for at least seven years, or a practising professional with a degree in child psychology, psychiatry, law, or social work. 	<ul style="list-style-type: none"> Stipulate certain additional criteria for appointment of CWC members. No person shall be eligible for selection as a member of the CWC, if he: <ul style="list-style-type: none"> Has any past record of violation of human rights or child rights. Has been convicted of an offence involving moral turpitude, and such conviction has not been reversed or has not been granted full pardon in respect of such offence. Has been removed or dismissed from service of the Government of India or State Government or an undertaking or corporation owned or controlled by Government of India or State government. Has ever indulged in child abuse or employment of child labour or immoral act. Is part of management of a child care institution in a district.

Benefits of new bill

- Faster adoption:** There is **significant delay in finalising adoption** cases in courts. Between April 2015 and March 2020, about 19,000 children have been adopted, an average of 320 adoptions per month. As on July 2018, there were **629 adoption cases pending** in various courts. The bill will ensure that more orphans in need of homes, will be adopted faster.
 - Adoption cases are **non-adversarial** in nature and can be dealt as per the process laid out.
- Enhanced Protection of children:** Both heinous and serious crimes have been clarified, removing ambiguity to ensure that children, as much as possible, **are protected and kept out of the adult justice system**.
- Smooth implementation:** DMs and ADMs will monitor the **functioning of various agencies** under the JJ Act in every district i.e the Child Welfare Committees, the Juvenile Justice Boards, the District Child Protection Units and the Special Juvenile Protection Units.
 - Bill makes DMs responsible for ensuring that CCIs falling in their district are **following all norms and procedures**.
 - National Legal Services Authority (2019) noted that **only 17 of 35 states/Union Territories (UTs) had all basic structures** and bodies required under the Act in place.

Concerns regarding bill

- **Overburdening DMs:** The Bill puts **entire onus of children's welfare on DMs**, ignoring the fact that the DMs are overburdened authorities, with the charge of **entire district and other multifarious duties**. **Centralizing all powers** with respect to children rehabilitation in one authority (DMs) may lead to **delays**, and may have **wider repercussions** on child welfare.
- **Inadequate Competency:** District magistrates and divisional commissioners are **trained to be administrators** and perform functions of the government. Specific training in child protection rules will need to be imparted, as they usually are not trained or equipped to deal with these specific laws.
 - In countries such as United Kingdom, Germany, France, and several states in the United States of America, **adoption orders are issued only by the court**.
- **Concerns regarding separation of powers:** The Grievance redressal powers have been given to the **executive**. This has **serious implications on the doctrine of separation of powers**.

Conclusion

Notwithstanding concerns mentioned above, new bill is expected to address difficulties faced in implementation of Act by increasing power and responsibilities of DMs and providing clarity on scope of certain provisions of the Act.

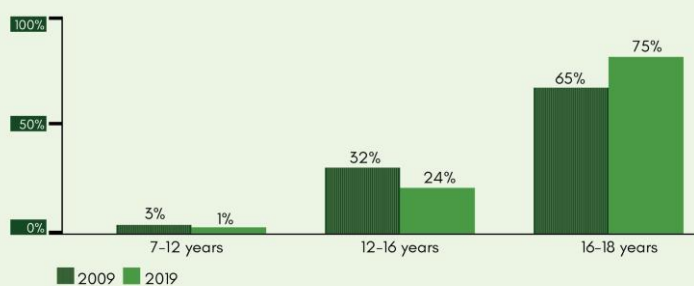
To further increase protection of children, following steps can be taken:

- **Transparency:** Proper record keeping and documentation must be carried out by all agencies to ensure transparency in various areas like finances, compliance with procedures etc.
- **Sensitization of officials:** Officials need to be properly trained to sensitively and efficiently deal with children and their issues, needs, problems, concerns and safety. Vacant positions must be filled, and where required, extra staff must be employed to ensure due care and protection to children.
- **Networking and Coordinating:** Linkages with external agencies and individuals who are experts in various areas of child care must be encouraged and made mandatory (where applicable).

Issues with implementation of JJ Act

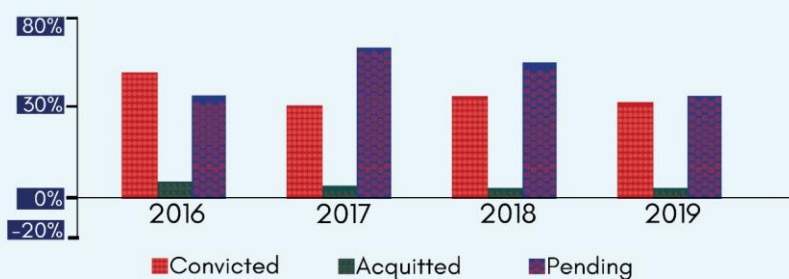
- **Child-care institutions (CCIs):** The Committee on review exercise of CCIs (2018) noted that many CCIs **fail to provide even the basic services** to the children including individual bedding, and proper nutrition and diet. Despite registration being mandatory under the 2015 Act, **only 32% of total CCIs across the country were registered**.
 - NCPDR report in 2018-19 found that **1.5 per cent CCIs do not conform to rules and regulations** of the JJ Act and 29 per cent of them had **major shortcomings** in their management. Not a single CCI in the country was found to be **100 per cent compliant** to the provisions of the JJ Act.
- **Limited Capacity of institutions:** The Standing Committee on Human Resource Development (2015) noted that **CWCs and JJBs lack authority** to manage their financial and human resources and are dependent on the state or district administration. Due to **lack of infrastructure or specific funds**, action taken by them was limited and delayed. It recommended **greater financial allocation, training and cadre-building** for various bodies.
- **Juveniles in conflict with the law:** The total number of children arrested rose **from 33,642 in 2009 to 38,685 in 2019**, an increase of 15%. Children in the 16-18 years' age group **account for majority of children** arrested.
 - **Pendency of cases of juveniles** in conflict with law has increased over the years from **43% in 2009 to 51% in 2019**. The total number of **convictions decreased from 52% in 2009 to 43% in 2019**, whereas acquittals remained below 10%.

JUVENILES ARRESTED BY AGE GROUP



Source: Crime in India, 2009-2019, National Crime Records Bureau

STATUS OF DISPOSAL OF CASES FILED AGAINST CHILDREN IN CONFLICT WITH LAW



Source: Crime in India, 2009-2019, National Crime Records Bureau

1.3. INTER STATE RIVER DISPUTE

Why in news?

Recently, the **Ministry of Jal Shakti** has notified the jurisdiction of **Godavari River Management Board (GRMB)** and **Krishna River Management Board (KRMB)** under the **Andhra Pradesh Reorganization Act (APRA) of 2014**.

Background of the dispute between Andhra Pradesh and Telangana

- The APRA 2014 contains provisions for **constitution of an Apex Council by Central Government** for the supervision of the **functioning of the GRMB and KRMB**.

- GRMB and KRMB are **autonomous bodies** set up after the

bifurcation of the state for administration, regulation, maintenance and operation of projects in Godavari and Krishna rivers basins to ensure **judicious water use** in **Andhra Pradesh (A.P)** and **Telangana** respectively.

- In 2014, the two states agreed to **split the water in 66:34 ratio** as per the allocation made on an ad hoc or temporary basis by the **Krishna Water Disputes Tribunal-1 (KWDT)**.
 - In 1969, the **KWDT-1** was set up under the **Inter-State River Water Dispute Act, 1956**.

- All projects on the **Krishna** — **Jurala, Nagarjuna Sagar, Pulichintala and Srisailem** — were built when the states were one.

- According to the A.P government, the maintenance of the **Srisailem and Pulichintala** projects and **Prakasam** barrage are under A.P, while **Telangana** claims to **look after the Nagarjuna Sagar and Jurala** projects.

- The **water of the Srisailem reservoir** — which is the main storage for river water between the two states — **has turned out to be a major dispute point**.

- The dispute escalated when **A.P** has alleged that

Telangana is drawing water from the four projects — **Jurala, Srisailem, Nagarjuna Sagar, and Pulichintala** — for **hydropower generation** without obtaining clearances from the **KRMB**.

Constitutional provisions for Inter State River water disputes

- Under Seventh schedule:**
 - Entry 17 of State List deals with water** i.e., water supply, irrigation, canal, drainage, embankments, water storage and water power.

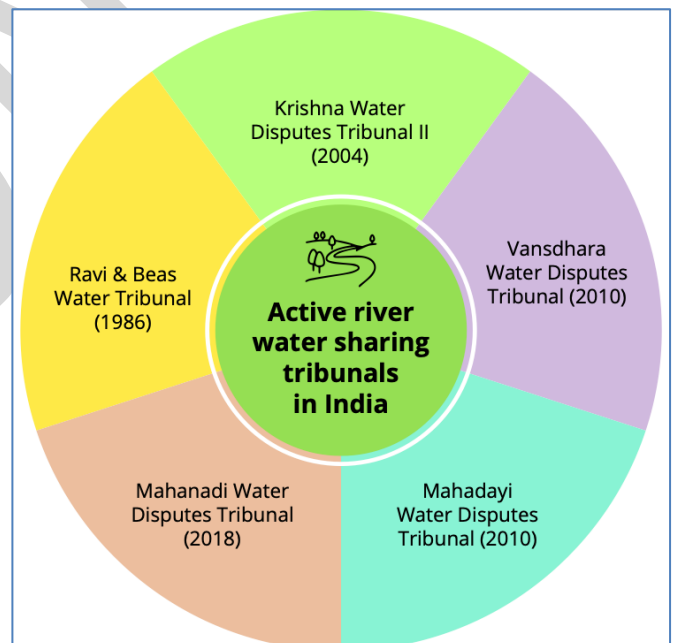
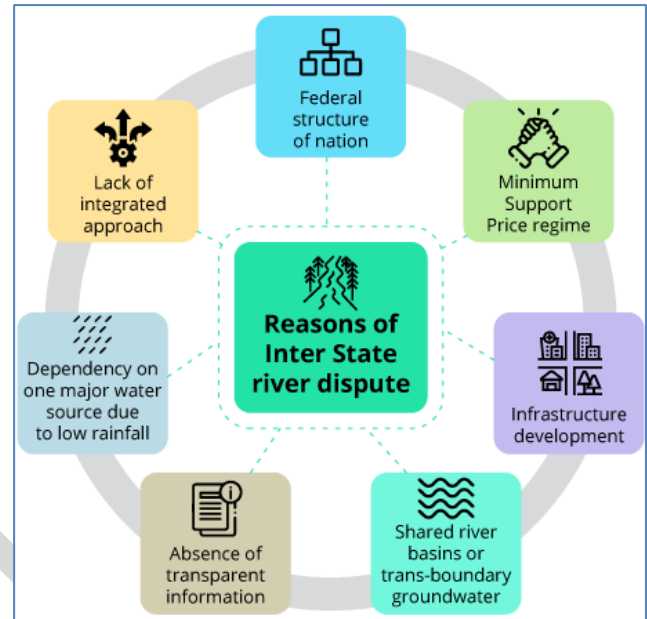
FOR SMOOTH OPERATIONS	
Andhra Pradesh Projects	Telangana Projects
<ul style="list-style-type: none"> Srisailem Right Bank Canal and Power Station Pothireddipadu Head Regulator (Telugu Ganga, SRBC, Galeru Nagari) Handrineeva Sujala Sravanthi (HNSS), *Machumarrli lift irrigation Pula Subbaiah Veligonda Nagarjuna Sagar Right Canal Head Regulator Pulichintala Prakasam Barrage Krishna Delta Western and Eastern Canals Bhiravani Tippha Gajuladinne 	<ul style="list-style-type: none"> Jurala Project Jurala Power Station Bima Nettermpadu Koilsagar lift irrigation Srisailem Left Bank canal, left bank power station Kalvakurthy Palamuru-Rangareddy Lift Irrigation Dindi Lift Nagarjunasagar Left Bank Canal and Power station, AMRC Hyderabad Drinking water scheme Sitarama lift irrigation Musi, Palair, Tummilla, RDS



- **Entry 56 of Union List** gives power to the Union Government for the **regulation and development of inter-state rivers and river valleys** to the extent declared by Parliament to be expedient in the public interest.
- **Article 262** provides for the **adjudication of disputes or complaint relating to waters of inter-State rivers or river valleys**.
 - Parliament by law provides that **neither the Supreme Court nor any other court is to exercise jurisdiction** in respect of any such dispute or complaint.

Issues associated with Inter State River disputes

- **Delays in dispute resolution:** Adjudication by tribunals involves **long-drawn adversarial litigations causing chronic delays**.
 - Sometimes, the **Centre takes years to decide** whether a matter needs to be heard by a tribunal in the first place. **For example**, the Godavari and Krishna disputes started around 1956 but the matter was referred to a tribunal only in 1969.
 - **Absence of authoritative water data** makes it difficult to even set up a baseline for adjudication.
- **Complex and Opaque procedure:** Because of **procedural complexities and incomplete nature of the system** that involves **multiple stakeholders** across governments and agencies, there are too **many options and discretion** at many stages in the institutional framework and guidelines process which **hampers the efficient functioning of the tribunal itself**.
- **Problem of non-compliance:** Due to **India's federal nature of polity and its colonial legacy**, there is problem in ensuring compliance wherein state governments have sometimes rejected tribunal awards.
- **Political mobilization:** There is nexus between water and politics due to which **Inter-state water disputes are no longer just about water allocation**, they have become hugely politicized.
 - **For example**, the recent **eruption of the Cauvery dispute**, framed as an **ethnic identity issue between Tamilians and Kannadigas** led to widespread civil unrest.



- **Institutional vacuum:** The law entrusts the Central government with the responsibility of framing institutions for implementing tribunal awards. There are **no proven institutional models for interstate coordination and implementing tribunal awards**.
- **Lack of grievances redressal:** Delays deprives the states of an avenue to redress their grievances after the tribunals are dissolved. When states approach the Supreme Court in such instances, the bar on its jurisdiction puts restrictions on the court. The apex court has had to limit its role to providing clarifications, leaving states discontent.

Steps taken by government to minimize the Inter- State River disputes

- Parliament has enacted two laws:
 - **River Boards Act, 1956**, provides for the **establishment of River Boards**, for the regulation and development of inter-State rivers and river valleys. River boards are established by central government on the request of the concerned state.

- **Inter-State Water Disputes Act, 1956** empowers the central government to **set up tribunal** for the adjudication of inter- state river dispute. The **decision of the tribunal is final and binding** on the parties to the dispute.
- **Inter-State River Water Disputes (Amendment) Bill, 2019** to streamline the adjudication of inter-state river water disputes and make the present institutional architecture robust.
- **River Basin Management Bill, 2019**, proposes to establish a **River Basin Authority** for regulation and development of inter-state rivers and river basins.
- **National Water Informatics Centre (NWIC)** has been established under **National Hydrology Project** to **maintain a comprehensive water resources data** and collaborate with leading research institutes to provide technical support to central and state organizations dealing with water emergency response of hydrological extremes.
- A web-based **Water Resources Information System (India WRIS)** has been set up and all unclassified data of Central Water Commission and Central Ground Water Board have been uploaded on the website.

Way forward

- **Legal avenues:** It is necessary to have credible avenues for pursuing political solutions supplementing legal and institutional mechanisms. These are vital in **mediating and mitigating escalation of disputes**, especially in distress situations.
- **Robust institutional framework:** Proposed laws should be put on for **consultation with people and the state governments**. The government must have a process on how to "present a robust institutional architecture" as well as understand the significant changes on water flow and relation between groundwater and surface water, before rushing to form the single tribunal.
- **Coordinated approach:** As river basins are shared resources, a coordinated approach between the states, with adequate involvement of the Centre, is necessary for the **preservation, equitable distribution and sustainable utilisation** of river water.
- **Incorporating Social Justice in Dispute resolution:** The River Basin Authority must develop adequate capacity for understanding the unique needs and realities emerging from the interplay of socioeconomic factors.
- **Positive politicization of the issue:** The political discourse of regional identity and culture could be unraveled by bringing to public notice the developmental hindrances, economic losses, and environmental degradation resulting from a lack of a solution to the dispute.

1.4. 97TH CONSTITUTION AMENDMENT ACT, 2011

Why in news?

A three-judge bench of the Supreme Court annulled part of the 97th Amendment Act and Part IX B of the Constitution which governs the "Cooperative Societies" in the country.



More on news

- **'Cooperatives' is a 'State' subject.** However, the 97th Amendment Act was passed by the Parliament **without getting them ratified by State legislatures as required by the Constitution.**
- The Court declared that **Part IXB of the Constitution is operative only insofar as it concerns Multi-State cooperative societies** both within the various States and in the Union Territories.
- The SC has held that **co-operative societies** come under the **"exclusive legislative power" of State legislatures.**
- **About Co-Operatives**
 - It is a **voluntary association of individuals** having common needs, who join hands **for attainment of common economic goals** and interests.
 - It includes, Co-operative societies, Primary Agricultural Credit Societies, Co-operative Banks, etc.
 - They help in **enhancing social cohesion, financial inclusion and elevate the bargaining power** of the poor by organizing them into a group.
 - They also help in **reducing income inequalities by facilitating equitable distribution of wealth** and gaining access to formal loans at affordable rates of interest.
 - Few examples of **successful co-operatives in India** are- Indian Coffee House, Self Employed Women's Association etc.
- **Recent Steps taken to promote co-operative culture**

- New **Ministry of Co-operation** to streamline the co-operative movement in India.
- The **Banking Regulation (Amendment) Act, 2020** which gives RBI the powers to supercede boards of Co-operative Banks and enables mergers and acquisitions in public interest.

- **97th Amendment Act:** This Amendment Act relates to effective management of co-operative societies in the country. The change in the Constitution has **amended Article 19(1)(c)** to give protection to the cooperatives and **inserted Article 43 B and Part IX B**, relating to them.
 - **Article 19(1)(c):** It guarantees **freedom to form association or unions or cooperative societies** subject to certain restrictions.
 - **Article 43 B:** It says that **states shall endeavor to promote** voluntary formation, autonomous functioning, democratic control and professional management of **cooperative societies**.
 - **Part IXB of the Constitution:** It dictated the terms for running co-operative societies. It went to the extent of determining the number of directors a co-operative society should have or their length of tenure and even the necessary expertise required to become a member of the society.

Note: To know more about Co-operatives and Co-operative Movement in India, refer to our Weekly Focus “Cooperatives: Prosperity through Cooperation”.

 <p>Cooperatives: Prosperity Through Cooper- ation</p>	<p>India has had a rich and successful history of the cooperative society and cooperatives today are the best channels to keep alive the spirit of collectivism and democracy afloat. The presence of a large network of social organizations, like cooperatives, would aid in the generation and utilization of social capital and greater the social capital greater would be the possibility of development. Highlighting the relevance and role played by the cooperative sector in India’s development, this document examines the existing roadblocks for the sector and the way forward for the sector to flourish.</p>	
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1.5. DRAFT CINEMATOGRAPH (AMENDMENT) BILL, 2021

Why in news?

Recently, the Information and Broadcasting Ministry released the **draft Cinematograph (Amendment) Bill, 2021** to seek public opinion on the amendments to Cinematograph Act, 1952.

What is Censorship and why Cinematographic censorship is relevant?

Censorship refers to **official prohibition or restriction of any type of expression such as films, books, television shows etc.** believed to threaten the political, social, or moral order. It may be imposed by a governmental authority, local or national, by a religious body or occasionally by a powerful private group.

The Cinematographic censorship becomes relevant because-

- Cinematographic Films, i.e., moving pictures or series of pictures played on any apparatus, are a popular and most influential media of mass communication (**SC in K.A. Abbas vs. Union of India, 1970**).
- The actions, speech, sight etc. in films have a strong impact on the mind and emotions of viewers, making censorship i.e., prior examination and altering or suppressing offensive content is not only desirable but necessary (**SC in S. Rangarajan Etc. vs P. Jagjivan Ram, 1989**).

Central Board of Film Certification

- **HQ at Mumbai with nine regional offices**, CBFC is a statutory body under **Section 3** of the **Cinematograph Act 1952**.
- It carries out the prior examination of films as per the **1952 Act, Cinematograph Rules 1983, and Guidelines from Central Government, 1991**, based on which:
 - it can sanction the film for public exhibition under various **categories of Section 5 (B)**,
 - **direct excisions or modifications** before sanction or
 - **refuse to give sanction** for public exhibition.

What are the changes proposed by the current Act?

- In India, the Cinematograph Act, 1952 provides for prior examination by Central Board of Film Certification (CBFC), popularly known as Censor Board, for **certification and regulating exhibitions**.
- To keep pace with changing times for effective film certification and curb piracy, the draft bill has proposed certain changes to the 1952 act:

Provision	Proposed Change/s
Categories of Film Certification	<ul style="list-style-type: none"> To make changes in the categories of films under Section 4 (1) (i) on 'unrestricted public exhibition' by introducing age-based categories as: 'U/A 7+', 'U/A 13+' and 'U/A 16+'. The existing categories under Section 4 (1) (i) are- <ul style="list-style-type: none"> 'U'- Unrestricted public exhibition 'U/A'- requiring parental guidance for children under 12
Validity of Certificate	<ul style="list-style-type: none"> To enhance certificate validation in perpetuity from existing validity of 10 years under section 5A (3).
Revisonal powers of the Central Government	<ul style="list-style-type: none"> Remove section 6 (1) which was struck down by High Court and add- <ul style="list-style-type: none"> a proviso to it, granting revisional powers to the Government on account of violation of Section 5B (1) of the Act. Another proviso to it, empowering Central Government to direct the Chairman of the Board to re-examine the film on violation of Section 5B (1). Section 6 and Section 5B of the Act provide Revisional powers to the Central Government and principles for guidance for certifying films respectively.
Film Piracy	<ul style="list-style-type: none"> To protect film industry and government from revenue losses caused due to the release of pirated version of films on internet by adding- <ul style="list-style-type: none"> Section 6AA to prohibit unauthorized recording. Section 7 (1A) to provide for penalties on violation of Section 6AA.

Issues in proposed amendment

Among the proposed changes in draft, the **provision on granting revisional powers to the Central Government has been criticized** by film fraternity and others as:

- Hinderance to Freedom of Expression:** The revisional power of Central government on film certified by CBFC was struck down by Karnataka High Court (in **KM Shankarappa Vs. Union of India**); a judgement upheld by the Supreme Court as well in 2000. The new provisions have reintroduced it.
- Stifles Creativity:** The new provisions will increase censorship rather than promoting open expression and discussion. It will raise insecurities for film professionals and can lead to harassment from vigilante groups.
- Economic Losses:** It can cause significant economic losses to producers and the whole film industry ecosystem like film distributors, theatres etc. may suffer.
- Against proposed direction on film certification:** Proposed changes go against the spirit of recommendations from Mudgal Committee (2013) and Shyam Benegal Committee (2016) on film certification.
- Already existing provisions:** Central Government already enjoys power to suspend and revoke certification under **Section 5E** of the Act after giving an opportunity to the concerned person. Also, it allows for review of order under **Section 5F**.

Shyam Benegal Committee Recommendations

In 2016, the **Shyam Benegal Committee** recommended broad guidelines to improve CBFC working based on global best practices. It primarily recommended some major changes in film certification as:



- Complete rights** of rights owner over film, i.e., only certification by CBFC with no modification suggestions
- CBFC should restrict to **deciding category** (a sort of **statutory warning**), allowing audiences to make **informed viewing** decisions,
- The applicant must **state the certification category** he seeks and his target audience, etc.

What can be done to overcome these issues without compromising effective regulation?

- Encouraging Self-regulation:** It can be set up both in-house and industry-wide depending on the function that it is supposed to serve.
- Right to choose and consume content:** The tendency to treat the consumer as incapable of making independent and informed decisions needs to be addressed. Instead of outright censorship, increased usage of content warnings involving explicit material can be encouraged.
- Promoting professional education in the media:** Ethical standards that respect privacy, dignity and freedom of speech and expression of citizens can be developed and inculcated in course curriculums to train professionals in various media, especially television, cinema, the press and the internet so as to minimize the need of external application of censorship standards.
- Limiting the extent of censoring power of the State:** To prevent abuse and overuse of power, any regulatory body should be allowed to take decisions independently, while the Government can act as a facilitator by forwarding its suggestions/recommendations.

- **Adopting proactive or non-punitive steps to address hate speech:** Such steps may involve public education, encouraging diversity, openly combating libelous or incendiary misinformation, and improving protection to protect a community at risk.

Note: To know more about **Censorship in Media** and its nuances, refer to our Weekly Focus “**Censorship in Media: A necessary evil?**”.

 <p>Censorship in Media: A Necessary Evil?</p>	<p>Censorship in media plays role of a gatekeeper against expression which could be harmful to the society at political, moral or religious level. But balancing free speech and censorship is a thin line to walk. Thus, the essential question lies in how to create this balance without compromising on either side.</p>	
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1.6. FOREST RIGHTS ACT

Why in news?

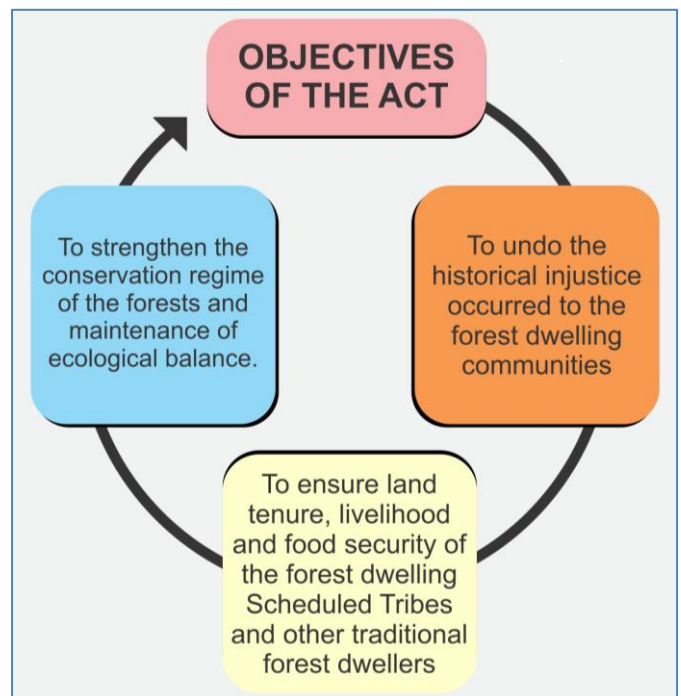
Ministry of Environment and Forests (MoEF) and the Ministry of Tribal Affairs sent a joint communication to all state governments for the “expeditious implementation” of the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, commonly known as Forest Rights Act (FRA).

About the act

- The Act recognizes and vests the forest rights and occupation in forest land in forest dwelling scheduled tribes (FDSTs) and other traditional forest dwellers (OTFDs) who have been residing in such forests for generations but whose rights could not be recorded.
- It provides for the individual and community forest rights that are categorised into following types:
 - **Title rights:** It gives FDST and OTFD the right to ownership to land farmed by tribals or forest dwellers subject to a maximum of 4 hectares.
 - ✓ Ownership is only for land that is actually being cultivated by the concerned family and no new lands will be granted.
 - **Use rights:** The rights to extract Minor Forest Produce, grazing, fishing, access to water bodies in forests etc.
 - **Relief and development rights:** To rehabilitate in case of illegal eviction or forced displacement and rights to allocate forest land for developmental purposes to fulfil basic infrastructural needs of the community.
 - ✓ Protection of the tribal population from eviction without rehabilitation and

Genesis of the act

- In the colonial era, the British diverted abundant forest wealth of the nation to meet their economic needs. While procedure for settlement of rights was provided under statutes such as the **Indian Forest Act, 1927**, these were hardly followed.
- As a result, **tribal and forest-dwelling communities, continued to live inside the forests in tenurial insecurity**, a situation which continued even after independence as they were marginalised.
- The symbiotic relationship between forests and forest-dwelling communities found recognition in the **National Forest Policy, 1988**.
 - The policy called for the need to associate tribal people in the protection, regeneration and development of forests.
- The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006, was then enacted following the long-standing demand of the tribal activists and groups to protect the marginalised socio-economic class of citizens.



settlement is provided under the provisions of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Settlement Act, 2013.

- **Forest management rights:** It includes the right to protect, regenerate or conserve or manage any community forest resource which they have been traditionally protecting and conserving for sustainable use.
- **Knowledge Rights:** Right to intellectual property and traditional knowledge, recognition of traditional customary rights.
- The **Gram Sabha is the authority to initiate the process** for determining the nature and extent of Individual Forest Rights (IFR) or Community Forest Rights (CFR) or both that may be given to FDST and OTFD.

Important Definitions under the act



Community Forest Resource: means customary common forest land within the traditional or customary boundaries of the village or seasonal use of landscape in the case of pastoral communities, including reserved forests, protected forests and protected areas such as Sanctuaries and National Parks to which the community had traditional access.



Minor Forest Produce: It includes all non-timber forest produce of plant origin including bamboo, brush wood, stumps, cane, tussar, cocoons, honey, wax, lac, tendu or kendu leaves, medicinal plants and herbs, roots, tubers and the like.



Forest Dwelling Scheduled Tribes: Members or community of the Scheduled Tribes who primarily reside in and who depend on the forests or forest lands for bona fide livelihood needs and includes the Scheduled Tribe pastoralist communities.



Other Traditional Forest Dweller: Any member or community who has for at least three generations prior to the 13th December, 2005 primarily resided in and who depend on the forest or forests land for bona fide livelihood needs.



Critical Wildlife Habitat: Such areas of National Parks and Sanctuaries that are required to be kept as inviolate for the purposes of wildlife conservation as may be determined and notified by the Ministry of Environment and Forests after consultation with locally appointed experts.



Forest Villages: settlements which have been established inside the forests by the forest department of any State Government for forestry operations or which were converted into forest villages through the forest reservation process.

Issues in effective implementation of the Act

- **Lack of Political will:** Assertion of power of forest dwelling communities is in direct conflict with the agenda of ease of doing business. It also challenges the power and authority of the Forest Department, which has from colonial times managed the forest for commercial gains.
- **Systemic issues:** There is lack of coordination between the tribal, revenue and forest department on implementation of the Act. Also, there are multiple laws that are in conflict with FRA.
 - For instance, in case of ownership of minor forest produce, it requires change in number of state laws, excise laws, Panchayat laws etc. Bamboo at present is not recognized as an NTFP in many parts of India.
- **Lack of recognition of Community Forest Resource rights:** There is a huge resistance from the forest department to recognize CFR Rights and sharing of power with Gram Sabha for conservation and management of forest resources.
 - According to Community Forest Rights Learning and Advocacy (CFR-LA) group, around 200 million forest dwellers in 177,000 villages can benefit from recognition of forest rights but only 3 to 5% of the population has benefited so far.
- **Functional/implementation barriers:** A large number of claims are being rejected; pending or limited rights are recognised. The area recognized has been drastically reduced from the area, which has been claimed without any proper reasons.

- **Lack of awareness and capacity:** Many tribal communities or grama sabhas are unaware of the provisions of FRA (and especially CFR). Hence, they have not taken adequate efforts to file their claims. Some grama sabhas may not have the capacity to carry out the responsibilities expected from them.

Way Ahead

The implementation of FRA should not be seen as a strategy merely to enhance the welfare of the tribal communities. It could be an effective strategy for the protection of forests too.

- **Need to form a detailed strategy of training and capacity building** of authorities responsible for implementing the act, such as Panchayats, Gram Sabha, village level Forest Rights committee etc.
- **Relevant maps and documents should be made available** to simplify the task of the Gram Sabha in identifying and filing claims for individual and community rights.
- **Need for collective action to encourage forest officials** at different levels to assume a positive attitude towards the implementation of FRA.
- **Strong cohesion within communities:** There is a need for conscious and informed collective action not only by the members of the tribal communities but also by others (like scientists and non-governmental organizations).
- **Large-scale awareness and information dissemination campaigns** are required at local level informing both tribal and lower level officials.
- **Need to use the opportunities offered by the MGNREGA** to carry out conservation activities within forests. This may have the twin benefits of enhancing the incomes of tribal people and reducing the cost of forest conservation.
- **Facilitating the learning from the experience in different states** and use these in other contexts.

Other major initiatives for development of Tribes and Tribal areas

- **Van DhanYojana:** Aims to promote MFPS-centric livelihood development of tribal gatherers and artisans. It mainstreams the tribal community by promoting primary level value addition to MFP at grassroots level.
- **Mechanism for Marketing of Minor Forest Produce (MFP) through Minimum Support Price (MSP) & Development of Value Chain for MFP:** increasing the number of Minor Forest Products (MFP) in the bracket of Minimum Support Price (MSP) from 10 to 86 in the last few years has supported tribes immensely in improving their incomes and livelihood prospects
- **The Provisions of the Panchayats (Extension to the Scheduled Areas) Act 1996 (PESA):** PESA empowers Gram Sabha/Panchayat at appropriate level with right to mandatory consultation in land acquisition, resettlement and rehabilitation of displaced persons.
- **Ekalavya Model Residential Schools (EMRS):** To impart quality education to ST children in remote areas in order to enable them to avail of opportunities in high and professional educational courses and get employment in various sectors.



You can scan this QR code to practice the Smart Quiz of Polity at our open test online platform for testing your understanding and recalling of the concepts.



2. INTERNATIONAL RELATIONS

2.1. STRATEGIC AUTONOMY

Why in news?

Recently, Foreign Secretary of India listed the **five pillars of Indian diplomacy for strategic autonomy & global good**.

More in news

The five pillars of Indian Diplomacy are:

- **Multipolar focus:** India places Neighborhood First, Act East and Think West and has revitalized its approach to these policies.
- **Diplomacy as an international force multiplier for the Government:** The Ministry of External Affairs is the global arm of the government and has a global footprint and presence.
 - Indian diplomacy must be able to work with domestic partners and bridge them with international interests to exploit the opportunities that will inevitably arise.
- **Force for global good:** This pillar ensures **Vasudhaiva Kutumbakam** in action.
 - For example, India's efforts in ensuring global vaccine supply through **Vaccine Diplomacy**.
- **Futuristic Outlook:** It promotes efforts at rebalancing including our endeavor to participate in the search for solutions to common problems.
 - For example, despite our development needs, India has shown strong commitment to climate action.
- **Indian in thought:** Indian diplomacy is guided by bearings that arise from Indian thinking influenced over centuries by **Kautilya's Arthshastra** or ancient texts such as the **Mahabharata** and the **Bhagvad Gita**. Three strands of Indian diplomacy worth mentioning here are:
 - Tradition of the Middle Path.
 - Human-centric globalization.
 - **Need for strategic autonomy.**

Non-Alignment & Strategic Autonomy

- In **appearance**, the two are different – the one non-alignment, the other multi-alignments; the one is relevant in the bipolar world, the other in the multipolar world; the one where India acted as a key leader of the South, the other where India is a leader among select powers (both Global South and among today's major power centers).
- In **essence**, the two are similar in the sense that both assume India would judge issues and relations on merit, not on the dictates of other powers. Strategic Autonomy is all about issue-based alliances.

Strategic Autonomy & Self-reliance

- Unlike in the past, self-reliance today is not about retreating from the world, but of **enhancing India's economic contribution to the global economy**.
- Self-reliance is about empowering India and the speedy **realization of its full national economic potential**.
- When Self-reliance is applied to foreign policy framework, it comes closer to "**strategic autonomy**".

What is Strategic Autonomy?

- Strategic autonomy denotes the **ability of a state to pursue its national interests and adopt its preferred foreign policy** without being constrained in any manner by other states.
- **India and Strategic Autonomy:**
 - In bipolar or multipolar world orders dominated by globalization, the ability to be strategically autonomous is not absolute but only relative.
 - Based on this, India is destined to be even less strategically autonomous.
 - **Core security issues:** India resist external pressure to change its policy or moderate its interest on **core issues of national security** irrespective of the costs involved.
 - ✓ For example, core national interests like Jammu & Kashmir issue and nuclear weapons.
 - **Non-core security issues:** Under external pressure, India is likely to alter their policy or moderate their interest on non-core security issues if the associated costs are calculated to be disproportionate to the benefits that may accrue from persisting with the preferred policy or interest.
 - ✓ For example, **India's decision to vote against Iran** in the International Atomic Energy Agency under the pressure of United States.

Evolution of Strategic Autonomy



Need of Strategic Autonomy

- **Geostrategic balancing:** India has always sought to maintain close diplomatic ties with different groups, including those who consider the other as an enemy or a competitor.
 - **For example,** India's concurrent diplomatic ties with Iran; while pursuing strong relationships with US, Saudi Arabia and Israel (all of them consider Iran as an outcast).
- **Need for Multi alignment:** Any quest to maximize options and expand space naturally requires engaging multiple players.
 - Today's world is characterized by complex interdependence (where countries are competing on geostrategic issues and cooperating on geo-economic issues) and hence Indian foreign policy requires **strategic hedging.**
 - For example, due to strategic autonomy India has maintained strategic defence relation with United States as well as it is keen to put forward S-400 deal with Russia.

- **Need for greater realism in policy:** India has realized that soft power diplomacy alone is not sufficient for protecting the country's interests and there is a **need for realism as well as pragmatism** in Indian foreign policy.
 - For example, India's early misreading of Pakistan's and China's intentions (Indo-Pak war 1948 & Sino-India war 1962) led to Gilgit-Baltistan & part of Kashmir and Aksai Chin region now being under the effective control of Pakistan and China respectively.

Challenges to Strategic Autonomy

- **Chinese assertion:** In the 1990s, India's strategic autonomy was about fending off US political threats to India but in contemporary times, it is inevitably about coping with China's challenge to India's territorial integrity and sovereignty.
 - For example, assertive policies of China at Line of Actual Control, blockade to India's membership at Nuclear Suppliers Group etc.
- **Hostile Neighbors:** Pursuing policy of Strategic Autonomy requires no unsettled international borders or no hostile neighbors.
 - In case of India, China-India as well as India-Pakistan border is long, mountainous and long disputed and both are nuclear powered nations.
- **India's dependence on western countries:** India needs technology, capital, markets, skills, defence equipment, international networking, and global cooperation to resolve global issues. But critical or sensitive technology can come only at the behest of compromising strategic autonomy.
- **American unreliability:** US sanctions on countries where India has a stake often compromise its policy of Strategic Autonomy.
 - **For example,** The North-South Transport Corridor (NSTC) with Iran has stalled due to the US's secondary sanctions threats, which also adversely affects Indian policy towards Afghanistan or unexpected violation of the India's exclusive economic zone by US during a recent so-called "**freedom of navigation**" operation (FONOP) in the Indian Ocean.
- **Rise of Russia-China-Pakistan axis:** A de facto **Russia-China-Pakistan (RCP)** strategic axis has emerged in recent years which has made balancing act a difficult one for India.
 - For example, Russia has now promised a \$14 billion investment in Pakistan's energy sector including \$2.5 billion for the North-South (TAPI) pipeline project.
- **China's dominance in South-Asia:** Another change since 1971 is that China has developed significant relations, chiefly economic, with India's neighbors.
 - Hence, apart from Bhutan, India's immediate neighbors generally find India overbearing and try to engage with China.

Way forward

- **Pursuing Independent Foreign policy:** The policy of Strategic Autonomy should be used to enhance India's strategic space and capacity for independent agency, allowing maximum flexibility and maneuverability to increase the options for New Delhi's choices to promote and protect its interest.
- **Issue based alignments:** Ridding itself of its non-aligned past, India should focus on "**alignment based on issues**" rather than **ideology**, thereby maintaining "**decisional autonomy**".
- **Balancing China's rise:** The logic of strategic autonomy from China nudges India to look for strong security partnerships with the US, Europe, Japan and Australia.
 - On the economic front, India is exploring various forms of collaboration with a broad group of nations that have a shared interest in developing trustworthy global supply chains that are not totally tied with China.
- **Defence Indigenization:** India is dependent on many foreign players (like U.S, Russia etc.) for its defence requirement, this may not pave well in national interest. Even defense indigenization assumes more significance, especially in the context of counterbalancing China.

To conclude, in this phase of geopolitical transformation, India needs to follow an approach of working with multiple partners on different agendas like Climate Change, Terrorism etc. and hence **Sabka Saath, Sabka Vikas, Sabka Vishwas** is relevant in foreign policy. In some ways, the contemporary shift from non-alignment to strategic autonomy in India is simply a case of the catching up to reality in a multipolar world order. On the lines of **Aatmanirbhar Bharat**, India should pursue an Independent Foreign policy in order to secure its interest and fulfill its global aspirations.

2.2. INDIA-NEPAL

Why in news?

Recent political crisis in Nepal has attracted renewed attention towards reassessing the implications of instability in Nepal for India's bilateral and regional interests.

Background

- Since 2015, when Nepal adopted the Constitution after bringing an end to Monarchy, the country has been caught in political turmoil.
- Amidst a tussle for power within the ruling Nepal Communist Party (NCP), with no party or coalition having a majority, the country's parliament has been dissolved twice since December 2020.
- Recently, Supreme Court of Nepal has passed an order to appoint Nepali Congress President Sher Bahadur Deuba as Prime Minister and reinstated the dissolved Parliament second time in last five months
 - The court's intervention alters the balance of power in the country's constitutional scheme.
- The present political crisis in Nepal has a long history of the **power struggle between the two prominent leaders**, which to a great extent was camouflaged or contained through the intervention of the Chinese Communist leaders, from time to time.
- **India's entrenched interests in Nepal suffered a setback in the recent times:**
 - **2015 border blockade** following protests by Madhesis (people of Indian ancestry residing in the Terai of Nepal) and some other ethnic groups against marginalisation of their interests in the Nepalese constitution.
 - **Boundary Dispute:** the relations strained further when the Nepal government published a map including 370 sq km with Kalapani, Lipulekh and Limpiyadhura, months after India had those areas in its map (see infographic).
- While India has previously interfered in Nepal's domestic politics, it has described the current power struggle as an "internal matter" to prevent backlash from Nepali policymakers and to avoid a potential spillover of political unrest.



Why stability in Nepal is in India's interest?

Stability in any form whether political, economic or social is important for India due to various reasons such as:

- **Strategic location of Nepal:** Apart from being an immediate neighbour, Nepal acts as a natural security buffer between India and China.
- **Internal security:** The harmonious relations between the two countries is necessary to nab dreaded terrorists groups such as Al-Qaida, Taliban, LeT etc. and deal with the rising nexus between the Maoist groups operating in India and Nepal and using Nepal as a transit base for their clandestine operations against India.
- **Security of India aided developmental projects:** Trust deficit between Nepal and India largely affected the implementation of various Indian-aided projects in Nepal such as cross-border railways, Pancheshwar multipurpose project, motorable bridges over Mahakali River among others. At times, some of the Indian investment projects had been attacked by the maoists.

- **Flood water management and development of hydropower:** Rivers originating in Nepal such as Gandak and Kosi feed the perennial river systems of India in terms of ecology and hydropower potential.
- **People to people connect-** Since time immemorial, people-to-people relations between Nepal and India have remained unique as it is based on the twin pillars of an open border system and people-to-people contacts of kinship. Because of the open border system, the citizens of both countries cross over the Nepal-India border for livelihood opportunities apart from marriages; familial ties; cultural, social, and economic security; and even political affairs.
- **Empowerment of Madhesis:** Madhesis inhabit the Nepali terai adjacent to the Indian plains. Their political empowerment through a democratic dispensation is important to India because any unrest there will spill over into our country.

Challenges in relationship

- **China's influence:** China has used its control over the Nepalese government to not only influence economic and political policies but also Nepalese society thus impacting India's traditionally dominant influence. For instance, Beijing offered to pay for the salaries of Mandarin teachers in Nepal, resulting in several private schools making Mandarin a compulsory subject.
- **Nepal's Discontent in Trade:** India is Nepal's largest trading partner (accounting for 65 percent of Nepal's total trade), with whom Nepal also runs the largest trade deficit.
 - Because of its geographical constraints, Nepal has found itself heavily reliant on India, never acquiring the comparative advantage to increase exports. As a result, local enterprises fail to grow and compete against lower-priced Indian products. India's imposition of non-tariff barriers and lack of standard infrastructure have added to Nepal's discontent with India.
- **Trust deficit towards India:** India's big brother attitude arising out of its Neighbourhood first policy is perceived as a disrespect for Nepal's sovereignty thus deepening distrust and suspicion for India. For instance, 2015 blockade at India-Nepal border made the Nepal government to turn for help to China and strengthened anti-India rhetoric.
- **Issues with Treaty of Peace and Friendship of 1950:** Nepal wants India to revisit the 1950 Indo-Nepal Treaty of Peace and Friendship in order to reflect changes and new realities of contemporary bilateral ties. However, there is a lukewarm response from India on the request increasing the bitterness in the relations.
- **Discontent over India's approach in dealing with river treaties:** Nepali stakeholders claim that India's handling of the issues involving the Koshi and Gandaki rivers has been far from satisfactory leading to the collapse of Koshi's embankment and massive flooding in Nepal in 2008. Also, the Mahakali agreement has remained in limbo for over two decades.
- **Unrestricted cross-border movement of people:** It impacts Nepal's domestic industry, local livelihood opportunities, law and order, and national security. The COVID pandemic has heightened the pressure on the Nepali government to create jobs, including for migrant workers who have returned or are expected to return home from India following job loss.

Way forward

India's long-term interest in this sensitive neighbouring country is best served by a stable multi-party democracy and economic prosperity. Efforts are being made in the recent times to restore normalcy in the bilateral ties. For instance,

- **6th India-Nepal Joint Commission** meeting was held amid the political turmoil that **discussed cooperation in a range of areas**, including power, oil and gas, water resources, capacity building and tourism among others.
- India assisted Nepal in fighting COVID-19 by supplying essential medicines, PPE kits etc. Indian and Nepali health professionals are collaborating their efforts on ground to contain and stop this Pandemic.

Going forward, interdependence between Nepal and India is essential to reset the relations between the neighbours.

- The **focus should be given to more air, road, train, and waterways connectivity**, to facilitate greater movement of commercial vehicles between the two countries.
- India must **leverage people-to-people links** to ensure a stable and mutually-productive state-to-state relationship.
- **Ongoing negotiations and discussions** on issues like boundary dispute **must be taken forward through appropriate bilateral mechanisms**. In this case, boundary dispute resolution between India and Bangladesh should serve as a model.

- **Both countries must play an active role in important multilateral forums** such as BBIN (Bangladesh, Bhutan, India and Nepal), BIMSTEC, NAM, and SAARC to serve their common interests.
- Safeguarding of India's vital interests demands **sustained engagement and limited interference with Nepal** at all levels and across the political spectrum. A hands-off policy will only create space for other external influences, some of which, like China, may prove to be hostile.

2.3. NEW OIL DEAL BY OPEC+

Why in News?

After a brief impasse between **UAE** and Saudi **Arabia**, the OPEC+ nations finally reached an agreement over oil production level for its member nations.

Crude Oil Prices and OPEC+ nations

- Crude Oil is a prominent **global commodity** with **skewed global distribution**, exposing oil prices not just to economic demand and supply but to geopolitical events as well.
- With **40% of global crude oil production and 60% of international trade**, OPEC is the biggest grouping to influence oil prices.
- In 2016, due to fall in crude oil prices 10 non-OPEC oil producing nations signed a Declaration of Cooperation with OPEC to jointly work towards stabilization of oil prices.
- This new grouping is known as **OPEC+ or as Vienna Group**, uniting two major cartels of crude oil rich nations to influence global oil prices through **production adjustments**.

About Organization of the Petroleum Exporting Nations (OPEC)

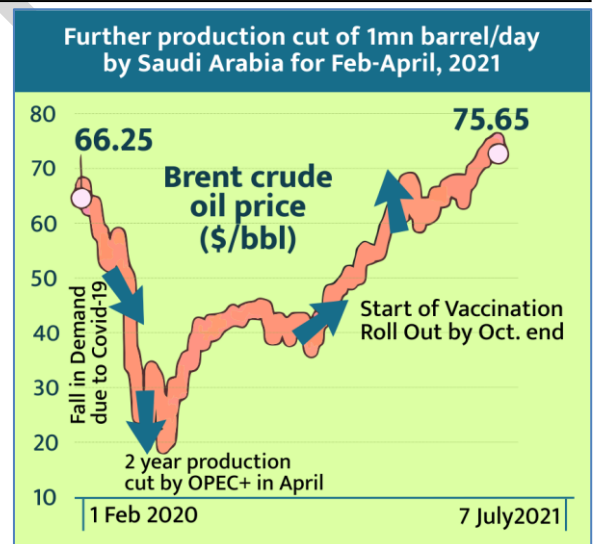
- Created at the **Baghdad Conference** in **1960**, OPEC is a **permanent intergovernmental organization** with Iran, Iraq, Kuwait, Saudi Arabia and Venezuela as the founding members.
- **Executive organ: Secretariat** (at **Vienna**) with 13 current members.
- **Objective:** OPEC coordinates and unifies the petroleum policies of its Member Countries, ensuring the stabilization of oil markets to protect interests of consumers, producers and investors.

OPEC+

- OPEC+, also known as **Vienna Group** loosely affiliated entity consisting of the OPEC members and major non-OPEC oil-exporting nations.
 - Its members include Mexico, Russia, Oman, Uzbekistan etc. along with the members of OPEC.

Pandemic induced Production Cuts and New Production Agreement

- Due to Covid-19 pandemic, the global economic activities went for a crash. The fall in crude oil prices due to reduced demand, led to **10 million barrels per day (mb/d)** production cut for 2 years from OPEC+ nations and further events (as shown in graph).
- Though the prices of crude oil recovered to pre-Covid level by year end, the oil production went for further cut from Saudi Arabia.
- This led to sharper price rise, impacting the **global recovery**, especially the developing and low-income countries.
- Despite global criticism including India, OPEC+ reaction was slow and only after a brief impasse between Saudi Arabia and UAE, OPEC+ reached to a new agreement:
 - **Extending April 2020 agreement** until the 31st December 2022,
 - Upward production of 0.4 mb/d from August 2021 on monthly basis until phasing out the 5.8 mb/d production adjustment.



How this fluctuation of Oil Prices impacts India?

India is the **third biggest** oil importer and consumer and expected to become first by 2040 (as per IEA energy outlook). Thus, the fluctuations affect India in following ways:

- **Rising Import Bill:** With 76% of our oil need met through imports or **Rs. 8.43 trillion import bill in 2019-20**, every **1 dollar price rise** can raise our import bill by **Rs 10,700 crore** on annualized basis.

- **Macroeconomic Stability:** Domestically, high oil prices lead to high retail fuel prices and inflation level. So, high oil prices are a concern to not just our present Balance of Payments but for macroeconomic stability as well.
- **Compromises India's Geostrategic position:** OPEC+ nations will have control over all prices at least over next decade or more with slow reactions as difference in worldviews and interests within OPEC members will remain.
 - E.g. recently, Saudi Arabia ended preferential tariffs for goods made in free zones (targeted at UAE free zone hub) as well as announced decision to end doing business with any international company whose regional HQ is not within the kingdom by 2024.



The new deal may provide a **slow temporary relief** from high prices and inflation, India needs a more comprehensive strategy to handle its present and future energy security.

Way Forward

Protecting India's energy security and economic interests requires not just a reactive approach but a comprehensive energy security approach with focus on preventive steps. This includes **reduction of Oil Imports** and **reduced exposure to OPEC+ production adjustments**.

Based on it, India has developed a **five-pronged strategy**, comprising:


- Promotion of Energy Efficiency and Conservation Measures,
- Giving thrust on demand substitution,
- Promoting biofuels and other alternate fuels/renewable,
- Increasing domestic production of oil and gas, and
- Refinery process improvements.

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3. ECONOMY

3.1. INDIA'S FOREX RESERVES

Why in News?

Recently, Indian Foreign Exchange reserves hit new lifetime high of around **US\$ 612 billion**, making India the **fourth largest Forex reserve** holder after China, Japan and Switzerland.

About Foreign Exchange Reserves

- Foreign Exchange Reserves, also known as **Forex Reserves**, are assets held on reserve by a central bank in foreign currencies.
- Mostly dominated by **foreign currency assets**, it can also include **other instruments** like bonds, treasury bills, Gold Reserves, Special Drawing Rights at IMF etc.
- US dollar, Euro, British pound, Japanese Yen and Chinese Yuan are some of the common currency assets with **US dollar as main currency** due to its use in **settlement of all international transactions**.
- Vital for **International trade and commerce**, Forex reserves serves a number of purposes like-



Forex Reserves Management in India and recent rise

- As central bank of India, the **Reserve Bank of India** is responsible for management of Forex reserves under:
 - **Reserve Bank of India Act, 1934** and
 - **Foreign Exchange Management Act, 1999**
- The Forex reserves of India include **four components** with share of each in its record level as given in table.

Reasons for recent rise in Indian Forex Reserves

- Though Indian reserves are rising since its **1991 Balance of Payment (BoP) crisis** (left only with US\$5.8billion of reserve), the speed of rise is significant in last 2-3 years.
- Some of the major reasons for this sudden rise includes:
 - **High Foreign Capital Flow** in terms of Rising Foreign Direct Investment (FDI) and Foreign Portfolio Investment (FPI) due to its large market size, growing startups, corporate tax cut, higher returns etc.
 - **Reduced Capital outflow** due to reduced consumptions under Covid-19 and curbs on foreign travel. E.g. In 2020-21, India's BoP was at record surplus of \$87 billion.
 - **Record remittances** from its Diaspora in last two years (above US\$ 80billion), and
 - **Massive Liquidity Injection** in USA through stimulus measures against economic impact of Covid-19 pandemic. E.g. US\$2.3 trillion lending support from Federal Reserve to households, financial markets, government etc.

Arguments for maintaining High Forex Reserves

Benefit of High Forex	Provides Solution Against
Reduced risk from External Vulnerabilities	<ul style="list-style-type: none"> • Volatile Oil Prices, • Meet external obligations and liabilities on high outflow of hot money (FPIs)
Exchange Rate Management	<ul style="list-style-type: none"> • Though market-determined since 1993, high Forex allows occasional RBI intervention to curb excessive volatility in the foreign exchange market • Help in growth of currency market
Generate Investors Confidence	<ul style="list-style-type: none"> • Helping to finance India's Current Account Deficit • Minimize impact of just above Junk Category rating and a net international investment position of -12.9% of GDP
Emerge as Regional Leader	<ul style="list-style-type: none"> • Expands India's ability to open currency swap lines for others, especially our neighbors like SAARC nations for which India started currency swap mechanism in 2012
Liquidity against Economic Risks	<ul style="list-style-type: none"> • Overcome domestic financial system crisis like High NPAs, corporate bond market crisis due to IL&FS payment default, risks of telecom sector challenges due to AGR • Overcome Global economic crisis due to Covid-19 related uncertainties

Cushion against monetary stimulus withdrawal	<ul style="list-style-type: none"> In 2013, Fed tapering created external sector crisis with over 10% currency fluctuation and only Japan as help via currency swap High Forex ensures liquidity against US monetary Stimulus withdrawal and subsequent capital outflows from developing nations like India
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Arguments against maintaining High Forex Reserves

- If we talk in terms of our imports and capital repayments, present Indian Forex reserves are:
 - Enough to cover more than **15 months** of our projected **2021-22 imports**,
 - Higher than our **external debt obligations** (stand at US\$ 570.0 billion at end-March 2021) and reducing short-term debt (maturity of up to 1 year) at only 17.7%.
- Low returns on **Forex reserves**- usually around 1% or less due to near zero interest rates in advanced economies,
- Large infrastructure** financing needs of India to meet development aspirations and utilize young demography.
- It may lead to several **other issues like**-
 - High opportunity and fiscal costs** of sterilization of liquidity, i.e. unused excessive cash despite development needs, poverty and large youth population,
 - High Forex reserves shows **lack of confidence** from government on
 - ✓ Resilience of its economy,
 - ✓ Measures to raise capital (e.g. Disinvestments) or exports (Atmanirbhar Bharat) and
 - ✓ Soundness of macroeconomic management

Way Forward

The level of Forex reserves should include not just present risks and exposures but India's future aspirations and optimum utilization of resources as well. In that context, it is important that maintenance of forex reserves is looked at not only from financial security perspective but also from a broader macroeconomic perspective.

3.2. INSOLVENCY AND BANKRUPTCY CODE (IBC)

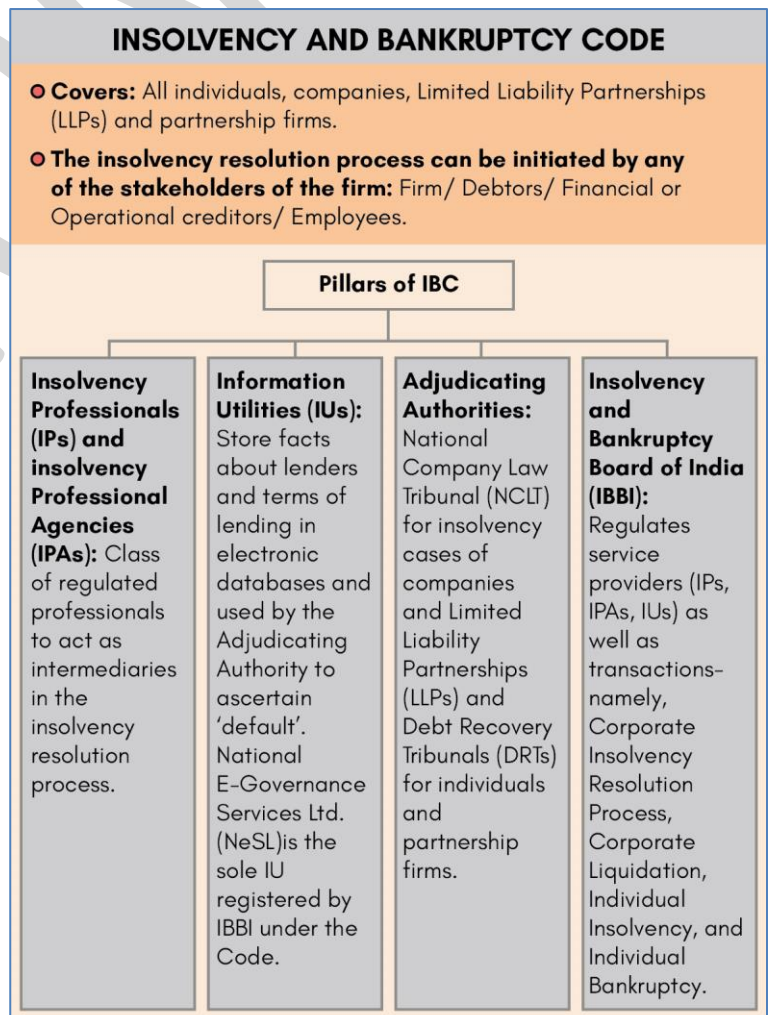
Why in News?

This May, the Insolvency and Bankruptcy Code (IBC) completed five years since it was passed by Parliament in 2016.

Assessment of Insolvency and Bankruptcy Code (IBC)

Achievements

- Reducing the bankruptcy resolution time:** The average time taken for resolution was reduced from 4.3 years in 2017 to 1.6 years in 2020.
- Behavioural change for the wider lending ecosystem:** The threat of promoters losing control of the company or protracted legal proceedings is forcing many corporate defaulters to pay off their debt even before the insolvency can be started.
- Improvement in India's 'ease of doing business' and 'getting credit' rank:** India's rank in ease of doing business improved from 155 in 2017 to 63 in 2020, getting credit rank improved from 62 in 2017 to 25 in 2020 and Starting a business rank improved from 151 in 2017 to 136 in 2020.



- **Rescued corporate debtors in distress:** The code has rescued 348 corporate debtors through resolution plans (21 percent of completed CIRPs).
- **Resolution of cases:** Out of total 32,547 cases filed under IBC in the NCLT, 19,377 have been disposed of.
- **Continuous updation of the Code:** IBC has undergone six amendments since its enactment introducing provisions such as clarifying the status of homebuyers as financial creditors; reducing the voting threshold of CoC from 75% to 66% etc.
 - Further, The IBC (Second Amendment) Act, 2020 was amended to provide relief to companies affected by COVID-19 pandemic and to recover from the financial stress without facing immediate threat of being pushed into insolvency proceedings by providing temporary suspension of initiation of CIRP.

Challenges that remain

- **Low recovery rates:** Public and private sector banks, non-banking financial institutions, and other financial lenders to companies undergoing CIRP have taken a cumulative haircut of 61.2 per cent of their admitted claims, with some haircuts as high as 90-95%
- **Delays:** Among the 13,170 IBC cases pending with the NCLT, 71% of these cases have been pending for more than 180 days. This happens to delays caused at various stages, which causes several issues like-
 - **Delays in admission of cases in NCLT:** During this time the company remains under the control of the defaulting owner enabling value shifting, funds diversion, and asset transfers.
 - **Delays due to unsolicited, late bids:** It creates tremendous procedural uncertainty which discourages genuine bidders from bidding at the right time.
 - **Delays due to appeals:** NCLT judgments are litigated continuously in the NCLAT and Supreme Court further delaying resolution and recovery.
- **Staffing and infrastructure issues in NCLT:** More than 50% of the sanctioned strength in NCLT is lying vacant (vacancy of 34 members, including the President, against the total of 63).
- **Need for strengthening homebuyer rights:** According to a 2018 amendment to the IBC, a minimum of 100 homebuyers, or 10% of the total flat purchasers, are needed for initiating the process.
 - However, homebuyers are facing practical difficulties in gathering the required number of homebuyers to initiate insolvency Proceedings against the real estate owner.
- **Lack of flexibility:** The resolution professional does not currently have the flexibility within the IBC to dispose of the corporate defaulter across multiple bidders.
- **Presence of multiple IPAs for regulating IPs** which results in absence of appropriate standards for selection process and conduct of the resolution professionals.
- **Other issues:**
 - Absence of provisions for cross-border insolvency resolutions
 - Lack of uniformity in decision making process of the CoC.
 - Need for data relating to IBC cases in granular form for researchers and analysts.

Way forward: Recommendations for reforms

The parliamentary standing committee on finance recommended following reforms for efficient functioning of IBC-

- **Setting benchmark for the quantum of haircuts allowed** as per global standards.
- **Formulating a professional code** for the CoC, who take over a company in distress.
- **A single professional self-regulatory body** that functions like the Institute of Chartered Accountants of India (ICAI) may be established to oversee and regulate the functioning of RPs so that there are appropriate standards and fair self-regulation.
- **Adoption of UNCITRAL (United Nations Commission on International Trade Law) Model Law on Cross border insolvency:** in Indian context to provide internationally competitive and comprehensive insolvency framework for corporate debtors under the Code.
- **Conducting an analysis of the requirement of capacity in dealing with projected cases** in the next three-four years to suitably plan recruitment process in advance.
- **NCLT and NCLAT should completely digitize their records and operations** with provision for virtual hearings to get through the backlog and deal with the pending cases swiftly.
- **Strengthening home buyer rights:** For instance, once a single homebuyer decides to initiate insolvency Proceedings in NCLT, the real estate owner should be obligated in the Rules/ Guidelines to provide details of

other home buyers of the project to the concerned homebuyer so that the required 10% or 100 homebuyers can be mobilised.

- **National Law Schools should be involved in the NCLT system** so that they can conduct academic research, develop suitable case-based training materials, and provide appropriate support through law clerks etc.

Related news

New curbs on insolvency resolution professionals

- These norm changes are **part of the IBBI (Insolvency Resolution Process for Corporate Persons) (Second Amendment) Regulations, 2021**
- **New Norms**
 - Any linkage of the insolvency professionals with the corporate debtor or any of the stakeholders is now not permitted.
 - IBBI has **authorised Interim Resolution Professionals and Resolution Professionals (RPs) to appoint any other professional that may be necessary** to assist in discharge of RP's duties.
 - ✓ This will be **allowed only when certain conditions are met such as explicit prohibition** on appointment of relatives of RPs, past (5 years) auditor of the corporate debtor, etc.
- **Significance**
 - To **ensure fair business dealings and transparency in the appointment** of RPs.
 - **Eliminates potential conflicts of interest** in functioning of RPs.

3.2.1. INSOLVENCY AND BANKRUPTCY CODE (AMENDMENT) BILL 2021

Why in News?

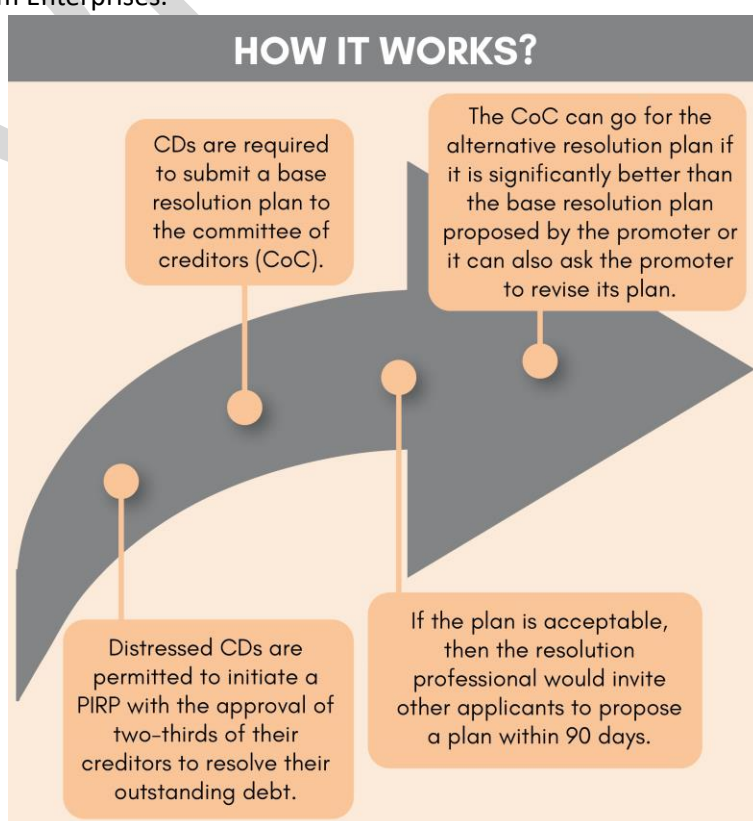
The Parliament recently passed the **Insolvency and Bankruptcy Code (Amendment) Bill 2021**, allowing the use of “pre-packs” to resolve insolvency proceedings involving micro, small and medium-scale enterprises.

More on news

- The bill replaces the Insolvency and Bankruptcy Code (Amendment) Ordinance, 2021 that was promulgated by the President in April, 2021.
- **Key provisions of the bill include:**
 - Inserting a new Chapter to facilitate pre-packaged insolvency resolution process (PIRP) for corporate persons that are Micro, Small and Medium Enterprises.
 - The central government may, by notification, set the minimum threshold of default to initiate PIRP up to one crore rupees.
 - Earlier, in April 2021, the government had set the minimum threshold at 10 lakh rupees.
 - Disposal of simultaneous applications for initiation of corporate insolvency resolution process (CIRP) and PIRP, pending against the same corporate debtor.
 - Penalty for fraudulent or malicious initiation of PIRP or fraudulent management of corporate debtor during the insolvency resolution process.
 - Punishment for offences related to pre-packaged insolvency resolution process.

What is Pre-packaged insolvency resolution?

- A pre-packed insolvency resolution mechanism is a process wherein a resolution arrangement is agreed upon between the distressed corporate debtor (CDs) and lender before approaching the National Company Law Tribunal (NCLT) for bankruptcy proceedings.



- It gives legal sanction to a plan agreed among banks, promoters and the buyer.
- It follows a **debtor-in-possession model**.
- **Protection against Fraudulent activities/mismanagement:** The CoC can, with a 66 per cent vote share, make an application for change in the management of the company and pass control to the resolution professional. This can be done if CoC finds that the company is being run in a fraudulent manner or there has been gross mismanagement of company affairs by the promoter.
 - If the resolution plan submitted by the promoter provides for impairment (drastic reduction in recoverable amount) of any claims, the CoC can ask the promoters to dilute their shareholding or voting or control rights in the company.
- **It allows for a Swiss challenge to the resolution plan submitted by a CD** in case operational creditors are not paid 100 per cent of their outstanding dues.
 - Under It, any third party would be permitted to submit a resolution plan for the distressed company and the original applicant would have to either match the improved resolution plan or forego the investment.

Differences between PIRP and Corporate Insolvency Resolution Process (CIRP)

Criteria	PIRP	CIRP
Control of the firm during insolvency process	Debtors remain in control of their distressed firm.	Company is managed by the resolution professional.
Deadlines	To be completed within a period of 120 days of the commencement date.	To be completed within a period of 270 days of the commencement date.
Process of resolution of the debt	Distressed company enters into direct agreement between secured creditors and the existing owners or outside investors.	Resolution through open bidding system.

Benefits of PIRP

- **Quicker, cost-effective insolvency resolution process:** Being a debtor-initiated process, it is expected to involve less legal disputes, reduce the cost of bankruptcy proceedings in court and provide faster resolution than a CIRP.
- **Least disruptive to the businesses:** The creditors and business owners along with interested buyers are better suited to make these crucial business decisions than resolution professionals in courts.
- **Reduced burden of benches of the National Company Law Tribunals:** The new amendment could help bankruptcy courts, which were already struggling to deal with pending cases and a flood of new cases owing to the pandemic.

Possible issues in implementation

- **Uncertainty:** Initiation of PIRP can worsen in the behaviour of its suppliers, workers, creditors and so forth who begin to feel uncertain about the future. For instance, suppliers may stop sending supplies as the creditworthiness of the business becomes doubtful.
- **Challenging for CoC members to decide on the Base resolution Plan:** within the prescribed short period without any broad parameters on which the Resolution Plan be approved.
- **CD may not raise additional capital or debt from Investors or Banks:** Due to the risks involved, the Corporate Debtor may find it challenging to bring new investor and raise fresh equity at a level which can reduce the debt at a sustainable level.

3.3. GOVERNMENT SECURITIES

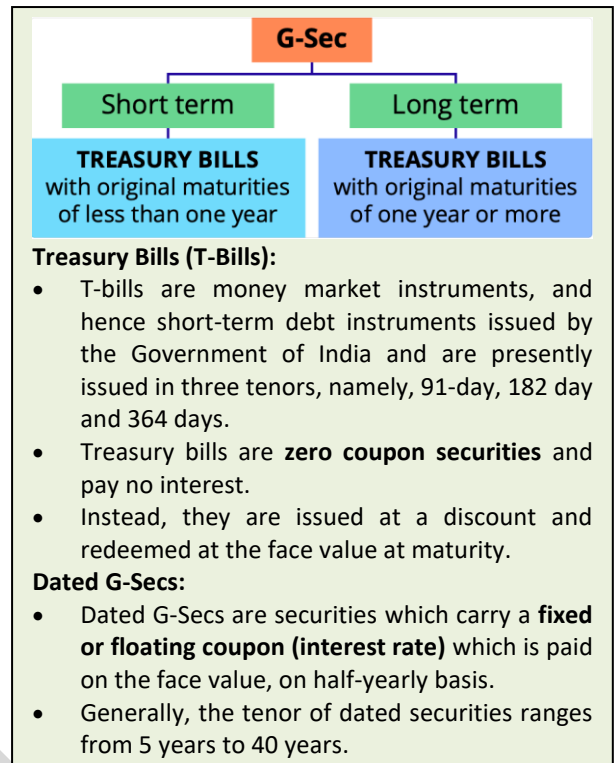
Why in news?

Recently, Reserve Bank of India (RBI) allowed **small retail investors** to invest in government securities (G-Sec) by opening gilt accounts with the central bank under '**RBI Retail Direct**' scheme.

About G-Sec and Gilt Accounts

- A Government Security (G-Sec) is a **tradeable instrument** issued by the **Central Government** or the **State Governments**. It acknowledges the Government's debt obligation.
- Government Securities are of **two types**. (See Box)

- In India, the **Central Government** issues both, treasury bills and bonds or dated securities while the **State Governments** issue only bonds or dated securities, which are called the **State Development Loans (SDLs)**.
- G-Secs carry practically no risk of default and, hence, are called **risk-free gilt-edged instruments**.
- A "**Gilt Account**" means an account opened and maintained for holding Government securities, by an entity or a person permitted by the Reserve Bank of India.
 - However, in case of a '**Person resident outside India**, the activities in the operations/maintenance of Gilt Account shall be governed by the **Foreign Exchange Management Act, 2000** and the regulations framed thereunder.



Importance of G-Secs

- **Liquidity Management:** If RBI wants to inject liquidity in the market, it will buy government securities. On the other hand, if it wants to curb liquidity, it would sell government securities. This buying and selling of government securities by RBI to regulate the liquidity in the market is referred as **Open Market Operations**.
- **Potentially risk-free investment:** Besides providing a return in the form of coupons (interest), G-Secs offer the **maximum safety** as they carry the Sovereign's commitment for payment of interest and repayment of principal.
- **Flexible investment options:** G-Secs are available in a wide range of maturities from 91 days to as long as 40 years to suit the duration of varied liability structure of various institutions.
 - G-Secs can be sold easily in the secondary market to meet cash requirements.
 - G-Secs can also be used as collateral to borrow funds in the repo market.
- **Attractive yields:** Securities such as State Development Loans (SDLs) and Special Securities (Oil bonds, UDAY bonds etc.) provide attractive yields.
- **Investor friendly Settlement:** The settlement system for trading in G-Secs, which is based on Delivery versus Payment (DvP), is a very simple, safe and efficient system of settlement. The DvP mechanism ensures transfer of securities by the seller of securities simultaneously with transfer of funds from the buyer of the securities, thereby mitigating the settlement risk.

Risks involved in holding G-Secs:

- **Liquidity risk:** Liquidity risk refers to the inability of an investor to liquidate (sell) his holdings due to non-availability of buyers for the security.
- **Market risk:** Market risk arises out of adverse movement of prices of the securities due to changes in interest rates. This will result in valuation losses if the securities are sold at adverse prices.
- **Reinvestment risk:** Cash flows on a G-Sec includes a coupon every half year and repayment of principal at maturity. These cash flows need to be reinvested whenever they are paid. Hence there is a risk that the investor may not be able to reinvest these proceeds at yield prevalent at the time of making investment due to decrease in interest rates prevailing at the time of receipt of cash flows by investors.

Operational mechanism of G-Secs

- The RBI, in consultation with the Government of India, issues an indicative **half-yearly auction calendar** which contains information about the amount of borrowing, the range of the tenor of securities and the period during which auctions will be held
- G-Secs are issued through auctions conducted by RBI. Auctions are conducted on the electronic platform called the **E-Kuber, the Core Banking Solution (CBS) platform of RBI**.
 - All non-E-Kuber members including non-scheduled UCBs can participate in the primary auction through scheduled commercial banks or PDs (called as Primary Members-PMs).
- The **Clearing Corporation of India Limited (CCIL)** is the clearing agency for G-Secs. It acts as a Central Counter Party (CCP) for all transactions in G-Secs by interposing itself between two counterparties. In effect, during settlement, the CCP becomes the seller to the buyer and buyer to the seller of the actual transaction.

- RBI also publishes all relevant data pertaining to the Government securities market on a daily, weekly, monthly, and annual basis.

While the data on market borrowings by the Central Government are disseminated regularly on weekly basis through the Weekly Statistical Supplement, **data on State Government securities are not available on a regular basis during the year** which acts as a limitation to the operational efficiency of the current mechanism.

What have been the recent initiatives vis-à-vis G-Secs and what has been their impact?

Initiatives	Impact/Potential Impact
<p>RBI Retail Direct scheme: Individual investors can open Retail Direct Gilt (RDG) Accounts with RBI to buy government bonds.</p> <p>✓ The bonds on offer are government securities (G-Secs) issued by the central government, state development loans that are bonds issued by state governments, and sovereign gold bonds issued by the central government but whose price is linked to gold.</p>	<ul style="list-style-type: none"> • Broaden Investor Base: Allowing direct retail investment in G-secs will broaden the investor base and provide retail investors with enhanced access to participate in the government securities market. • Financialize Domestic Savings: Allowing retail participation in the G-Sec market is a bold step towards the financialization of a vast pool of domestic savings. • From a retail perspective, this opens an additional investment avenue. <p>But unlike small saving schemes of the Union government such as the Public Provident Fund or National Savings Certificate, there are no special tax benefits on direct purchase of government bonds.</p>
<p>Government Securities Acquisition Programme (G-SAP): Through this programme, RBI aims to purchase government securities worth Rs 1 lakh crore in the first quarter of FY22.</p>	<ul style="list-style-type: none"> • Decline in bond yield acts as a fillip for the equities markets. • It will ensure financial stability and G-Sec stability from global uncertainty. • It prevents crowding out of private investment.
<p>Long-term repo operations (LTROs): The LTRO is a tool under which the central bank provides one-year to three-year money to banks at the prevailing repo rate, accepting government securities with matching or higher tenure as the collateral.</p>	<ul style="list-style-type: none"> • It will help banks to get funds for a longer duration as compared to the short-term liquidity provided by Liquidity Adjustment Facility (LAF) and the Marginal Standing Facility (MSF). • Banks can avail one year and three-year loans at the same interest rate of the overnight repo.
<p>Operation Twist: Through 'Operation twist', RBI aims to bring down long-term bond yields.</p> <ul style="list-style-type: none"> • There exists an inverse relationship between bond prices and yields. • In the current scenario, as RBI purchases long-term bonds, its demand pushes bond prices upwards. With an increase in the price of long-term bonds, yields would come down. 	<ul style="list-style-type: none"> • Lower longer-term yields help boost the economy by making loans less expensive for those looking to buy homes, purchase cars, and finance projects, while saving becomes less desirable because it doesn't pay as much interest.

3.4. NATIONAL ASSET RECONSTRUCTION CO. LTD. (NARCL)

Why in News?

Recently, the **NARCL** was registered in Mumbai with the aim of cleaning up the **bad loans** from bank books.

More on News

- Indian Banking system needs solution to large percentage of stressed assets (7.5% of advances in March 2021) and high level of provisioning.
- First proposed by **Indian Bank Association (IBA)** in 2020. In Budget 2021-22 government announced the establishment of an **Asset Reconstruction Company (ARC)** and **Asset Management Company (AMC)** to-
 - consolidate and take over the existing stressed debt.
 - manage and dispose of the assets to **Alternate Investment Fund (AIF)** and other potential investors for eventual value realization.
- With set up of NARCL, participating PSBs have identified **22 bad loans** worth **₹ 89,000 crore** to be acquired by it.
- In future, it is expected to take most of the legacy NPAs of around **₹ 2,00,000 crore.**
- **Government** will have **no direct capital infusion** in NARCL, but it will offer **guarantee against the security receipts**

- NARCL will reconstruct only those assets which are 100% provided for by the lenders and not classified as fraud or amid a liquidation process.

About Asset Reconstruction and ARC

Asset reconstruction is defined as ‘the acquisition of banks/financial institutions right or interest in any financial assistance by an ARC for realization of such financial assistance. So, ARCs are the **specialized agencies** which facilitate bad loan resolution for banks.

In India, ARCs are incorporated under the **Companies Act** and registered with RBI under **section 3** of the Securitisation and Reconstruction of Financial Assets and Enforcement of Security Interest (**SARFAESI**), **Act 2002**.

Major Classifications of Assets

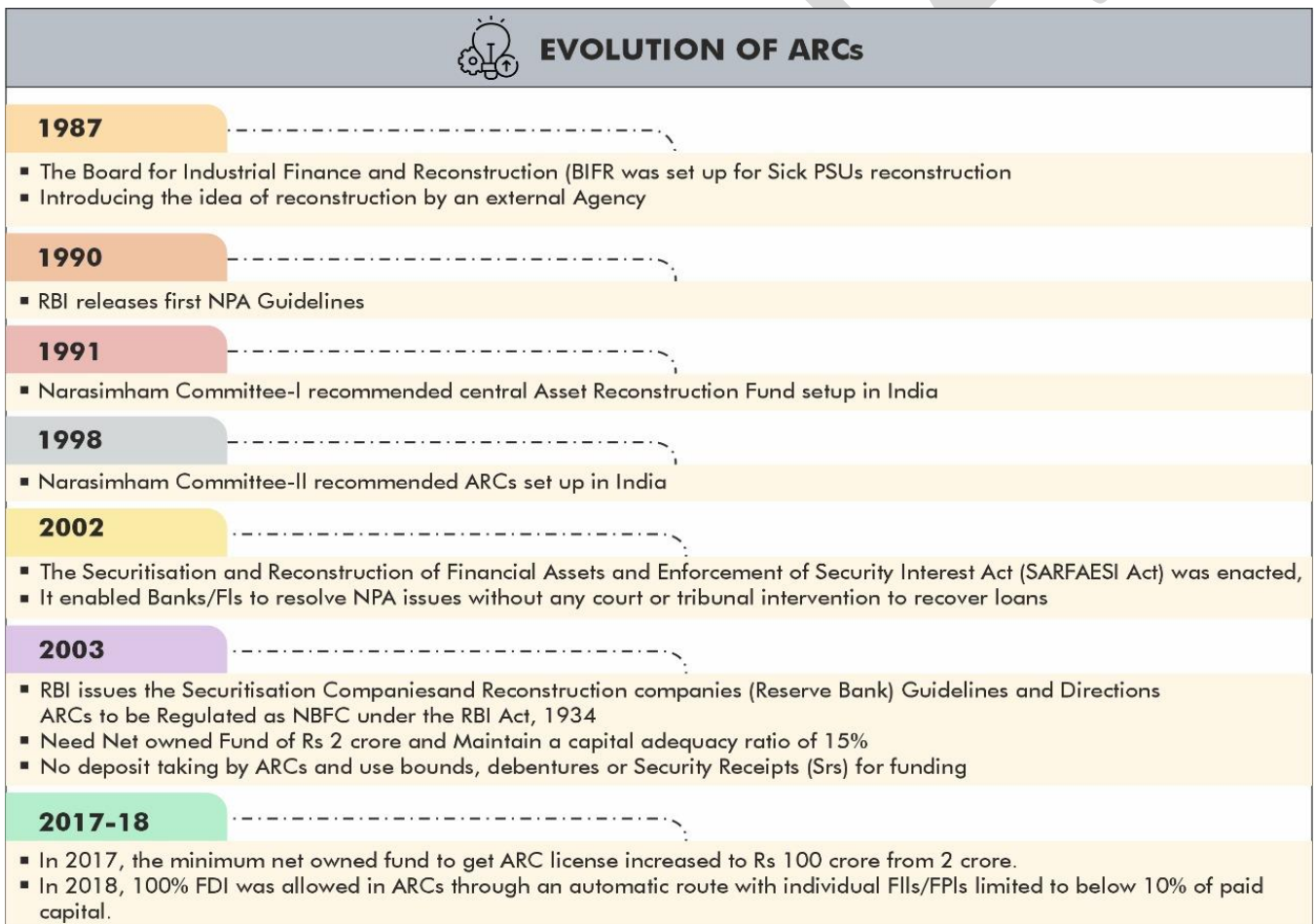
Money or loans provided by banks are considered as **Assets**, as it generates income for the bank. If it has no problem or does not carry more than normal risk, it is called **Standard Asset**. If it ceases to generate income it becomes Non-Performing Asset (NPA).

Non-performing Asset (NPA): Based on overdue norms, a loan or advance for which the principal or interest payment is overdue for a period of **90 days** (one quarter) is classified as NPA.

- For **Agricultural loans**, the overdue for NPA is **two crop seasons** for short duration crops and **one crop season** for long duration crops.

Categories of NPAs

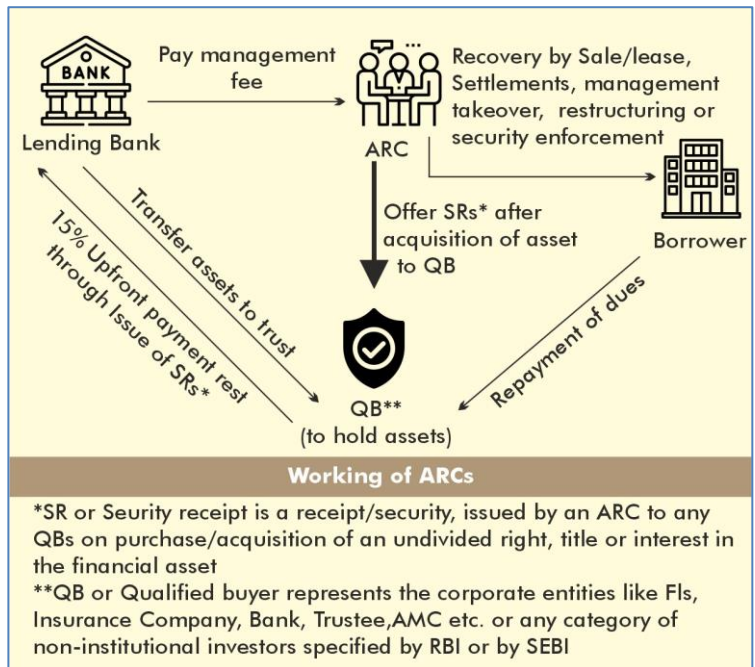
- **Substandard assets** if it remained NPA for a period less than or equal to 12 months.
- **Doubtful assets** if the asset remains substandard asset for a period exceeding 12 months.
- **Loss assets**, if loss has been identified by the bank or internal or external auditors or by the Co-operation Department or by the Reserve Bank of India inspection but the amount has not been written off, wholly or partly.



What could be the potential benefits from NARCL?

- With existing **ARCs** capital not enough to deal with huge NPA problem of banks, **NARCL can help banks in reducing NPAs**, yielding other benefits as well like-
 - Allowing banks to focus on **normal banking functions**,
 - Improved lending's to productive sectors for **faster economic recovery**,
 - Help government in **banks privatization** with **improved PSBs valuations**.

- **Opportunities for other ARCs at MSME's level:** NARCL will reconstruct assets only where the total exposure of the banking sector is **more than ₹500 crore**. With limited capitalization of other ARCs, they can focus at huge business opportunities in retail and MSMEs with stressed assets aggregating about ₹1 lakh crore.
- **Aggregating debt:** Set up of NARCL will help in addressing the problem of contradictory views (lack of consensus) among different lenders, allowing debt recasts.
- **Unrealized Potential:** Despite different ways to solve problems or flexibilities in working, the potential of ARCs is not fully realized in India due to lack of funding, limited number of qualified professionals or other limitations. With government-backed guarantees (for 5 years), NARCL entry can bring new culture and values in sector.
- **Improve Recoveries:** After initial high rates of recovery, it dipped below 30% post 2010-11 (exception of 2017-18 with 32.2% recovery). Entry of NARCL holds potential to shape the operations of the existing ARCs, strengthening the asset resolution mechanism in India.
- **Promote Competition:** Assets allocated to NARCL will go through 'Swiss challenge', i.e., giving other ARCs an opportunity for highest evaluation. It will help banks in maximum recovery with promotion of competition in the sector.



Sudarshan Sen Committee

Set up in 2021 by RBI, the committee will-

- review existing legal and regulatory framework applicable to ARCs with recommendations to improve efficacy of ARCs;
- review role of ARCs in stressed assets resolution under Insolvency & Bankruptcy Code (IBC);
- Review ARCs business model and suggest means to improve liquidity and trading of SRs.

What makes NARCL different from other Asset Reconstruction Companies (ARCs)?

Other ARCs	NARCL
<ul style="list-style-type: none"> ▪ Private companies which limit the assets transfer from PSBs because of fears related to investigation. ▪ Buy assets at a steep discount from actual loans with low recoveries. ▪ Except few, most are thinly funded as they largely borrow funds from banks and face various issues like different compulsions from different lenders, which delays whole process. 	<ul style="list-style-type: none"> ▪ With PSBs as main stakeholders and government backing, assets transfer can happen more freely. ▪ Allows Swiss Challenge to get best for banks from stressed asset. ▪ Designed on international experiences of government backed ARCs in South Korea, Sweden and US, NARCL won't have capital issues and it can aggregate bad loans for faster reconstruction.

Challenges



- **Risk of Moral Hazard:** Shifting of NPAs without accountability risks moral hazard of reckless lending which can further amplify the problem
- **Lack of Urgency:** For **restructuring and turning around** of bad loans, NARCL need **separate Asset Management Company** (proposed as India Debt Management Agency or IDMA. But no steps are taken for its establishment yet.
- **Qualified Professionals:** India lacks adequately trained manpower.
- **Mere Shift of Bad Asset:** With PSBs as stakeholders and at top positions, NARCL risks the mere shift of bad loans from government owned banks book to government backed NARCL

- **Capital Requirements:** With 15% upfront payment needs, NARCL will require capital somewhere between ₹ 6,500-7000 crore to resolve ₹ 89,000 crore NPAs even if recoveries are kept near the half of actual, i.e., ₹ 44,500 crore

Conclusion

Arrival of NARCL is at an opportune time when existing 28 ARCs have limited assets and RBI is looking to enhance ARCs role in stressed asset resolution. At the same time, we must not leave our focus from **training the manpower** at ARCs as well as banks to improve not just ARCs performance but to minimize such risks in future.

Note: To know more about the NPA crisis, refer to our Weekly Focus “Non-Performing Assets (NPA) From 'a Crisis' to 'a Catalyst'”.

 <p>Non-Performing Assets (NPA) From 'a Crisis' to 'a Catalyst'</p>	<p>NPA crisis in India has been an amalgamation of several weaknesses such as poor credit monitoring, governance issues and limited capital availability. The solution similarly has to be an amalgamation of multiple steps expressed as a '4R strategy'. At the same time, the NPA problem has the potential to be an indicator guiding the holistic reforms in the Banking sector.</p>	
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3.5. NATIONAL URBAN DIGITAL MISSION

Why in news?

The **Ministry of Housing & Urban Affairs (MoHUA)** along with the **Ministry of Electronics and Information Technology (MeitY)** has launched **National Urban Digital Mission (NUDM)** to improve urban connectivity that will connect nearly 2,535 cities.

More on news

Other initiatives such as **India Urban Data Exchange (IUDX)**, **SmartCode platform**, **Smart Cities 2.0 website**, and **Geospatial Management Information System (GMIS)** were also launched by MoHUA.

- **India Urban Data Exchange (IUDX):** Developed in partnership between the **Smart Cities Mission** and the Indian Institute of Science (IISc), Bengaluru to **address the problem of data silos**, both within and across cities.
 - Serves as a **seamless interface for data providers and data users**, including Urban Local Bodies (ULBs), to share, request, and access datasets related to cities, urban governance, and urban service delivery.
 - An **open-source software platform** which facilitates the secure, authenticated, and managed exchange of data amongst various data platforms.
- **Smart Code Platform:** Enables all ecosystem stakeholders to contribute to a repository of open-source code for various solutions and applications for urban governance.
 - **It addresses the challenges that ULBs face in the development and deployment of digital applications** to address urban challenges, by enabling cities to take advantage of existing codes and customizing them to suit local needs, rather than having to develop new solutions from scratch.
- **Smart Cities Mission 2.0 website** has been redesigned to serve as a **single stop for all Smart Cities initiatives**.
 - **GMIS** is integrated with this website. The website creates a **single window hub for Smart Cities Mission**.
 - The website has been developed to be used as a highly effective communication and outreach tool.

About National Urban Digital Mission

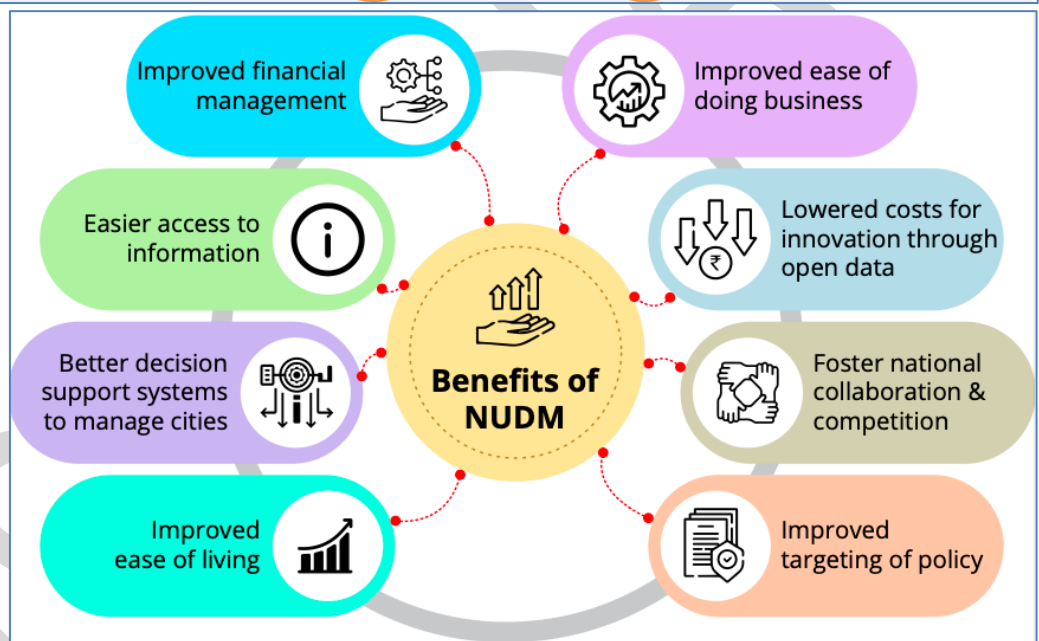
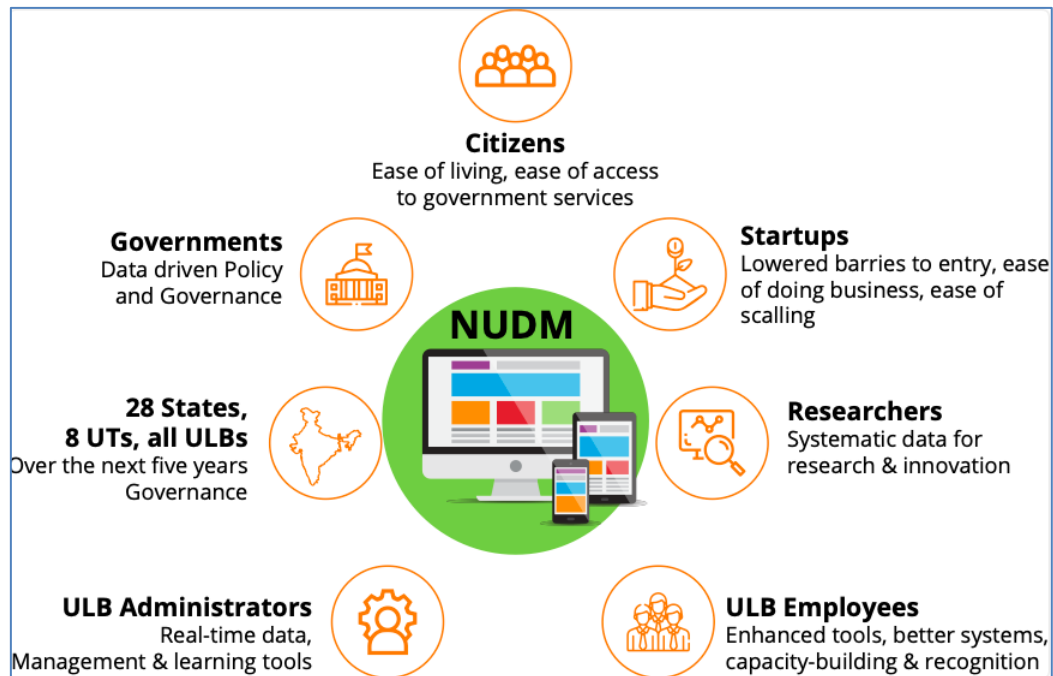
- NUDM aims to **build the shared digital infrastructure for urban India**, working across the **three pillars of people, process, and platform** to provide holistic support to cities and towns.
 - **People:** Mobilise, enable and empower stakeholders across the urban ecosystem.
 - **Processes:** Improve governance through standards and frameworks for collaboration and impact.

- **Platforms:** Leverage technology in service of an improved quality of life for every citizen.

- It will institutionalise a **citizen-centric and ecosystem-driven approach** to urban governance and service delivery in cities by 2022 and across all cities and towns in India by 2024.

- **Objectives of NUDM:**

- To **catylase an urban national open digital ecosystem (u-NODE)** that leverages NUDM build new platforms, solutions and innovations.
- To **create open standards and enforce the adoption of open standards** by all national digital urban stakeholders.
- To **establish registries at appropriate levels** to create single source of truth in respect



- of urban assets, service delivery, urban data and actors.

- To **promote the development of nationally scalable application systems** with a special focus on achieving the Sustainable Development Goals (SDGs) for urban.
- To **adopt the best principles of cooperative federalism** while working with the States, Union Territories and ULBs for the realization of the vision.
- To provide for **enhancing the efficiency and effectiveness of governance** at all levels.

Challenges in urban digital transformation

- **Lack of expertise:** There is poor resource management planning, lack of information technology resources, expertise, and skilled manpower in digital technology.
- **Data security:** Successful integration of digital technologies requires a transformation of security, which is a top-most challenge faced by many organizations embarking on a digital transformation journey.
- **Inadequate Investment:** There are insufficient funds to implement policy and bridge the infrastructure gaps in urban areas.
- **Poor connectivity:** Digital technology is not accessible to every citizen which creates **digital divide due to lack of connectivity in urban areas** such as **absence of internet, unavailability of digital services in local**

languages and a sizeable number of population without computer or laptop are a stumbling block to gaining widespread digital literacy.

- **Lack of coordination** among various departments which lacks vision to transform India to a digitally empowered society and knowledge economy.

Way forward

- **Policy Transformation:** Increased focus and mainstreaming of **people-centered sustainable and inclusive digital transition** is critical policy topic in high level political forums and global dialogues on smart cities.
- **Financing Digital Urban Innovation:** Increased **investment and financing for people-focused smart cities** to accelerate the achievement of the SDGs with a specific focus on developing countries, small and medium size cities and grassroots urban communities.
- **Digital Empowerment and Capacity Building:** Enhanced capacity of governments at all levels to **adopt a people-focused, privacy-enhancing, and rights preserving approach** to digital technologies for inclusion and sustainable urban development in the achievement of the SDGs.
- **Proper Infrastructure:** Public Private Partnership (PPP) models must be explored for sustainable development of urban digital infrastructure, as has been the case for civic infrastructure projects like roads and metro.
- **Inclusive growth:** There is need to ensure data security, clear regulatory guidelines, and greater autonomy for academia for inclusive growth.

3.6. PERIODIC LABOUR FORCE SURVEY

Why in News?

Recently, National Statistical Office (NSO) released third annual report on Periodic Labour Force Survey (PLFS).

About Periodic Labour Force Survey (PLFS)

- Considering the importance of availability of labour force data at more frequent time intervals, NSO launched PLFS in April 2017.
 - The first annual report (July 2017-June 2018) was **released in May 2019 and the second in June 2020.**
 - Third Annual Report is brought out based on PLFS conducted during July 2019-June 2020.
- **Objective of PLFS is primarily twofold**
 - To estimate the **key employment and unemployment indicators** (viz. Worker Population Ratio (WPR), Labour Force Participation Rate (LFPR), Unemployment Rate (UR)) **in the short time interval of three months** for the urban areas only in the 'Current Weekly Status' (CWS).
 - To **estimate employment and unemployment indicators in both 'Usual Status'** (principal activity status + subsidiary economic activity status) **and CWS in both rural and urban areas annually.**
- PLFS **categorises the workforce into self-employed** (which includes own account workers, employers, and unpaid helpers in family enterprises); **regular wage/salaried workers and casual labourers.**
- **Own account workers run small enterprises without hiring any labour** but may take help from family members, while employers hire workers.

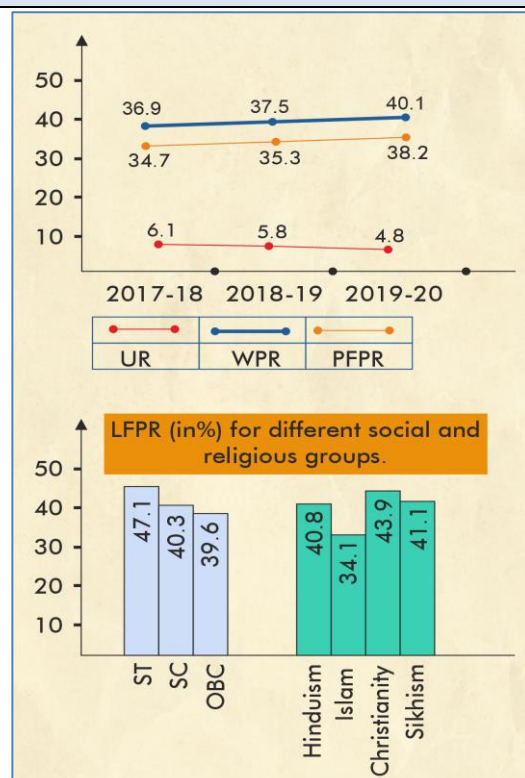
About National Statistical Office (NSO)

- It is the **statistics wing of Ministry of Statistics and Programme Implementation.**
- NSO consists of the Central Statistical Office (CSO), the computer center and the National Sample Survey Office (NSSO).
- **NSO is mandated with the following responsibilities:**
 - Acts as the **nodal agency for planned development of the statistical system in the country**, lays down and maintains norms and standards in the field of statistics.
 - **Prepares national accounts as well as publishes annual estimates of national product**, government and private consumption expenditure, capital formation, savings, estimates of capital stock and consumption of fixed capital, as also the **state level gross capital formation of supra-regional sectors** and prepares comparable estimates of State Domestic Product (SDP) at current prices.
 - **Maintains liaison with international statistical organizations**, such as, the United Nations Statistical Division (UNSD), IMF, ILO etc.
 - **Compiles and releases the Index of Industrial Production (IIP)** every month in the form of 'quick estimates.
 - Conducts the **Annual Survey of Industries (ASI)**; and provides statistical information to assess and evaluate the changes in the growth, composition and structure of the organized manufacturing sector.
 - Organizes and **conducts periodic all-India Economic Censuses** and follow-up enterprise surveys.

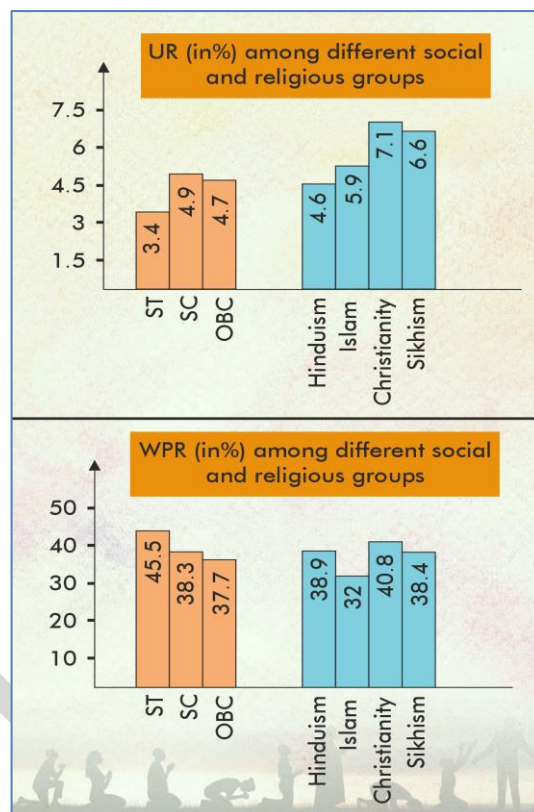
Definition of Key Indicators		
Labour Force Participation Rate (LFPR)	<ul style="list-style-type: none"> It is defined as the percentage of persons in labour force (i.e. working or seeking or available for work) in the population. 	<p>1. Labour force Participation Rate (LFPR): $\frac{\text{no. of employed persons} + \text{no. of unemployed persons}}{\text{total population}} * 100$</p> <p>2. Worker Population Ratio (WPR) $\frac{\text{no. of employed persons}}{\text{total population}} * 100$</p> <p>3. Proportion unemployed (PU) $\frac{\text{no. of unemployed persons}}{\text{total population}} * 100$</p> <p>4. Unemployment Rate (UR): $\frac{\text{no. of unemployed persons}}{\text{no. of employed persons} + \text{no. of unemployed persons}} * 100$</p>
Unemployment Rate (UR)	<ul style="list-style-type: none"> It is defined as the percentage of persons unemployed among the persons in the labour force. 	
Worker Population Ratio (WPR)	<ul style="list-style-type: none"> It is defined as the percentage of employed persons in the population. 	
Activity Status	<ul style="list-style-type: none"> Activity status of a person is determined on the basis of the activities pursued by the person during the specified reference period. 	
		<ul style="list-style-type: none"> Usual Status: When the activity status is determined on the basis of the reference period of last 365 days preceding the date of survey. Current Weekly Status (CWS): When the activity status is determined on the basis of a reference period of last 7 days preceding the date of survey. Principal activity status: The activity status on which a person spent relatively long time (major time criterion) during 365 days preceding the date of survey. Subsidiary economic activity status- The activity status in which a person in addition to his/her usual principal status, performs some economic activity for 30 days or more for the reference period of 365 days preceding the date of survey.

What Data in PLFS indicates?

- Falling Unemployment rate**
 - PLFS shows decline in the unemployment rate, together with an increase in LFPR between 2017-18 and 2019-20, even as the real growth rate of the economy slipped (from 7% to 4.2% over that period).
 - ✓ **UR fell to 4.8%** in 2019-20. In 2018-19, it stood at 5.8% and 6.1% in 2017-18.
 - ✓ **UR among youth in the 15-29 age group is 15%**, with urban male and female joblessness rates in this age group even greater, at 18.2% and 24.9% respectively.
 - While there was an increase in the share of the population in the labour force, there was an even higher increase in the share of those who were able to find work (indicated by WPR), and hence unemployment fell.
 - ✓ **WPR improved** to 38.2% in 2019-20 compared with 35.3% in 2018-19 and 34.7% in 2017-18.
- Rise in workforce engaged in agriculture:** Share of the workforce engaged in agriculture has risen to 45.6 per cent (2019-20) from 42.5 per cent (2018-19).
 - Almost the entire rise in the workforce was accommodated by agriculture. Agriculture continues to perform the function of a sink — absorbing the workforce that cannot find remunerative employment elsewhere.
 - Share of rural women engaged in agriculture has increased substantially from 71.1 per cent (2018-19) to 75.7 per cent (2019-20) and these women are increasingly being employed in the category of unpaid family workers.



- **Rise in self-employment:** 53.2% of rural households and 30.7% of urban households were engaged in self-employment. Only 12.9% households in rural areas (compared to 43.1% in Urban areas) were engaged in regular wage/salary earning.
 - Proportion of rural households reporting themselves as 'self-employed', especially in non-agriculture, went up at the cost of regular wage earning/salaried households.
 - In agricultural sector, much of the increase is coming through the category of unpaid family helpers.
- **Female participation:** PLFS shows a **sharp increase in the female LFPR by 5.5 percentage points** (from 2018-19). Much of this is **driven by the increased LFPR of rural women**.
- **Impact of lockdown:** In April-June 2020 LFPR for men and women declined to 55.5% and 15.5% against 56.7% and 17.3% in January-March 2020.
 - On a year-on-year basis, urban India saw a reduction of 11.05 million jobs in the April-June 2020 period and rural areas saw the addition of 14.7 million jobs.
 - UR increased more sharply in urban areas (from 8.9% to 20.8%) than in rural areas (from 8.7% to 12.2%).
 - The self-employed were the worst hit during the lockdown, while regular wage workers suffered a contraction only in rural areas.



Issues with PLFS

- The **sample size on which national-level estimates of the PLFS are based are, in fact, much larger** than the minimum sample size required to produce reliable estimates of UR.
- Typically, **UR is based on Usual Status**. But this approach is **not comparable with either the global norm** (followed by ILO) **or the private sector practice** (such as Centre for Monitoring Indian Economy or CMIE).
 - **CWS is closer to the global norm** as memory recall is much better in CWS. Using CWS approach, the UR was estimated to be 8.8%, unchanged during the last three years.
 - **Usual Status made more sense when the economy was predominantly agrarian**. Today more and more people are into jobs that do not follow a year-long schedule.

3.7. MICRO, SMALL & MEDIUM ENTERPRISES

Why in news?

The government has **announced fresh guidelines to include wholesale and retail trades as micro, small and medium enterprises (MSMEs)**.

More on news

- The new guidelines will **make wholesale and retail enterprises eligible for registration in the Udyam portal**.
 - The Udyam portal provides a single-page registration, consumes less time, and simplifies the process of registering any enterprise under the MSME category.
- Wholesale and retail traders will now be **eligible for finance under priority sectors** classified by the Reserve Bank of India (RBI).
 - However, other than being eligible for finance under priority sector, **wholesale and retail enterprises will not be eligible for any other benefits** that small businesses otherwise get from the government.
- In the past, wholesale and retail trading activities were classified as MSMEs, **but were excluded in 2017 as they did not cater to manufacturing activity**.

Background

- **MSMEs, introduced by the Government via Micro, Small & Medium Enterprises Development (MSMED) Act, 2006, are entities engaged in the production, manufacturing, processing or preservation of goods and commodities** subject to investment limits (refer infographic).

- **Importance of MSMEs in India**
 - They contribute to **30% of the country's GDP; 45% of manufacturing output** and about **40% of overall exports**.
 - There are approximately **6.3 crore MSMEs employing 110 million people**.

Recent Government steps to support MSMEs

- **New definition of MSMEs**
 - In 2020, the **Government has revised the definition of micro, small and medium enterprises (MSMEs) to give them the confidence to grow**.
 - Previously, successful MSMEs feared if they outgrow the size of what is defined as an MSME, benefits accrued of being a MSMEs would be lost. Therefore **MSMEs preferred to remain within the definition rather than grow**.

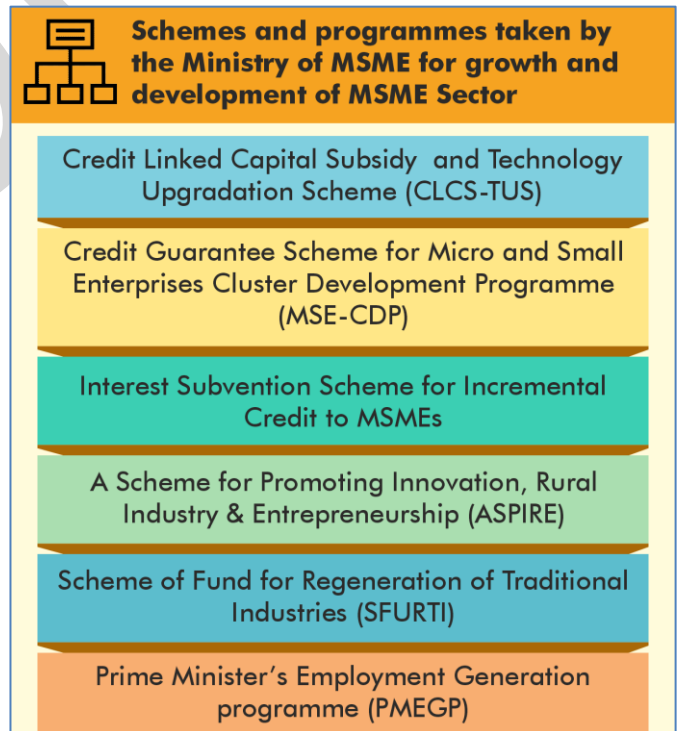
PREVIOUS MSME CLASSIFICATION:

CRITERIA: INVESTMENT IN PLANT & MACHINERY EQUIPMENT			
Classification	micro	small	medium
Manufacturing Enterprises	Investment <₹25 Lakh	Investment <₹5 Crore	Investment <₹10 Crore
Service Enterprise	Investment <₹10 Lakh	Investment <₹2 Crore	Investment <₹5 Crore

NEW REVISED MSME CLASSIFICATION:

COMPOSITE CRITERIA: INVESTMENT & ANNUAL TURNOVER			
Classification	micro	small	medium
Manufacturing & Services	Investment <₹1 Crore & Turnover <₹5 Crore	Investment <₹10 Crore & Turnover <₹ 50 Crore	Investment <₹20 Crore & Turnover <₹100 Crore

- Under the **new definition**
 - **Distinction between manufacturing and services enterprises has been eliminated**.
 - **Investment criteria** for such enterprises have been **revised upwards**, while an **additional criterion of turnover has been introduced**.
- **Improving the credit access:** The Finance Ministry has **extended the Emergency Credit Line Guarantee Scheme (ECLGS) for three months upto September 2021**, allowing fully guaranteed and collateral-free additional credit support for Covid-hit MSMEs.
 - Recently, **ECLGS has been expanded by Rs. 1.5 lakh crore**, raising the overall cap of admissible guarantee from Rs. 3 lakh crore to Rs. 4.5 lakh crore.
- **Addressing delayed payments:** Recently, the Parliament has passed the **Factoring Regulation (Amendment) Bill** which will help MSMEs by providing them added avenues for getting credit facility, especially through Trade Receivables Discounting System (TReDS). This will result in bringing down cost of funds and enable greater access to small businesses, ensuring timely payments.
 - **TReDS is an electronic platform** where receivables of MSMEs drawn against buyers (large corporates, PSUs, Government departments) are financed through multiple financiers at competitive rates.
 - This is in addition to the **MSME Samadhaan Portal** that empowers **micro and small entrepreneurs across the country to directly register their cases relating to delayed payments by Central Ministries/ Departments/CPSEs/State Governments**.
- **Portal "Champions"** was launched to cover many aspects of e-governance including **grievance redressal and handholding of MSMEs**.
- **Global level market for MSMEs** through the Ministry of MSMEs
 - The Ministry through its **MSME-Development Institutes (DI)**, facilitates **MSMEs to export** from Domestic Tariff Area (DTA) and Special Economic Zone (SEZ).
 - The **International Cooperation Scheme (ICS)** is implemented to **facilitate participation of the MSMEs in International Exhibitions, Trade Fairs etc.** to expand their business in the global market.



Challenges faced by MSMEs

- **Impacts of COVID-19 pandemic**
 - Study conducted by **Khadi and Village Industries Commission (KVIC)** revealed that, **of the MSMEs affected by the pandemic, more than 50% were shut down and reported a drop in production and revenue.**
 - The department-related **Parliamentary Standing Committee on Industry** noted in its report that the **stimulus package** announced by the government is “**inadequate**” as the measures were more of loan offerings and long-term, instead of improving the cash flow to generate demand as immediate relief.
 - **Other problems faced** during the pandemic were delayed payments, high informality, low financial resilience, scarcity in raw material availability etc.
- **Infrastructure bottlenecks:** MSME clusters, particularly the **micro enterprises, are inadequately equipped with necessary support systems** like new technologies, digital modes of payments etc.
 - This makes them **unable to take advantage of most Government schemes** which are mostly based on digital infrastructure and require beneficiaries to have some form of digital identity and presence.
- **Limited capital and knowledge:** The majority of MSME owners are from education-deprived and poverty-hit regions. Apart from this, India’s MSME sector usually does not enjoy the same credit worthiness as owners usually do not have any assets in their name.
- **Non-availability of suitable technology:** Limited access to IT education, knowledge, and information is restricting the growth of the sector which results in slower production processes and compromised product quality.
- **Labour challenges:** MSMEs face a lot of inconsistencies when it comes to skilled manpower and labour law compliances. Moreover, the non-availability of a skilled workforce at an affordable cost is adding to the woes of the MSME sector.
- **Other challenges** include Ineffective marketing strategy; Constraints on modernisation & expansions etc.

Way forward

- **Parliamentary Standing Committee on Industry:** It gave the following recommendations **to support MSMEs** during the pandemic
 - A larger economic package aimed at bolstering demand, investment, exports, and employment generation to help the economy, including MSMEs.
 - Soft loans to MSMEs at minimal interest rate of 3-4%
 - Conduct a Detail study to make assessment of the actual losses suffered by the MSME sector
 - Setting up a National Electronic Employment Exchange along with a new employment policy
- **Simplified loan processing and assessment:** All applications should be made online along with a simplified assessment based on Nayak Committee on Small Scale Industries.
- **Integration of MSME sector with global value chains (GVC):** Being part of GVC would enable MSMEs to produce quality goods and services which will have greater acceptability in the global market.
 - **Global Bharat program**, designed by NASSCOM, UNDP and others to enable Indian **MSMEs become globally competitive** by equipping them with digital technologies is a step in this direction.
- **Lenders to collaborate with FinTech companies:** The emergence of FinTech companies has made it possible to assess credit worthiness of MSMEs by utilising data sources such as digital transaction trails etc. This can be used for speedier credit underwriting for extending loans to MSMEs.
- A **Central Research Institute for enterprises and entrepreneurship:** Such an institute, at the national level, can foster a conducive environment for the growth of entrepreneurs and development of skill sets and dissemination.

3.8. LOGISTICS SECTOR

Why in news?

The Logistics Division of the Ministry of Commerce and Industry has unveiled plans for the ‘**Freight Smart Cities**’.

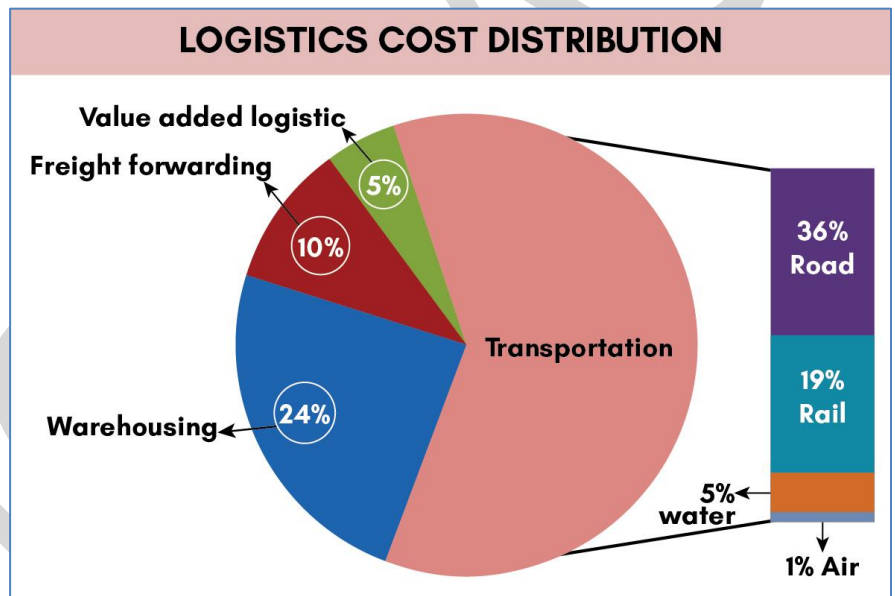
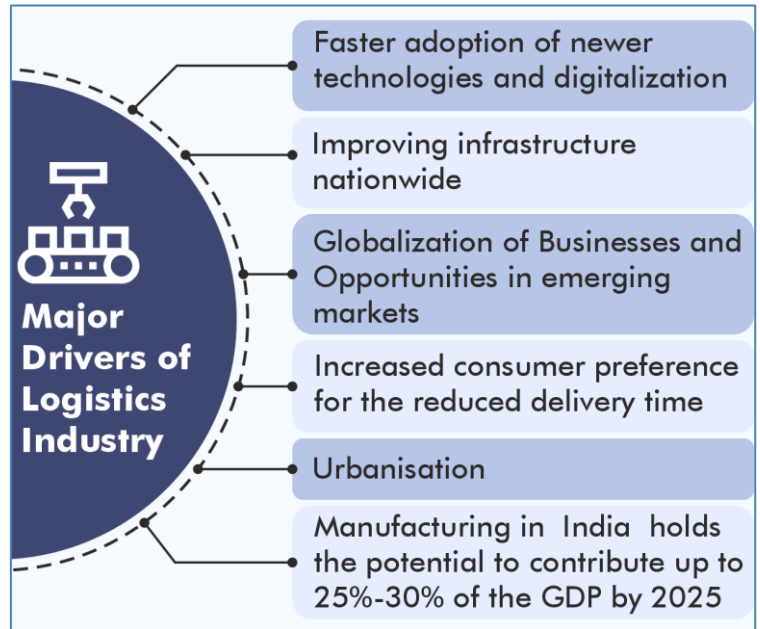
More about scheme

- To begin with, **10 cities will be developed** as Freight Smart cities. Further, **an institutional mechanism** involving the Government, private stakeholders like logistics services providers, users and citizens **will be set up.**

- To enhance the urban freight system, measures have been divided into four categories- vehicle use optimization, infrastructure development, demand and land use planning, and technology adoption.

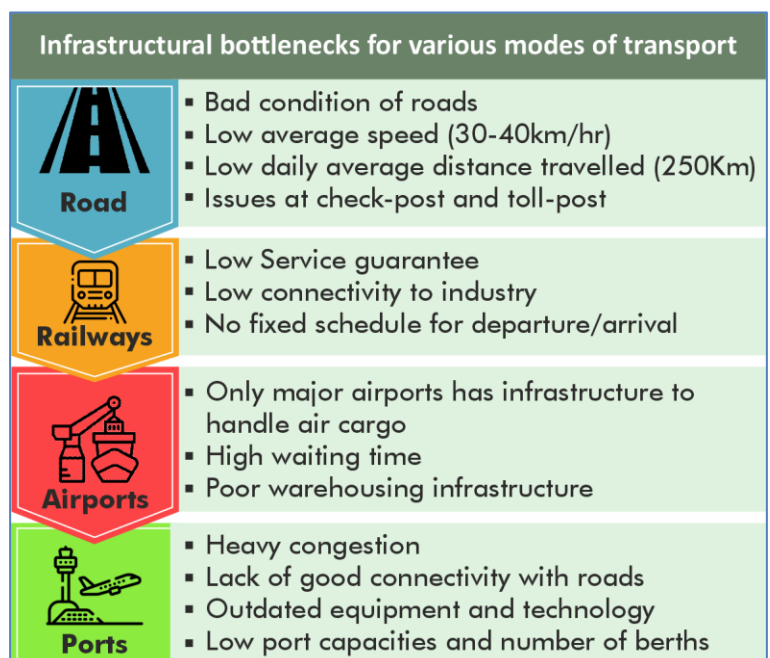
Logistics industry in India

- Broadly defined, logistics covers all aspects of trade, transport and commerce, starting from the **completion of the manufacturing process all the way to delivery for consumption.**
- Currently, **transportation is considered to be most crucial logistics activity** which almost accounts for 50-60% of logistics cost followed by warehousing (Refer Fig).
- The Size of Logistics Industry in India is \$215 billion.
 - It provides livelihood to **more than 22 million people** and improving the sector will facilitate 10 % decrease in indirect logistics cost leading to the **growth of 5 to 8% in exports.**
- The logistics market in India is forecasted to grow at a **CAGR of 10.5% between 2019 and 2025.**
- Increasing investments and trade points toward a **healthy outlook for the Indian freight sector.**
 - Port capacity** is expected to grow at a CAGR of 5% to 6% by 2022.
 - Indian Railways** aims to increase its freight traffic from 1.1 billion tons in 2017 to 3.3 billion tons in 2030.
 - Freight traffic on airports** in India has the potential to reach 17 million tons by FY40.



Challenges of Indian Logistics Sector

- Infrastructure:** Infrastructural challenges are reflected in **inadequate and low-quality** modal and terminal transport infrastructure, **inefficient and ill-designed** storage facilities for cargo and containers etc. Refer info graphic for **core infrastructural bottlenecks** for various modes of transport.
- Suboptimal modal mix:** In the **absence of a systematic and holistic approach**, the



use of different modes of transport has remained **skewed (60% of transportation activities conducted via road) and inefficient.**

- **High Logistics Cost:** The Ministry of Commerce & Industry estimates that presently the **country spends about 14% of its GDP on logistics** which is much higher than Japan (11%) and the USA (9-10%).
- **Fragmented and unorganised sector:** The logistics industry is highly fragmented and **consists of over 1,000 active players** which include large scale domestic players, leading entities of global players, the express arm of the government postal service and emerging start-ups specialising in e-commerce deliveries.
 - Further, **only 10-15 per cent** of the \$215-billion Indian logistics market is **owned by organised players.**
- **Shortage of skilled workforce:** Non availability of appropriately skilled manpower is attributed to inadequate training and proper leadership and support. There are **limited institutes for soft skills**, and operational and technical training. Also, due to **poor working conditions and low pay scale** (unorganised nature), it is not a **preferred choice among skilled personnel.**
- **Slow adoption of new technology:** Awareness about the economic benefits of using digital technology is low and collaboration among stakeholders far from satisfactory. As a result, the logistics ecosystem is fraught with **operational inefficiencies and poor asset utilization.**
- **Regulatory hurdles: Obstacles in land acquisition** and consolidation, **poor coordination** among multiple regulatory agencies and **lack of transparency in compliances** continue to be major impediments.
- **Huge investment:** Logistics sector requires huge investment for resources like vehicles, skilled manpower and warehouses etc. Logistics is a **high cost and low-margin** business. High costs of operation and delays involved in compliances with **varying documentation requirements** make the business unattractive.
- **Less awareness towards sustainability measures:** Very few Logistics Service Providers in India shows concern towards environment and use reusable and recyclable pallets, eco-friendly vehicles and green processes in their operations.

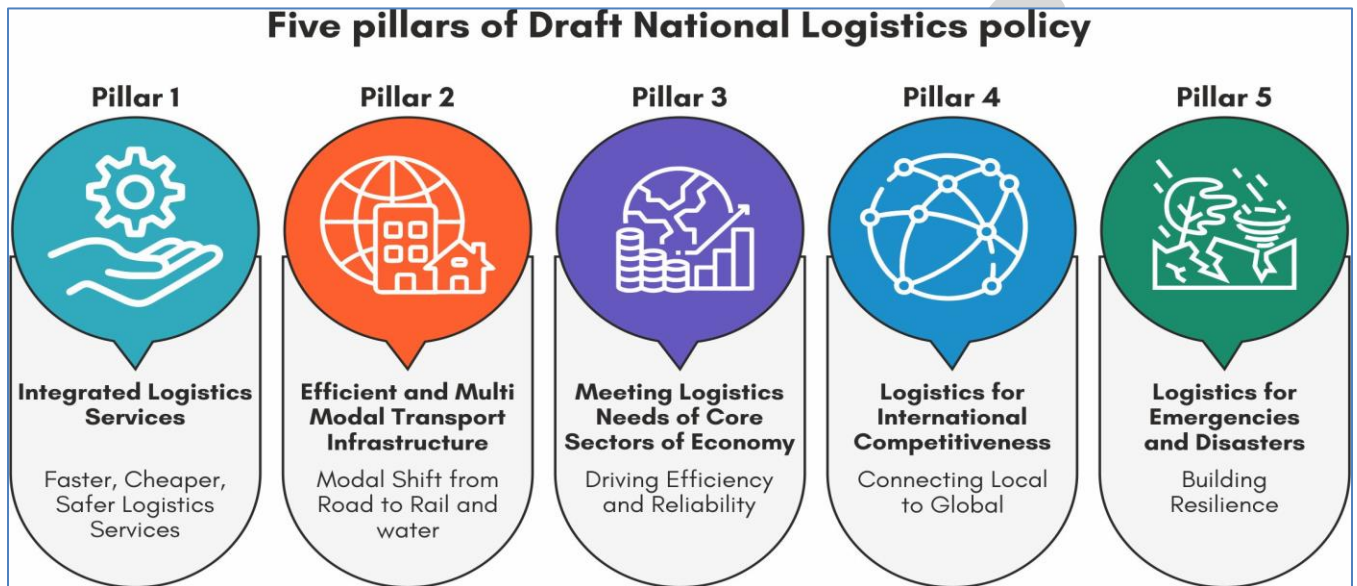
Measures taken

- **Grant of Infrastructure status to Logistics sector:** It helps in **providing credit** to the exporters at competitive rates and on a long-term basis, **reducing logistics costs.**
- **Introduction of GST:** The integration of the multilayer **goods and service tax (GST)** has turned the Indian tax system into a **unified one** and leading to **greater economies of scale** for transport operators.
 - **E-way bill** (a document generated online) **under GST regime** is helping logistics firms by **improving load planning, shipment tracking, operational transparency, and the overall quality** of their services.
 - The data from the Ministry of Road Transport and Highways (2017) indicate that trucks are covering **300- 325 km a day on an average against about 225 km a day before GST** was introduced.
- **Creation of Logistics Division:** The Logistics division in the Department of Commerce was created consequent to the amendment to Government of India (Allocation of Business) Rules, 1961, that allocated the task of **“Integrated development of Logistics sector”** to the Department of Commerce.
 - Logistics division has planned to **create an IT backbone and develop a National Logistics Information Portal** which will be also an online Logistics marketplace that will serve to bring together the various stakeholders on a single platform.
- **Integrated approach to Logistics infrastructure:** Significant initiatives in this direction include planned development of 35 **Multi Modal Logistics Parks (MMLPs) under Bharatmala Pariyojana**, a number of port connectivity projects under **Sagarmala**, renewed focus on national waterways with inland terminals, and a number of **industrial and dedicated freight corridors** being planned across key clusters in the country.

Logistics performance Index (LPI)

- In 2018, India was ranked **44th in the Logistics Performance Index**, a measure through which the **World Bank ranks countries** based on their logistics performance.
- LPI is the weighted average of the country scores on the **six key dimensions**:
 - **Efficiency** of the clearance process (i.e., speed, simplicity and predictability of formalities) by border control agencies, including customs;
 - Quality of trade and transport related **infrastructure** (e.g., ports, railroads, roads, information technology);
 - Ease of arranging **competitively priced shipments**;
 - **Competence and quality** of logistics services (e.g., transport operators, customs brokers);
 - Ability to **track and trace consignments**;
 - **Timeliness** of shipments in reaching destination within the scheduled or expected delivery time.

- **Logistics Ease Across Different States (LEADS) Index:** It is an attempt to establish the base line of performance in the logistics sector based on the **perception of users and stakeholders** at the state level. The index is based on the **analysis of perception with regard to nine parameters**, including infrastructure, quality of logistics, services, timeliness of cargo delivery, regulatory process and safety of cargo.
- **National Logistics Excellence Awards:** Objective of awards is to catalyse **systematic transformation** of the Indian logistics sector by **shining the spotlight on best practices** in logistics by **highlighting the initiatives and achievements of top performers**.
- **Proposed National Logistics Law:** Currently **under consultation with stakeholders**, it would provide an agile regulatory environment through a unified legal framework for **“One Nation-One Contract”** paradigm (single bill of lading across modes) supporting **“One Nation-One Market”** agenda.
- **Draft National Logistics policy:** It aims to promote seamless movement of goods across the country and is at the **near-finalisation stage**. There are five pillars for programmatic interventions:



3.9. INDIAN SHIPPING INDUSTRY

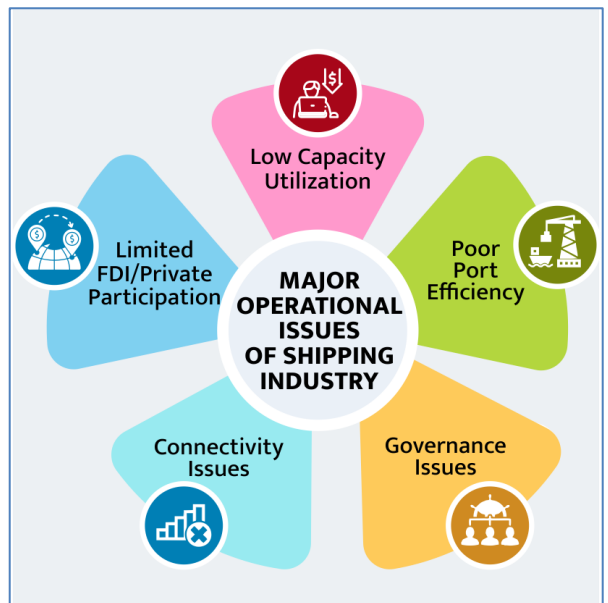
Why in News?

Recently, the Union Cabinet approved a scheme for promotion of **Flagging in merchant ships** in India while Parliament also passed the **Marine Aids to Navigation Bill, 2021**.

What role does Shipping Industry play in the Economy?

As far as the Indian subcontinent is concerned, shipping plays an important role in the transport sector of India's economy.

- Approximately, **95 percent of the country's trade by volume** (70 percent in terms of value) is moved by sea.
- With a **coastline close to 7517 km and 12 major & 187 minor ports** India happens to be a potential destination for shipping and transshipment in the futures to come.
- The industry offers numerous benefits like- **capabilities to transport large freight, is cost effective, eco-friendly** and **creates employment in coastal regions** among others.
- Following are some of the important areas of the economy where the shipping industry plays the central role-
 - **India imports around 40 million tonnes of crude and 20 million tonnes of products** every year, chiefly from the Gulf, Malaysia, and Nigeria via the Shipping route.
 - **Iron ore exports** from India to East Asia.



- **Coking coal imports** from Australia to Visakhapatnam, Paradip, and Haldia
- Other imports like Fertilizer material, cement movement through movement of minor ports and other logistical links for the domestic industries are also served by the shipping industry.

What are the issues that the sector is facing?

- **Small Fleet Size:** The size of Indian Shipping Industry and its fleet is comparatively smaller to its counterparts (Ranked at 16 with 1,431 vessels or 1.2% of world).
- **Lack of Competitiveness:** Due to high taxation, compliance burden and lack of skilled manpower, the operational costs of Indian vessels is high. Because of the above two reasons, India had nearly **US\$ 53 billion** of **foreign exchange outflow** in 2018-19 alone as shipping payments.
- **Low capacity:** Despite handling **90% of EXIM Cargo by volume** and **70% by value**, the traffic handled at ports is far less than capacity (704.92 MTPA in 2019-20 against 1534.91 MTPA capacity at major ports alone by March 2020).
- The **average turnaround time** at Indian ports reached 12 days in Covid-19 despite being in the essential list.
- Despite **100% FDI** and **10 year tax holiday to enterprises** engaged in maintenance and operation of ports, a cumulative FDI of only **US\$ 1.63 billion** is received from April 2000 to March 2021.

How can Marine Aids to Navigation Bill, 2021 help the industry?

It seeks to **incorporating global best practices** and **comply** to India's International obligations under

- **International Convention for the Safety of Life at Sea, 1974.**
- **International Association of Marine Aids to Lighthouse Authorities Maritime Buoyage System.**

It provides a **user-friendly legal framework** for **development, maintenance, and management** of aids to navigation across India through provisions on:

- Definition on **aid to navigation** and on **vessels**, based on the modern state-of-the-art technologies of marine navigation.
- Appointment of **Director General of Aids to Navigation** and **Central Advisory Committee** to advise the central government on matters related to aids to navigation.
- Designate any aid to navigation as **Heritage Lighthouse**.
- Identifying **offences and penalties** for **intentional obstruction or damages** to any aid to navigation with fine and punishment.
- **Training and Certification** for operating any aid to navigation and vessel traffic service.

Potential Benefits

- Better Navigation **safety and efficiency** with protection of environment
- **Skill development** and strengthening of Auditing and Accreditation of Institutes at par with international standards.
- Realize tourism potential of coastal regions through Heritage lighthouses **development for educational, cultural, and tourism purposes.**

Important Terms to know before recent provisions

- **'Flagging In'** is the process of adding a vessel to the **national registry** (removal from national registry as 'flagging out'), legal requirement of every merchant ship to be registered to a state.
- **Lighthouses**, usually a **tower structure**, are built onshore or on the seabed to serve as an aid to maritime coastal navigation, warning mariners of hazards, establishing their position, and guiding them to their destinations.
- **Right of First Refusal (ROFR)**, policy measure from government to provide Indian Shipping Companies an opportunity to match the quote from L1 (lowest bidder) in cargo import.

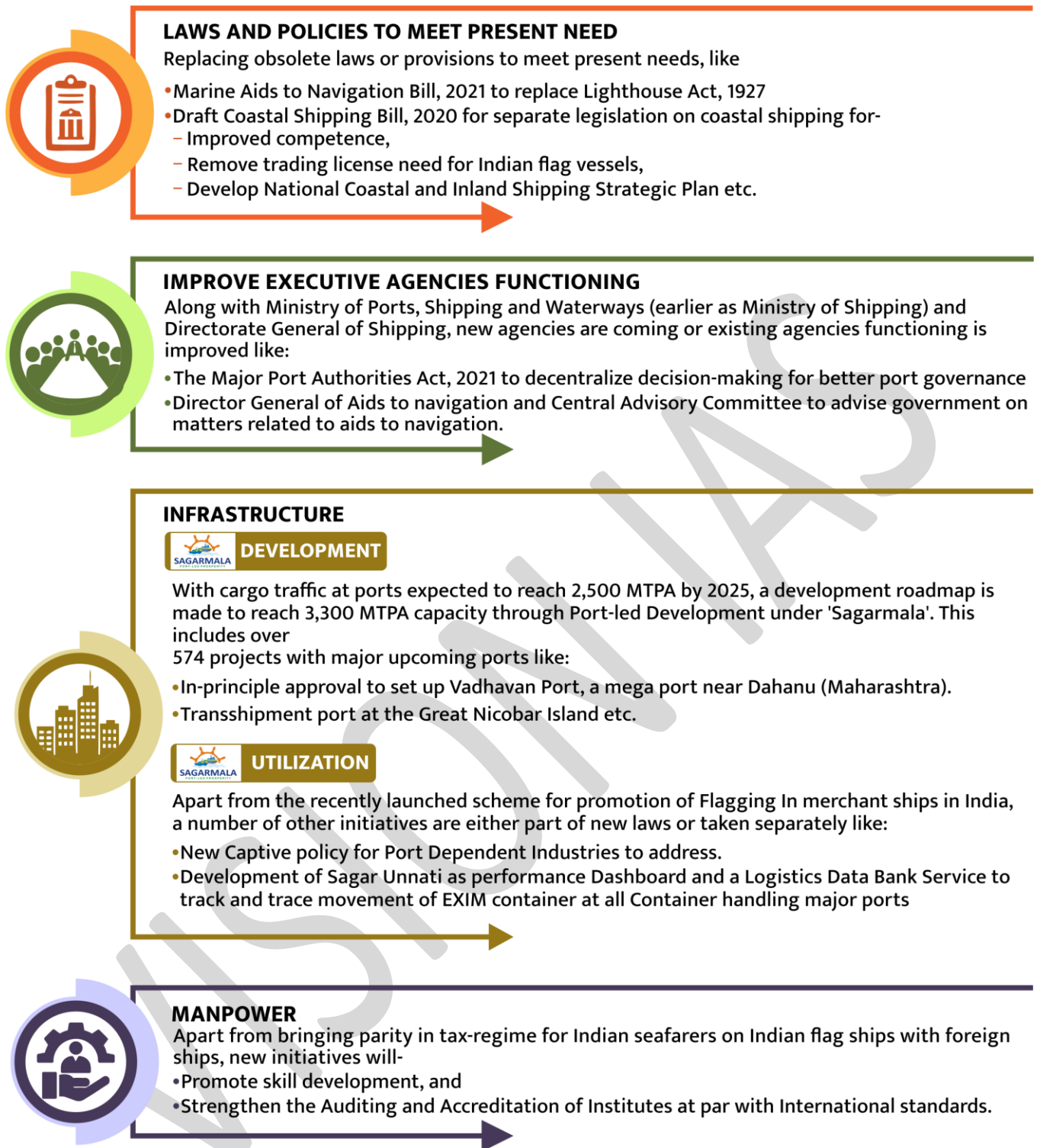
Scheme for promotion of Flagging In merchant ships

It is a **subsidy scheme** to support domestic shipping industry in global tenders by Ministries and CPSEs for cargo import.

Potential Benefits

- Enhance **fleet size** to provide **economic, commercial, and strategic** advantages
- **Increased competitiveness** by offsetting high operational costs
- **Increased training** and **jobs opportunity** for Indian seafarers
- **Savings on Foreign Exchange** with increase in tax collection
- Help in **development of ancillary industry** like ship repair, banking etc.

Other major steps to turnaround Indian Shipping Industry



3.10. DISTRICT MANAGEMENT FUND

Why in news?

Recently, Government has taken complete control of the **District Mineral Foundation (DMF) funds** thereby negating states' right to sanction or approve any expenditure out of the funds accrued from mandatory contribution from mining lease holders.

More on News

- The Ministry of Mines has stated that the move was **necessitated as "there are instances where a part of the funds of the DMF are being transferred to the treasury/consolidated fund of the state or state level funds,"** thereby "defeating the very purpose" of the creation of the DMF.

- The Centre also pointed out that the transfer of any part of the fund of DMF to any state level entity for its utilization is **violation of the provision of section 9B of the Act.**

About District Mineral Foundation (DMF) funds

- It has been conceptualized as a **benefit-sharing mechanism** with mining-affected communities, recognizing them as partners in natural resource-led development.
- It is set up as a **non-profit trust in all mining districts of India**, and it comes with the precise objective to ‘work for the interest and benefit of people and areas affected by mining’, through a participatory process
- It was mandated through the **Mines and Minerals (Development & Regulation) Amendment Act, (MMDRA) 2015** and is funded through the contributions from miners.
- In 2015, the Government further aligned DMF with the **Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY)** scheme, to implement various developmental projects and welfare programs in mining-affected areas using DMF funds.
- The DMF funds collections have been the highest in mineral-rich Odisha (Rs 11,099 crore), followed by Jharkhand (Rs 5,921 crore), Chhattisgarh (Rs 5,830 crore), Rajasthan (Rs 4,121 crore) and Telangana (Rs 2,902 crore).

Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY)

- It is meant to provide for the **welfare of areas and people** affected by mining related operations, using the funds generated by District Mineral Foundations (DMFs).
- The **scheme ensures mitigating the adverse impacts, during and after mining**, on the environment, health and socio-economics of people in mining districts; and to ensure long-term sustainable livelihoods for the affected people in mining areas.
- As per this scheme, **High priority areas** like drinking water, health care, sanitation, education, skill development, welfare measures, skill development and environment conservation **will get at least 60% share of the funds.**

The Mines and Minerals (Development and Regulation) Amendment Act, 2015

- The act **regulates the mining sector in India** and specifies the requirement for obtaining and granting mining leases for mining operations.
- **Institutions:** The Bill provides for the creation of a **District Mineral Foundation (DMF)** and a **National Mineral Exploration Trust (NMET)**.
 - The **DMF is to be established by the state government** for the benefit of persons in districts affected by mining related operations.
- The Amendment act creates a **new category of mining license** i.e., the prospecting license-cum-mining lease, which is a two stage-concession for the purpose of undertaking prospecting operations (exploring or proving mineral deposits), followed by mining operations.
- **Maximum area for mining:** The Act allows the central government to increase the area limits for mining, instead of providing additional leases for covering additional area.
- **Lease period:** The lease period for coal and lignite remains unchanged. For all minerals other than coal, lignite and atomic minerals, mining leases shall be granted for a period of 50 years.
- **Auction of notified and other minerals:** The Act states that **state governments** shall grant mining leases and prospecting license-cum-mining leases for both notified and other minerals.
 - All leases shall be granted through auction by **competitive bidding, including e-auction.**



Issues in effective utilization of DMFs

- **Centre-State tussle for the control of DMF:** As per the act, the composition and functions of the District Mineral Foundation shall be such as may be prescribed by the State Government, however as per recent amendment, Central Government may give directions regarding composition and utilization of fund by (the DMF) thereby depriving the states of discretion in the utilization of DMF funds.
- **Lack of representation:** Despite being a fund meant for people, **DMFs lack representation of mining affected people** in decision-making.
 - As per the report the governing body remains dominated by elected representative like members of Parliament, members of Legislative Assembly and district officials.
- **Poor implementation:** No identification has been done to include displaced people, people whose livelihoods were affected due to mining, people who might need any special and direct assistance, etc., despite a clear mandate in states’ rules and the Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY).
- **Identification of directly-affected areas is arbitrary:** No proper mapping has been done for demarcation and delineation of mining-affected area.

- **Poor planning:** Despite mid- and long-term planning mandates in state rules of Odisha, Chhattisgarh and Madhya Pradesh, no district has made a perspective plan.
- **Auditing:** Apart from a financial audit, no other scrutiny, such as a social or a performance audit of DMFs has been done.
- **Imbalances in spending:** The investments were focused mainly on development of physical infrastructure and less on improving human development indicators.
- **Lack of public disclosure:** DMF trusts have a website providing clearly the composition of DMF bodies, budget, sanction and progress of works etc., but they lie defunct in many states and districts.

Way forward

- **Used for tackling COVID Pandemic:** In wake the of the growing COVID-19 crisis and the strain on healthcare resources, District Mineral Foundation (DMF) funds should be used by state governments to augment healthcare as directed by Finance Ministry.
- **Ensuring Decentralization:** In an overly centralized structure, communities can neither plan nor authorize tasks, which they believe the DMF should undertake. Hence, steps must be taken towards ensuring decentralization of authority by promoting community participation.
- **Involving Gram Sabha:** The DMF decision making body should be inclusive with representation from mining-affected people. For Scheduled areas it must be ensured that at least 50 per cent of the Gram Sabha members represented in the governing council shall be Scheduled Tribes.
- **Use of technology:** Both directly and indirectly mining-affected areas should be delineated on a priority basis. For this purpose, the support of the State Space Application Centre or similar institutions/expert agencies may be sought.
- **Allocation:** It must be ensured that at least 60 per cent of DMF allocations/sanctions are for the 'high priority' issues as stipulated in the state DMF rules, as well as for the 'directly-affected' areas.
- **Grievance Redressal:** Each DMF Trust must also have in place a strong grievance redressal mechanism.
- **A dedicated DMF office** for planning and co-ordination must be set-up in every mining district. The PMKKKY guideline already says that 5 per cent of the DMF funds can be used for such expense.
- **Annual reports** should be prepared by each DMF Trust and laid before the State Legislative Assembly.

 <p>SMART QUIZ</p>	<p>You can scan this QR code to practice the Smart Quiz of Economics at our open test online platform for testing your understanding and recalling of the concepts.</p>	
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फाउंडेशन कोर्स सामान्य अध्ययन

प्रारंभिक एवं मुख्य परीक्षा 2022

इनोवेटिव क्लासरूम प्रोग्राम

- प्रारंभिक परीक्षा, मुख्य परीक्षा और निबंध के लिए महत्वपूर्ण सभी टॉपिक को विस्तृत कवरेज
- मौलिक अवधारणाओं की समझ के विकास एवं विश्लेषणात्मक क्षमता निर्माण पर विशेष ध्यान
- एनीमेशन, पॉवर प्वाइंट, वीडियो जैसी तकनीकी सुविधाओं का प्रयोग
- अंतर - विषयक समझ विकसित करने का प्रयास
- योजनाबद्ध तैयारी हेतु करेंट ओरिएंटेड अप्रोच
- नियमित क्लास टेस्ट एवं व्यक्तिगत मूल्यांकन

- सीसेट कक्षाएं
- PT 365 कक्षाएं
- MAINS 365 कक्षाएं
- PT टेस्ट सीरीज
- मुख्य परीक्षा टेस्ट सीरीज
- निबंध टेस्ट सीरीज
- सीसेट टेस्ट सीरीज
- निबंध लेखन - शैली की कक्षाएं
- करेंट अफेयर्स मैगजीन

कक्षाएं ऑनलाइन आयोजित की जाएंगी। ऑफलाइन कक्षाएं सरकारी नियमों और छात्रों की सुरक्षा के अधीन उपलब्ध होंगी।

DELHI: 15 July | 5 PM | 23 March | 1:30 PM

JAIPUR: 28 June | 4 PM

लाइव/ऑनलाइन कक्षाएं भी उपलब्ध

4. SECURITY

4.1. CYBER SURVEILLANCE

Why in news?

Recent controversy regarding **Pegasus spyware** has fuelled the debate related to cyber surveillance in India.

What is cyber surveillance and its laws in India?

- Surveillance means **close observation of a person or groups** especially the one **who are under suspicion** or the act or the condition of being observed.
- Cyber-surveillance is when a person uses **“smart” or “connected” devices that communicate through a data network to monitor people or places**. This type of connected technology has also been called the **“Internet of Things” (IoT)**. Devices used for cyber-surveillance are generally connected to each other and to a device or app that can control them.
- **Communication surveillance in India** takes place primarily **under two laws**:
 - **The Indian Telegraph Act, 1885: Section 5** of the act had given power to central or state government to **intercept any message/calls in two circumstances, if it is**:
 - ✓ Against **public safety or public emergency**.
 - ✓ Necessary in the **interests of the sovereignty and integrity of India; the security of the State; friendly relations with foreign states or public order**; for **preventing incitement** to the commission of an offense.
 - ✓ Same restrictions are also imposed on free speech under Article 19(2) of the Constitution.
 - **Information Technology (IT) Act, 2000**: It was enacted to provide legal recognition for electronic communication, electronic commerce and cybercrimes etc.
 - ✓ **Section 69 of the IT Act and the IT (Procedure for Safeguards for Interception, Monitoring and Decryption of Information) Rules, 2009** were enacted to deal with **surveillance of all electronic communication**.
 - ✓ IT Act covers the civil and criminal offences of **data theft and hacking**.
 - **Indian Telegraph rules: Rule 419A** in the Telegraph Rules in 2007 **identifies the officers** who can order surveillance of messages.
 - ✓ A **secretary to the Government of India** in the Ministry of Home Affairs can pass orders of interception in the case of Centre.
 - ✓ A **secretary-level officer** who is in charge of the home department can issue directives in case of state government.
 - ✓ In unavoidable circumstances, such orders may be made by an officer, **not below the rank of a Joint Secretary to the Government of India**, who has been duly authorised by the Union Home Secretary or the state Home Secretary.

Decoding Pegasus

Pegasus is a spyware, developed and licensed by an Israeli company, NSO Group. It can be used to infiltrate smartphones that run on both iOS and Android operating systems, and turn them into surveillance devices. A low down:

- Pegasus's method of attack is called zero-click attacks, which do not require any action by the user. The spyware can hack a device simply by giving a **missed WhatsApp call**
- It will **alter call logs** so that the user has no knowledge of what happened
- It can also be **installed manually** on a device or over a wireless transceiver
- If it fails to connect with its command-and-control server for more than 60 days, it **self-destructs and removes all traces**
- If it detects that it was installed on the wrong device or SIM card, it will **self-destruct**
- Amnesty International noted that despite issuing security updates, Android and iOS devices were **breached**

■ **Once the spyware enters the device, it installs a module to track call logs, read messages, emails, calendars, Internet history, and gather location data to send the information to the attacker**



■ To stay safe, users need to ensure that software in devices is updated and all apps are installed directly through the official stores. **No suspicious email or text should be clicked**



Concerns associated with Cyber- Surveillance

- **Threat to press freedom:** The **personal safety of journalists and their sources** especially those whose work criticises the government is jeopardised. Therefore, lack of privacy creates an aura of distrust around these journalists and effectively buries their credibility.
 - **World Press Freedom Index** produced by 'Reporters without Borders' has **ranked India 142 out of 180 countries** in 2021.
- **Right to privacy and free speech:** Surveillance system **impacts the right to privacy and the exercise of freedom of speech** and personal liberty under **Articles 19 and 21** of the constitution, respectively.
 - The perceived danger founded on reasonable suspicion **impacts citizens' ability to express, receive and discuss unorthodox, controversial or provocative ideas.**
- **Absence of oversight:** Due to lack of parliamentary or judicial oversight, electronic surveillance **gives power to executive to influence the subject of surveillance and individuals**, resulting in a chilling effect on free speech.
 - As executive exercise disproportionate amount of power, surveillance encourages **spread of authoritarianism.**
- **Violates due process of law:** When surveillance are carried out by the executive, it **curtails Articles 32 and 226 of the constitution** (empowering the Supreme Court and High Courts, respectively, to issue certain writs) as it happens in secret. Thus, the affected person is unable to show a breach of their rights.
 - This **violates not only the ideals of due process and the separation of powers** but also goes against the requirement of procedural safeguards as mandated in *K.S. Puttaswamy (Retd) v. Union of India (2017)*.
- **Threat to National security: Increasing Cyber-terrorism and cyber-crimes** penetration motivated the attack against information, computer systems and programs and data which **results in violence against non-combatant targets by sub-national groups** or secret agents.

State backed surveillance vs. Right to privacy

- The Supreme Court (SC) of India pronounced its judgment in the case of **People's Union for Civil Liberties (PUCL) vs Union of India (1997)**, which laid the groundwork for the right to privacy in the context of telephonic surveillance (i.e. wiretaps) and constitutional freedom.
- The SC in a landmark decision in **KS Puttaswamy versus Union of India (2017)** unanimously **upheld right to privacy as a fundamental right** under Articles 14, 19 and 21 of the Constitution.
 - Telephone tapings and internet hacking by State, of personal data falls within the realm of privacy.
- Privacy judgment lays down **four-fold test that needs to be fulfilled** before state intervention in the right to privacy:
 - State action must be sanctioned by law
 - In a democratic society, there must be a legitimate aim for action
 - Action must be proportionate to the need for such interference
 - It must be subject to procedural guarantees against abuse of the power to interfere
- Bombay High Court in **Vinit Kumar vs Central Bureau of Investigations and Ors (2019)**, outlined the ambit of state's power to surveil its subjects particularly on matters that do not fall within the category of 'public emergency' or 'in the interest of public safety'.

Way forward

- **Role of Judiciary:** In order to satisfy the ideal of "due process of law", to maintain an effective separation of powers and to fulfill the requirements of procedural safeguards and natural justice, there **needs to be oversight from another branch of the government.**
 - Only the judiciary can be competent to decide whether specific instances of surveillance are proportionate, whether less onerous alternatives are available, and to **balance the necessity of the government's objectives with the rights of the impacted individuals.**
- **Awareness:** There has to be an educational framework to teach people how to identify and avoid incidents that might lead to personal and corporate data being compromised.
- **Decentralised system:** Tracking systems have to be made decentralised and open-source, and should be designed in such a way that data is shared without any privacy breach.
- **Dedicated cyber security law:** India needs to come up with **more effective legal frameworks and stringent provisions to fight cybercrime**, to protect India, its cyber security, cyber sovereign interests.
 - As per Cyber Security Summit organised by the Confederation of Indian Industry (CII), **India needs to move on from IT security to cyber security.**
- **Use of Artificial intelligence (AI):** For preventing and accurately identifying cyber-attacks, real-time threat intelligence and AI is required.

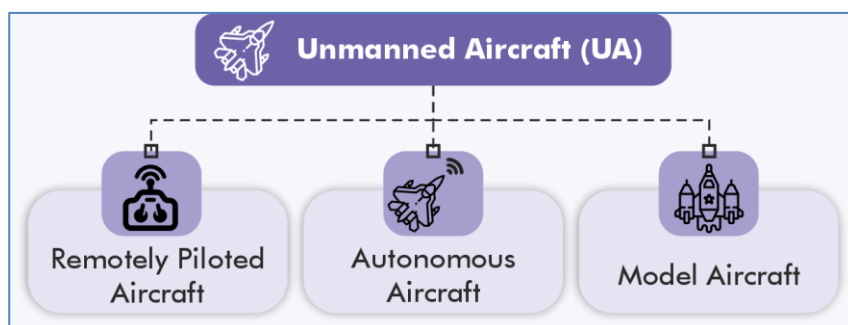
4.2. DRONE REGULATIONS IN INDIA

Why in News?

Ministry of Civil Aviation (MoCA) has released the updated – The Drone Rules, 2021 for public consultation.

About Drones

- Drone is a layman terminology for Unmanned Aircraft (UA), an aircraft, **which is intended to operate with no pilot on board.**
- An aircraft and its associated elements, which are operated with no pilot on board is called as Unmanned Aircraft System (UAS).



Application Of Drones In Each Sector			
Agriculture <ul style="list-style-type: none"> • Crop health monitoring • Soil health assessment • Improved resource utilisation 	Forest and wildlife <ul style="list-style-type: none"> • Wildlife conservation • Managing human wildlife conflict • Forest protection 	Urban Development <ul style="list-style-type: none"> • City survey • Improved urban planning • Project monitoring • Project quality assessment 	Healthcare <ul style="list-style-type: none"> • Epidemic control • Cleanliness & hygiene • Healthcare delivery
Traffic Management <ul style="list-style-type: none"> • Road surface condition monitoring • Improve traffic management • Traffic feedback 	Homeland Security <ul style="list-style-type: none"> • Real time surveillance • Security Planning • Drugs/Narcotics Detection 	Disaster Management <ul style="list-style-type: none"> • Real time surveillance • Search and rescue • Delivery of essential goods 	Mining <ul style="list-style-type: none"> • Mineral scouting • Managing encroachment • Contract monitoring

Need of Drone regulations

- **Policy Gaps:** While the DGCA has taken the first step of framing draft guidelines for the use of UAVs, there remain several gaps that must be addressed, keeping in mind the need for balance between security concerns and legitimate uses of drones in a variety of civilian sectors.
- **Quality Control:** As a sizable percentage of India's drones continue to be imported, there is a need to ensure their quality control and standardisation.
- **The Privacy Question:** Drones can collect data and images without drawing attention, leading many citizens to fear for their right to privacy. This can also occur if government entities were to use drones to monitor the public.
- **Terrorist Threat Management:** With rapid advances in the variety of functions that a drone can undertake, there have been several instances of known terrorist organisations using them to carry

out their activities. This will ensure that they do not have to resort to banning drones to deal with their potential security threats.

- **Air Traffic Management:** Drones present a new dimension in the management of air traffic as they are neither as easy to track as conventional aircraft nor as easy to communicate with.

Draft Drone Rules, 2021

- Drone Rules, 2021 will replace the **Unmanned Aircraft Systems (UAS) Rules 2021** (released on 12 March 2021).
- Objective is to **enable more types of unmanned aircraft operational scenarios, increase the ease of compliance for the unmanned aviation industry, and ensure safety and security.**

Drones and Security Concern

- Security agencies in India have for some time been **anticipating the possible use of drones to target sensitive locations.**
 - A couple of years ago drones were used to drop weapons and drugs along the Punjab border.
- **Drones are becoming security threats as**
 - **Conventional radar systems are not meant for detecting low flying objects.** Besides the low altitude, what also makes it difficult to trace and intercept drones is their slow speed.
 - **Technology is easily accessible to terrorist groups** and it also provides them the capability of air strikes.
 - Drones are **relatively cheaper, compact and smaller in comparison to conventional weapons** and yet can achieve far more destructive results. There is a possible threat of them being used deliver weapons of mass destruction.
 - They **can be controlled from a remote distance** and does not endanger any member of the attacking side.
- **How India is planning to tackle the threat**
 - Defence Research and Development Organisation (DRDO) has developed an **'Anti Drone System'** and it will be deployed this year.
 - **Indian Air Force has decided to procure Counter Unarmed Aircraft System (CUAS)** that can be armed with laser directed energy weapons to bring down rogue drones.

Key provisions

Rules will apply to	<ul style="list-style-type: none"> • A person owning or possessing or engaged in exporting, importing, manufacturing, trading, leasing, operating, transferring, or maintaining a drone in India. • All drones that are being operated for the time being, in or over India. • These shall not apply to drones used by the naval, military or air force. 												
Eligibility conditions for authorization	<ul style="list-style-type: none"> • Following natural persons shall be eligible for a remote pilot license: <ul style="list-style-type: none"> ○ Not less than eighteen years of age and not more than sixty-five years of age. ○ Have passed class tenth or its equivalent examination from a recognised Board. ○ Have completed the training prescribed by the Director General for the applicable class of remote pilot licence from an authorised remote pilot training organisation. • No licence shall be required for a person operating <ul style="list-style-type: none"> ○ A nano drone. ○ A micro drone for non-commercial purposes ○ For research and development (R&D) organizations operating such drones. 												
Classification of drones	<ul style="list-style-type: none"> • Will be based upon the maximum all-up weight including payload: <table border="1" style="margin-left: 20px;"> <thead> <tr> <th colspan="2">Classification of UAS</th> </tr> </thead> <tbody> <tr> <td>Nano</td> <td><= 250g.</td> </tr> <tr> <td>Micro</td> <td>250g - 2kg</td> </tr> <tr> <td>Small</td> <td>2 kg - 25 kg</td> </tr> <tr> <td>Medium</td> <td>25 kg - 150 kg</td> </tr> <tr> <td>Large</td> <td>>150 kg</td> </tr> </tbody> </table> 	Classification of UAS		Nano	<= 250g.	Micro	250g - 2kg	Small	2 kg - 25 kg	Medium	25 kg - 150 kg	Large	>150 kg
Classification of UAS													
Nano	<= 250g.												
Micro	250g - 2kg												
Small	2 kg - 25 kg												
Medium	25 kg - 150 kg												
Large	>150 kg												
Drone Registration	<ul style="list-style-type: none"> • Drone operators will have to generate a unique identification number of a drone by providing requisite details on the digital sky platform (DSP). <ul style="list-style-type: none"> ○ DSP is an initiative by MoCA to provide a secure and a scalable platform that supports drone technology frameworks, such as NPNT (no permission, no take-off), designed to enable flight permission digitally and managing unmanned aircraft operations and traffic efficiently. 												
Drone Operations	<ul style="list-style-type: none"> • Central Government may publish on DSP, an airspace map for drone operations segregating the entire airspace of India into red, yellow, and green zones. 												

	Green Zone	Yellow Zone	Red Zone
	<ul style="list-style-type: none"> • Airspace from the ground up to a vertical distance of 400 feet (120 metre) above ground level (AGL) that has not been designated as a red zone or yellow zone in the airspace map. • Airspace from the ground up to a vertical distance of 200 feet (60 metre) AGL in the area located between a lateral distance of 8 kilometre and 12 kilometre from the perimeter of an operational airport. 	<ul style="list-style-type: none"> • Controlled airspace of defined dimensions above the land areas or territorial waters of India within which drone operations are restricted and shall require permission from the concerned air traffic control authority. 	<ul style="list-style-type: none"> • Airspace of defined dimensions, above the land areas or territorial waters of India, or any installation or notified port limits specified by the Central Government beyond the territorial waters of India; within which drone operations shall be permitted only under exceptional circumstances by the Central Government;
	<ul style="list-style-type: none"> • No person shall operate a drone in a red zone or yellow zone without prior permission. • In the airspace above 400 feet AGL in a designated green zone and the airspace above 200 feet AGL in the area located between the lateral distance of 8 kilometre and 12 kilometre from the perimeter of an operational airport, the provisions of yellow zone shall apply; • State Government, UT or law enforcement agency may declare a temporary red zone for a period not exceeding 48 hours at a time. <ul style="list-style-type: none"> ○ Declaration shall be done by an officer not below the rank of Superintendent of Police or its equivalent. 		
Drone operations for research and development (R&D)	<ul style="list-style-type: none"> • Following persons shall not require a certificate of airworthiness, unique identification number, prior permission, and remote pilot licence for operating drones: <ul style="list-style-type: none"> ○ R&D entities and Educational institutions under the administrative control of, or recognised by Central Government, State Governments or UT. ○ Startups recognised by Department for Promotion of Industry and Internal Trade. ○ Any drone manufacturer having a Goods and Service Tax Identification Number. • But such drone operations must take place within a green zone and within the premises of the person where such R&D is being carried out; or within an open area in a green zone under such person's control. 		
Other key highlights	<ul style="list-style-type: none"> • In case of a drone with maximum all-up-weight more than 500 kilogram, the provisions of the Aircraft Rules, 1937 shall apply. • Import of drones and drone components shall be regulated by the Directorate General of Foreign Trade. • No security clearance required before any registration or licence issuance. • Approvals abolished: unique authorisation number, unique prototype identification number, certificate of conformance, certificate of maintenance, import clearance, acceptance of existing drones, operator permit, authorisation of R&D organisation, student remote pilot licence, remote pilot instructor authorisation, drone port authorisation etc. • Safety features like 'No permission – no take-off' (NPNT), real-time tracking beacon, geo-fencing etc. to be notified in future. • Digital sky platform shall be developed as a business-friendly single-window online system. • Issuance of Certificate of Airworthiness delegated to Quality Council of India and certification entities authorised by it. 		

Way forward

- **An international process to define the limits of what is acceptable with respect to the possession and use of drones** by states is urgently needed.
 - EU has also urged the promotion of an **UN-based legal framework which strictly stipulates that the use of armed drones has to respect international humanitarian and human rights law.**
- **Regulation.** Despite some initial progress in defining regulations for drones, government should come up with laws that enable innovation, but restrict infringements on privacy and misuses of airspace.
- **Rectify classification of UAS under the UAS Rules** which is weight-based classification rather than performance based.

Anti drone technologies that can be used against rouge drones



Radio Jammer

It is a static, mobile, or handheld device that uses a combination of radar and cameras to detect and jam drones in the sky by transmitting radio frequencies



GPS spoofing

This countermeasure involves sending a new signal to the drone, replacing the communication with GPS satellites it uses for navigation.



Electromagnetic Pulse

It will interfere with radio links when fired and disrupt or even destroy the electronic circuits in drones.



Net Guns

Net Cannon fired from the ground can be hand-held, shoulder-launched, or turret-mounted and is used to capture drones effectively between a range of 20m to 300m.



High energy lasers

These are high-powered counter-Unmanned Aerial Systems that shoot an extremely focused beam of light, or laser beam that melts and disrupts a drone's electronics.



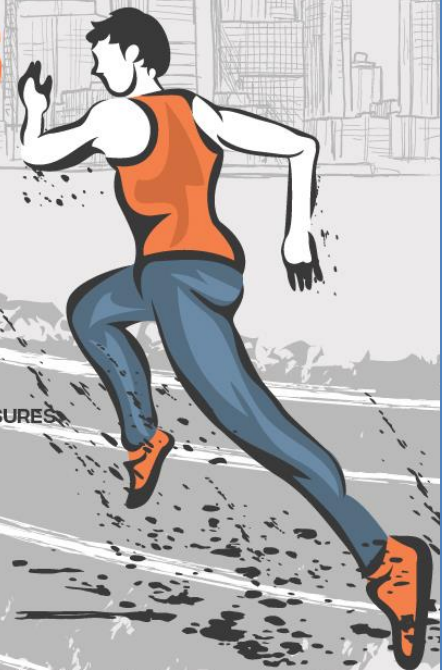
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5. ENVIRONMENT

5.1. CLIMATE FINANCE

Why in News?

The report titled ‘The State of Cities Climate Finance’ was recently released by the Cities Climate Finance Leadership Alliance and the World Bank.

Key Highlights of the report

- An average of \$384 billion was invested in urban climate finance annually in 2017-2018.
- Urban climate finance flows are heavily concentrated in OECD countries and China.
- Vastly insufficient amounts of urban climate finance were invested in many developing economy regions, including South Asia and sub-Saharan Africa.
- Finance for adaptation projects amounted to \$7 billion in 2017-2018, representing 9 per cent of investments tracked at the project level, against the 91 per cent (\$69 billion) for mitigation and dual uses.

Cities Climate Finance Leadership Alliance

- It is a coalition of leaders committed to deploying finance for city level climate action at scale by 2030.
- It is the only multi-level and multi-stakeholder coalition aimed at closing the investment gap for urban subnational climate projects and infrastructure worldwide.



What is Climate Finance?

- Climate finance refers to **local, national or transnational financing**—drawn from public, private and alternative sources of financing—that seeks to support mitigation (reducing GHG emissions) and adaptation (adapting to the adverse effects and reduce the impacts of a changing climate) actions that will address climate change.
- Climate financing will essentially help the world to reach the target of limiting global warming to an increase of 1.5°C above pre-industrial level.
- The **United Nations Framework Convention on Climate Change (UNFCCC)**, the **Kyoto Protocol** and the **Paris Agreement** call for financial assistance from Parties with more financial resources to those that are less endowed and more vulnerable.

Financial mechanisms established UNFCCC and related Agreements	
Global Environment Facility (GEF)	<ul style="list-style-type: none"> • It has served as an operating entity of the financial mechanism since the Convention’s entry into force in 1994. It manages two funds- <ul style="list-style-type: none"> ○ Special Climate Change Fund (SCCF), established in 2001, to finance projects relating to: adaptation; technology transfer and capacity building; energy, transport, industry, agriculture, forestry and waste management; and economic diversification. ○ Least Developed Countries Fund (LDCF), established to support a work programme to assist Least Developed Country Parties (LDCs) carry out the preparation and implementation of national adaptation programmes of action (NAPAs).
Adaptation Fund (AF)	<ul style="list-style-type: none"> • It was established in 2001 to finance concrete adaptation projects and programmes in developing country Parties to the Kyoto Protocol that are particularly vulnerable to the adverse effects of climate change.
Green Climate Fund (GCF)	It was established in COP 16, in 2010 and developed countries had pledged to mobilise US\$ 100 billion per year by 2020 through this fund to support developing countries raise and realize their Nationally Determined Contributions (NDC) ambitions towards low-emissions, climate-resilient pathways.
Other Funds and instruments of financing	
UN-backed international climate funds	<ul style="list-style-type: none"> • Clean Technology Fund (CTF): It aims at empowering transformation in developing countries by providing resources to scale up low carbon technologies. • Climate Investment Funds (CIFs): It aims to accelerate climate action by empowering transformations in clean technology, energy access, climate resilience, and sustainable forests in developing and middle-income countries. • UN- Reducing emissions from deforestation and forest degradation (REDD): It aims to protect forests, a pre-eminent nature-based solution to the climate emergency. • Net Zero Asset Owner Alliance: It has 29 members, including pension funds, insurance companies, and sovereign wealth funds, and is working on substantial methodologies to align portfolios with net zero Paris targets.

Other international funds	<ul style="list-style-type: none"> • Climate Change Fund of Asian Development Bank (ADB): It was established in 2008 to facilitate greater investments in developing member countries (DMCs) to effectively address the causes and consequences of climate change, by strengthening support to low-carbon and climate-resilient development. • Forest Carbon Partnership Facility (FCPF): It is a global partnership of governments, businesses, civil society, and Indigenous Peoples focused on reducing emissions from deforestation and forest degradation, forest carbon stock conservation, the sustainable management of forests, and the enhancement of forest carbon stocks in developing countries, activities commonly referred to as REDD+.
Other National and local Sources of raising finances	<ul style="list-style-type: none"> • Allocations from National Governments: For example, National Adaptation Fund for Climate Change (NAFCC) is a Central Sector Scheme which was set up in the year 2015-16 to support concrete adaptation activities which mitigate the adverse effects of climate change. • Carbon pricing instruments: These include a carbon market approach (where an Emissions Trading Scheme is established, and carbon credits are bought and sold based on a market price per tCO₂e); Carbon emissions tax approach (that can also be in the form of a fossil fuel tax or removal of fossil fuel subsidies) etc.

Need of Climate Finance

Reduce emissions and Transition toward low-carbon economies 	Adapt to the impacts of climate change 
<p style="text-align: center;">Investments needed in-</p> <ul style="list-style-type: none"> ■ Renewable energy generation ■ Green buildings ■ Energy efficient transportation such as electric drive technologies ■ Decarbonisation of Industries ■ Alternative fuel technologies like biofuels and green hydrogen ■ Restoration of land and forests ■ Carbon capture and sequestration technologies etc. 	<p style="text-align: center;">Investments needed in-</p> <ul style="list-style-type: none"> ■ Climate resilient infrastructure such as storm water drains, flood defenses etc. ■ Developing resilient crop varieties ■ Recover from Loss and damage due to extreme weather events ■ Addressing needs of Small Island Developing States (SIDS) ■ Climate Smart agriculture ■ Rehabilitation of vulnerable populations etc.

Challenges in mobilizing climate finance

- **Insufficient in amount:** While climate finance in 2017 and 2018 crossed the USD half-trillion mark, IPCC report estimated that the investment required to remain within the 1.5°C to 2°C scenario should be between \$1.6 to \$3.8 trillion per year.
- **Stress added by COVID-19 pandemic:** The disruptions caused by the pandemic such as need for more emergency services coupled with a reduction in tax revenue have led to diversion of funding away from climate resilience projects and renewable energy.
- **Underfunding of adaptation:** The Climate Policy Initiative noted in its 2019 Climate Finance Landscape report that the vast majority of the finance that is tracked continues to flow toward activities for mitigation.
- **Lack of 'investment ready' low-carbon/ climate-resilient projects:** There are few visible 'investment ready' projects and most projects require further assessment regarding scale of returns in terms of their contribution in climate mitigation or adaptation.
- **Gaps in present global knowledge about climate finance:** These include issues such as-
 - Lack of common definitions for central concepts related to climate finance or financial accounting rules.
 - Limited awareness by national policymakers on the financing mechanisms that exist.
 - **A scarcity of demonstrable, tested models on climate finance delivery.**
 - **Low 'bankability' of some climate action projects** due to lack of sufficient data about future returns and risks on investment.
- **Lack of adequate finance for least developed countries (LDCs) and small island developing states (SIDS):** Launched during the **COP 19** in 2013, the **Warsaw International Mechanism (WIM)** intended that developed countries provide developing countries (including SIDS and LDCs) with finance, technology and capacity-

building to help victims of climate change recover after extreme weather events or slower-onset climate disasters such as sea-level rise. However, no considerable progress has been made to solidify financial commitments of developed nations.

- **Obstacles to expeditious access by developing countries to international climate finance:** For instance, about 85% of green finance in India came from domestic sources, with private players such as commercial banks and corporations accounting for two-thirds of this. This can be attributed to issues such as lack of efficient delivery channels, low awareness, etc.

Way forward

- **Governments should introduce carbon-pricing mechanisms, climate data systems, and criteria for assessing capital investments** in green projects to help prioritize climate-smart investment options.
- **Enhance capital investment planning of Local Governments** by integrating carbon pricing and other climate-smart metrics into decision making.
- **Multilateral development banks (MDBs) and development finance institutions (DFIs)** need to take urgent measures to align their portfolios with the Paris Agreement.
- **Incentive structures and mechanisms**, such as tax rebates, are required to promote private sector investment in mitigation and adaptation activities in developing countries.
- **Standardizing definitions of climate finance:** Development finance institutions can promote best practices to track and report climate finance at the project level by developing harmonized definitions, taxonomies, and methods.
- **Balancing investments in Climate adaptation and mitigation**, based on studies assessing their impacts and returns on investment, to holistically address the issue of climate change.
- **Developing additional funding mechanisms to compensate for loss and damage:** GCF already supports activities that can be defined as relating to “loss and damage”. Its efforts can be facilitated by establishing other funds that can pool private and public investments from developed nations and global insurance mechanisms to compensate for loss and damage.

Conclusion

The Indian ministry of environment, forests and climate change estimates the country will require ₹162.5 trillion (USD 2.5 trillion) from 2015 to 2030, or roughly ₹11 trillion per year, for effective climate action. Hence, it is essential to scale up efforts at international, national and local levels to mobilize and effectively utilise climate finance to deal with ongoing and upcoming effects of climate change.

5.2. AIR POLLUTION IN DELHI AND NCR

Why in news

The Commission for Air Quality Management in the National Capital Region and Adjoining Areas Bill, 2021, was recently passed by both Houses of the Parliament. It replaces the Ordinance that was promulgated in April 2021.

Key highlights of the Bill

- **Functions of the commission:** To have better co-ordination, research, identification, and resolution of problems related to air quality in the National Capital Region (NCR) and adjoining areas (**Haryana, Punjab, Rajasthan, and Uttar Pradesh, adjoining the National Capital Territory of Delhi and NCR**).
- **Composition:** The Commission will consist of a Chairperson, an officer of the rank of a Joint Secretary as the member-secretary and Chief Coordinating Officer, a full time member and 3 independent technical members, 3 members from NGOs among others.
- **Powers of the Commission:** The Commission will be the **sole authority** with jurisdiction over matters defined in the Bill (such as air quality management). **In case of conflicts, directions of the Commission will prevail** over the orders of the respective state governments, the Central Pollution Control Board (CPCB), state PCBs, and state-level statutory bodies. Powers of the Commission include:

Rationale for a New Commission

- Currently, there is a lack of a permanent, dedicated and participative mechanism adopting a collaborative and participatory approach involving relevant central ministries, state governments, local bodies and other stakeholders to tackle air pollution in the National Capital Region (NCR) and adjoining areas.
- To reach a permanent solution and to establish a self-regulated, democratically-monitored mechanism for tackling air pollution in NCR.

- Restricting activities influencing air quality,
- Investigating and conducting research related to environmental pollution impacting air quality,
- Preparing codes and guidelines to prevent and control air pollution,
- Issuing directions on matters including inspections, or regulation which will be binding on the concerned person or authority.

- **Penalties:** Contravention of provisions of the Bill, or orders and directions of the Commission will be punishable with imprisonment of up to **five years, or fine of up to one crore rupees, or both.**

- The Bill excludes farmers from the scope of these penalties. However, the Commission may collect an environmental compensation from farmers causing pollution by stubble burning.

- **Appeals** against the Commission's orders will **lie with the National Green Tribunal (NGT).**

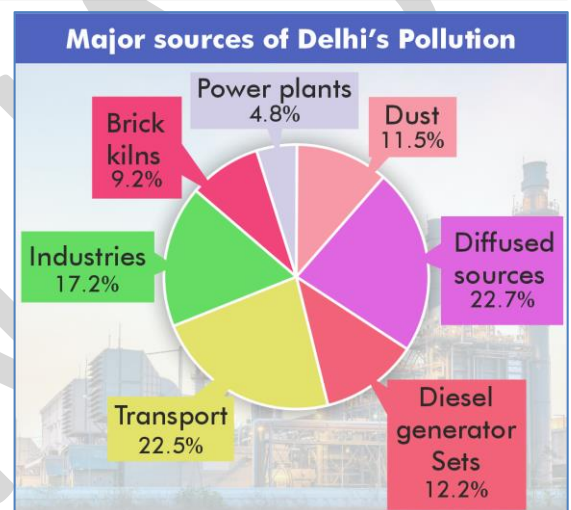
- **Selection Committee for full-time members:** The Committee will be headed by the Minister in charge of the Ministry of Environment, Forest, and Climate Change.

Factors abetting air pollution in Delhi and NCR

- **Industrial Pollution:** CPCB data shows that the national capital is home to and surrounded by highly pollutive industrial clusters that do not meet limits on air, water, or soil emissions.
 - For example, the Supreme Court in 2017 banned the use of cheaper alternatives in the NCR, including petroleum coke and furnace oil. However, these same fuels continue to be used in neighboring states.
- **Vehicular emission:** The CPCB and the National Environmental Engineering Research Institute (NEERI) have declared vehicular emission as a major contributor to Delhi's increasing air pollution.
- **Inadequate public infrastructure:** In India, investment in public transport and infrastructure is low which leads to congested roads, and hence air pollution.
- **Large scale construction:** Construction in Delhi-NCR is another reason that is increasing dust and pollution in the air. Considering the dipping air quality, a number of construction sites have stalled work, as directed by the Delhi Government.
- **Other reasons:** Over-population in the capital, garbage dumps are also increasing air pollution and building-up smog in the air.
- **Reasons for rise in pollution in winter**
 - **Dip in temperatures:** As temperature dips, the inversion height — which is the layer beyond which pollutants cannot disperse into the upper layer of the atmosphere — is lowered. The concentration of pollutants in the air increases when this happens.
 - **Dip in wind speed:** High-speed winds are very effective at dispersing pollutants, but winters bring a dip in wind speed over all as compared to in summers. As a result of this dust particles and pollutants in the air become unable to move. Due to stagnant winds, these pollutants get locked in the air and affect weather conditions, resulting in smog.
 - **Biomass burning in neighbouring states:** Delhi is landlocked between its adjoining areas and Stubble burning in these states especially in Punjab and Haryana, is considered a major cause for environment pollution. A 2015 source-apportionment study on Delhi's air pollution conducted by IIT-Kanpur also states that 17-26% of all particulate matter in Delhi in winters is because of biomass burning.
 - **Combustion caused by Fire crackers:** It may not be the top reason for the smog, but it definitely contributes to its build up.

Severity of India's air pollution

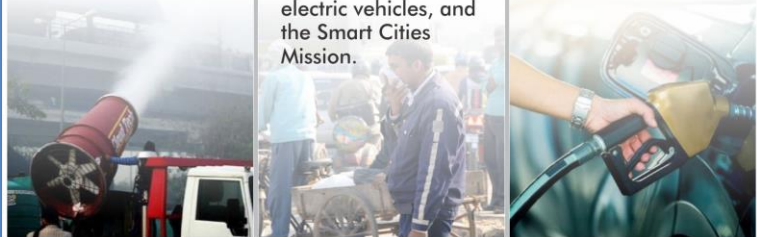
- According to the World Air Quality Report, 2020, prepared by Swiss organisation, IQAir:
 - **India** continues to feature prominently at the top of the most polluted cities ranking, with **22 of the top 30 most polluted cities globally.**
 - Besides Delhi, the 21 other Indian cities among the 30 most polluted cities in the world are Ghaziabad, Bulandshahar, Bishakh Jalalpur, Noida, Greater Noida, Kanpur, Lucknow, etc.
 - **Major sources of India's air pollution:** Transportation, biomass burning for cooking, electricity generation, industry, construction, waste burning, and episodic agricultural burning.



Way ahead

- **Filling the Policy Gaps:** Speeding up the transition to clean energy and clean transport. Also, it is pertinent that governments **prioritize sustainable and clean energy sources**, as well as the cities, need to encourage low cost, active, and carbon-neutral mobility choices such as walking, cycling, and accessible public transport.
- **Capacity Building:** More awareness needs to be created among policymakers and the general public about the slow but substantial impact of ambient particulate matter and household air pollution.
- **Viable public transport system strategy.** While the Metro has provided massive relief to Delhi's commuters, it is not viable for all economic classes. Therefore, Delhi needs a more active bus service. Also, electric mobility of public transport is a definitive way towards cleaner air, without compromising functionality.
- **Financing and Role of Private sector:** An investment fund with a dedicated green focus could play an instrumental role in catalyzing growth of green industries and simultaneously addressing the twin problems of air pollution and climate change.
 - **A Green Superfund:** The Triple Bottomline framework, with an emphasis on profit, people and the planet, will be at the heart of the Superfund's performance management strategy.
- **Academia-Urban Planning Linkage:** The academic community can be tapped to find innovative solutions.
 - For example, researchers from Banaras Hindu University (BHU) have determined which trees are hardy enough to put up with the assault of particulate matter gaseous pollutants (nitrous oxide, sulphur dioxide, ozone) in the city's urban pockets. This knowledge can be used by urban planners in managing urban forests.
- **Community as a Stakeholder:** It is also crucial to have the **representation of vulnerable communities particularly women and tribal communities** in decision-making bodies to ensure that their specific problems are brought to light and noted while making development and industrial plans.

Major Anti-Pollution Policy Measures taken so far for Delhi		
Graded Response Action Plan (GRAP)	National Clean Air Program (NCAP)	Other initiatives
<ul style="list-style-type: none">■ It is a set of curbs triggered in phases as the air quality deteriorates, which is typical of the October-November period. It includes strict measures such as a ban on the entry of heavy vehicles, the odd-even road rationing restrictions, and a halt of construction work, etc.	<ul style="list-style-type: none">■ Launched in 2019, it is a five-year action plan to curb air pollution, build a pan-India air quality monitoring network, and improve citizen awareness. The programme focuses on city-specific action plans.■ It aims to reduce PM2.5 levels by 20-30 percent by 2024 (compared to 2017 levels). The plan aligns with existing policies and programmes, including the National Action Plan on Climate Change, initiatives on electric vehicles, and the Smart Cities Mission.	<ul style="list-style-type: none">■ The introduction of BS VI (cleaner) fuel.■ Push for electric vehicles, under Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME II) scheme.■ Odd-Even as an emergency measure.■ Construction of the Eastern and Western Peripheral Expressways■ SAFAR application, etc.



5.3. NATIONAL DOLPHIN RESEARCH CENTRE (NDRC)

Why in news?

India's and Asia's first National Dolphin Research Centre (NDRC) is coming up in the premises of Patna University, Bihar.

More on news

- The centre is being set up on banks of Ganges, as per recommendation of a steering committee constituted for implementation of **Project Dolphin**.
- As per the committee, **Bihar had a natural advantage** as it accounted for **50% of the world's river dolphin population**.
- It was first time proposed in 2011.

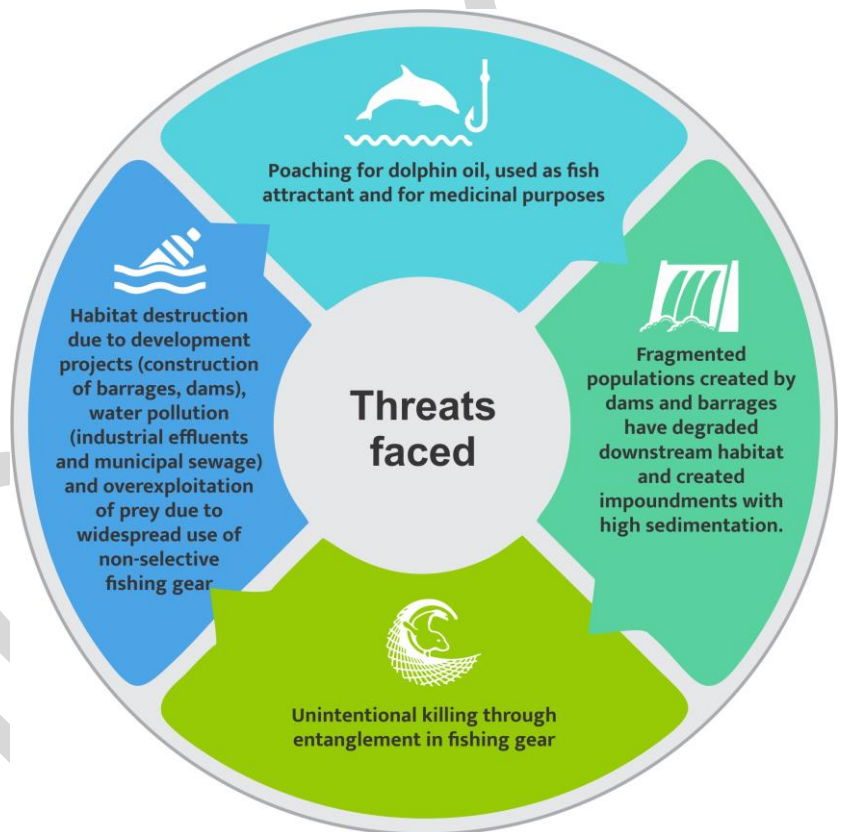
About Gangetic Dolphin

- The Gangetic River dolphin is **India's national aquatic animal** (declared in 2009).

- **Protection status**

List/ Act	Categorisation
Wild Life (Protection) Act, 1972	Schedule I
CITES	Appendix I
IUCN Red list	Endangered

- The species is a **reliable indicator** of the **health of the entire river ecosystem**.
- It is **one of four freshwater dolphin species in the world**. The other three are:
 - 'Baiji' in Yangtze River in China (Functionally extinct since 2006)
 - 'Boto' in Amazon River
 - 'Bhulan' in Indus River in Pakistan
- The **Gangetic Dolphin is endemic to the Indian sub-continent** and has a fairly extensive distribution range. It is found in the **Ganga -Brahmaputra - Meghna** and **Karnaphuli-Sangu river systems** of **India** and **Bangladesh**, while a few individuals survive in the **Karnali, and the Sapta Kosi Rivers** in **Nepal**.
- It is **blind** and **finds its way and prey** in river waters through **echolocation**. They are usually **found in turbulent waters**, where there are **enough fish for them to feed on**.
 - Echolocation is a technique used by bats, dolphins and other animals to **determine the location of objects using reflected sound**.
- They **live in a zone where there is little or no current, helping them save energy**. If they **sense danger**, they can **dive into deep waters**. They swim from the **no-current zone to the edges to hunt for fish** and return.
- Being a **mammal**, the Ganges River dolphin **cannot breathe in water** and **must surface every 30-120 seconds**. Because of the **sound it produces when breathing**, the animal is popularly referred to as **'Souns/Susu/Sushuk/Seho'**.
- Generally, **Females are larger than males** and give birth once every two to three years to only one calf.



Conservation efforts for Gangetic Dolphin

- National Mission for Clean Ganga (NMCG) implemented Ganges River Dolphin Conservation Action Plan 2010-2020.
- **Project Dolphin**
 - Announced in 2020 has been envisaged along lines of 'Project Tiger' to enhance dolphin population.
 - It will be **implemented by Ministry of Environment, Forest and Climate Change**.
 - It involves conservation of dolphins and aquatic habitat through **use of modern technology** especially in **anti-poaching activities**.
 - It will **engage fishermen and other river/ ocean dependent population** and will strive for **improving the livelihood of the local communities**.



SMART QUIZ

You can scan this QR code to practice the Smart Quiz of Environment at our open test online platform for testing your understanding and recalling of the concepts.



6. SOCIAL ISSUES

6.1. INTERNAL MIGRANTS

Why in news?

The Supreme Court of India has delivered its judgment in the ‘migrant labourer’ case.

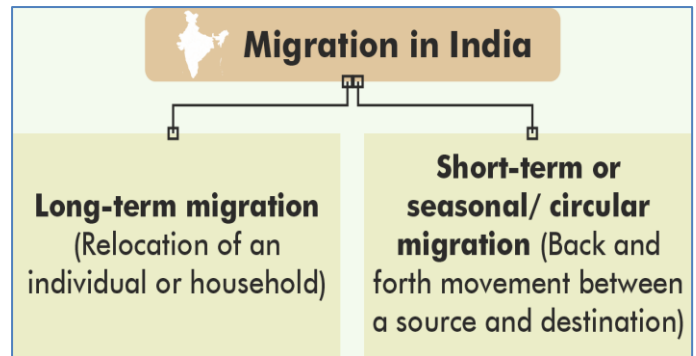
More on news

The apex court took *suo motu* cognisance of the plight of the migrant workers at the height of the exodus last year and continued hearing the case through the second wave and gave following directions-

- All states and Union territories (UT) to implement the ‘One Nation One Ration Card’ scheme for the benefit of migrant workers by July 31, 2021.
- Provide food to non-ration cardholders, increase allocation of subsidised food and allow a migrant to access dry ration from anywhere under National Food Security Act.
- The work on the portal for the National Data Base for Unorganised Workers (NDUW Project) has to be completed by July 31, 2021 and the Central Government and the respective states/UTs must complete the process of registration of the unorganized labourers/migrant workers by December 31, 2021.

Internal Migration in India

- Internal migration is defined as changes of usual residence within countries. Migration in India is primarily of two types (Refer infographic).
- The 2011 Census enumerated 450 million internal migrants based on place of last residence, or 37 percent of the total population and 68 percent of all migrants were females.
 - A person is considered as migrant by place of last residence, if the place in which he is enumerated during the census is other than his place of immediate last residence.
- The Economic Survey (2017) estimated that an average of 5–6 million Indians migrated annually between 2001 and 2011, leading to an inter-state migrant population of “about 60 million” and an inter-district migrant population “as high as 80 million”.
- According to a research paper, India has the lowest rate of internal migration in a sample of 80 countries.
 - Five-year interval inter-state migration rate in India is around 1% whereas it is 10% in the US and nearly 5% in China.

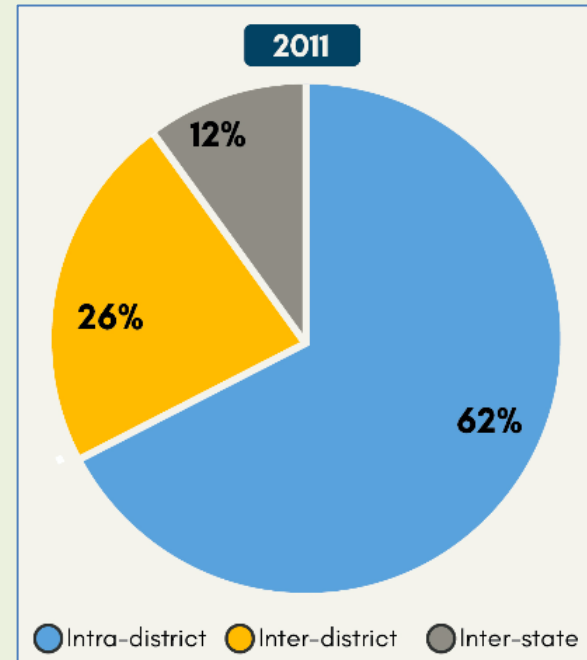


Total Migrants in India

According to the Census of India



Distribution of internal migrants by type of movement



Among major geographical streams, the most prevalent stream of migration is rural to rural, accounting for 62 percent, followed by the rural to urban stream at 20 percent, then the urban to urban at 13 percent, and urban to rural migration at 5 percent.

Places of Origin of majority of migrants (densely populated and less urbanized states)

Uttar Pradesh, Bihar, Rajasthan, Madhya Pradesh, Jharkhand and Chhattisgarh

Places of destination (more industrialized and urbanized states)

Maharashtra, Delhi, Punjab, Gujarat, Tamil Nadu, Karnataka and Kerala.

Issues affecting internal migrants

- **Labour Market: Low wages, high risk jobs and the fear of being replaced** are the main constituents of vulnerability for migrants in the **informal labour market**. It is estimated that **migrant workers comprise nearly 60 per cent of occupationally vulnerable workers** outside agriculture.
- **Lack of Social Security:** Almost all states are **apathetic to the needs of migrants**, which stops the latter from accessing **welfare entitlements**.
 - Even if states make provisions for migrants' access to benefits and support, **no measures are put in place to make migrants aware** of the relevant schemes and policies.
- **Education and Skilling:** The children of migrants constitute one of the most unrecognised and vulnerable groups among internal migrants. This is reflected in the **absence of crèches, early childcare services, and other facilities** at workplaces.
 - Data from the Census of India 2011 states that **57.8% of female and 25.8% of male migrants are illiterate**.
 - About 80% of seasonal migrant children in major **destinations lack access to education** near work sites, and 40% work, experiencing abuse and exploitation.
- **Housing and Sanitation:** Most low-income internal migrants live in **slum accommodations**, often facing difficulties in accessing basic amenities like sanitation and constant **threats of displacement and eviction**.
- **Health:** Factors such as their **patterns of mobility** (regular, circular, seasonal, etc.) and poor **work and living conditions** impact their health conditions.
- **Political Participation:** Interstate migrants **cannot exercise voting right** since voting is determined by one's inclusion in the local constituency's electoral roll. The process of enrolling is time consuming and has **no relevance for seasonal migrants** i.e who are not permanent settlers at destination.
- **Identity and registration:** Migrants often **lack proper personal identification** in the destination states. In addition to the national identification system (Aadhar), India provides for a **system of state identification known as domicile/residency**. This certificate is issued for those **born in a state or for migrants who have resided for a stipulated period** (which varies from state to state) and have applied for a domicile certificate.
- **Little or no upward mobility: Informal social networks** (for example, friends, neighbours, members of the same caste group and co-villagers) help migrants in providing access to the urban job market in the initial stages, but do **not have any positive effect on upward mobility**.

REASONS FOR MIGRATION IN INDIA			
	1991	2001	2011
Work/ Employment	20.4M	29.9M	41.4M
Business	5.3M	2.8M	3.6M
Education	4.5M	3.4M	5.5M
Marriage	130.3M	156.1M	211.2M
Moved with Household	35.6M	43M	66M
Moved After Birth		15.8M	33.9M
Others	36M	63.5M	94.3M

Source: Census India

Additional issues due to COVID-19

- **Mobility crisis:** Pandemic precipitated a severe 'crisis of mobility' because of desperate attempts of migrants to **return home by any means** available which prompted their **clashes** with authorities, police aggression, last-minute policy relief and, eventually, the **arrangement of transport measures**.
- **Rising uncertainty:** Immediate concerns faced by migrant workers are related to food, shelter, loss of wages, concerns about the family, anxiety and fear. **Language and technological barriers** increased uncertainty due to misinformation.
- **Higher risk of infections:** This is due to higher incidence of **poverty, overcrowded housing** conditions, and high concentration in jobs where physical distancing is difficult.
- **Increase in unemployment:** The ILO has estimated that **up to 25 million people might become unemployed worldwide** due to the impact of COVID-19, ranging between 5.3 million job losses on a 'low scenario' and 24.7 million on a 'high scenario'.
- **Increased risk of gender based violence:** Lockdowns and restricted movement **limited access** of vulnerable groups like women to their support network.

- **Marginalization of migrants:** Migrants are **looked upon as ‘outsiders’** by the local administration, and their **right to the city is denied** because of political support for the **‘sons of the soil’ ideology**.
 - **Exclusion and discrimination** against migrants and their negative portrayal in the media widens the gulf between migrants and locals.

Interventions undertaken for migrants

Policy Sub Area	Description
Food Safety	One Nation One Ration Card: Distribution of highly subsidised food grains is enabled through nation-wide portability of ration cards through the operationalisation of biometrically authenticated ePoS transactions in the State/UTs.
Pension	Pradhan Mantri Shram Yogi Mandhan: for old age protection and social security of unorganised sector workers
Education of child migrants	Project Changathi: Implemented by the Kerala State Literacy Mission, this is a literacy scheme targeted at migrant children for them to learn Malayalam.
Health	Ayushman Bharat Scheme: Launched in 2018 is the world’s largest health insurance/ assurance scheme fully financed by the government. The benefits of the scheme are portable across the country i.e. a beneficiary can visit any empanelled public or private hospital in India to avail cashless treatment.
Legislative measures to protect labour and migrant workers	<ul style="list-style-type: none"> • 1979 Interstate Migrant Workmen Act, • 1996 Building and Other Construction Workers Act and the • 2008 Unorganised Sector Social Security Act • Relevant provision referred in Code of Social Security 2020
Employment	Garib Kalyan Rojgar Abhiyaan (GKRA): To boost employment and livelihood opportunities for migrant workers returning to villages , in the wake of COVID-19 outbreak. It involved skill mapping of migrant labourers and linking women with self-help groups.


Challenges in providing services to migrants

- **Inadequate data:** There exists a serious **data gap on the extent, nature and magnitude** of internal migration which hampers delivery of services for migrants. Macro databases such as the Census fail to adequately capture flows of short-term migrants and do not record secondary reasons for migration.
 - The official data (Census or the National Sample Survey) is **more than a decade old**. Census 2011 migration data was made publicly available only in 2019.
- **Policy Gap:** For instance, inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act (1979) applies to **only migrants crossing state boundaries** and, therefore, a large section of migrants is excluded from its ambit. It **does not monitor unregistered contractors** and establishments and remains silent on provision for crèches, education centres etc.
 - Unorganised Workers’ Social Security Act included **neither a National Minimum Social Security Package, nor the provision for mandatory registration**.
- **Lack of attention:** Migrants constitute a **floating and invisible population**, alternating between source and destination areas and remaining on the **periphery of society**. In India, internal migration has been accorded very low priority by the government.
 - There is **lack of institutional and governance support** to facilitate safe transfer of remittances of migrants to their left-behind families.
 - Migrants do not constitute a homogeneous category, and are **segmented along gender, class, ethnicity, language and religion**.

Positive effects of migration

- **Optimal utilisation of Human Resources:** Internal migration results in a more **efficient allocation** of human resources to **sectors and regions** where they are better utilized.
- **Escaping rigid norms:** It provides an opportunity to escape **caste divisions and restrictive social norms** and to work with dignity and freedom at the destination.
- **Women empowerment:** Left-behind women enjoy empowerment effects, with **increased interaction** in society, including their participation as **workers and decision makers** of households.
- **Social Remittance:** Migrants bring back to the source areas a variety of **skills, innovations and knowledge**, known as ‘social remittances’, including change in tastes, perceptions and attitudes. For example, improved knowledge and awareness about workers’ rights
- **Augmenting Human capital:** Evidence reveals that with rising incomes, migrant remittances can encourage **investment in human capital formation** through increased expenditure on health and education.

- **Declining expenditure on Social protection:** Estimates show that the **central government's expenditure** on all major social protection programmes declined from 1.6 per cent in 2013-14 and to only **1.28 per cent in 2019-20**.



Coherent legal and policy framework on migration

- **Mainstream migration** in a comprehensive and focused manner in policy documents and national development plans.
- Design **targeted components and special outreach strategies** for migrants within public services and government programmes

Ensure ground level implementation

- **Prioritize implementation of existing labour laws** including the Minimum Wages Act (1948), Payment of Wages Act (1936), Contract Labour (Regulation and Abolition) Act (1970), Equal Remuneration Act (1976) etc.
- **Sensitize and train** policymakers, local government officials, NGOs, employers and financial institutions regarding obstacles in accessing public services for migrants.

Fill knowledge and research gaps to enable evidence-based policy making

- **Revise design of Census and surveys** to adequately capture sex disaggregated and age-disaggregated data on migration.
- Conduct detailed **countrywide mapping of internal migration**.
- Encourage **state-level research institutions** to develop state migration profiles, including state-wise mapping of nature, timing, duration and magnitude of migration cycles.

Improve institutional preparedness and build capacity

- Build **capacity of panchayats** to maintain a database of migrant workers and establish **vigilant committees** to identify entry of new migrants at the local level.
- Establish **migrant labour cells** in each state labour department with the support of the Labour Ministry.
- Create **inter-district and inter-state coordination committees** to jointly plan institutional arrangements between administrative jurisdictions of sending and receiving areas to ensure service delivery.

Devise a universal national minimum social security package

- Adopt recommendations on a **National Minimum Social Security Scheme for informal workers** suggested by the National Commission for Enterprises in the Unorganised Sector (NCEUS) by including features like **complete portability** in terms of registration, payment of premium (where applicable) and **National Minimum Social Security Package** for all workers.

Conclusion

Since migration has cross-cutting sectoral impacts, **multiple and complementary interventions** by different ministries and departments are needed, to facilitate migration and ensure **integration of migrants into the economic, social, political and cultural life** of the country.

6.2. POPULATION CONTROL POLICY

Why in News?

Recently, on World Population Day (11th July), Uttar Pradesh (UP) government **announced a new population policy for 2021-2030**. This year, the theme of World Population Day 2021 is '**the impact of the Covid-19 pandemic on fertility**'.

More on News

- If enacted, the provisions of the proposed legislation titled Uttar Pradesh Population (Control, Stabilization and Welfare) Bill, 2021 **will come into force after one year from the date of publication in the gazette**.
- It cites **strain on resources due to growing population** as the need to have a population control policy in place.
- **UP is India's most populous state** with a population of around 220 million.

Some states that follow two-child norm

- **In Rajasthan**, those having more than two children are not eligible for appointments in government jobs.
- **Madhya Pradesh (MP)** follows the two-child norm since 2001.
 - Under MP civil services rules, if the third child was born on or after January 26, 2001, a person becomes ineligible for government services.
- **In Maharashtra**, too, candidates are disqualified from contesting local body elections for having more than two children.
- **Gujarat** also amended the local law in 2005 to disqualify anyone with more than two children from contesting elections for bodies of local self-governance.

Key Features of the policy

- **Efforts to increase the accessibility of contraceptive measures** issued under the Family Planning Programme and provide a proper system for safe abortion.
- **Reduce the newborns' and maternal mortality rate.**
- UP government will give **promotions, increments, concessions in housing schemes and others perks to employees** who adhere to population control norms and have two or less children.
 - Proposed incentives for government employees with one child include increments, promotions, and concessions in housing schemes.
 - For non-government employees, the incentives are rebates in taxes on water, housing and home loans.
- If a single child's parent opts for a vasectomy, the **child will be entitled to free medical facilities until the age of 20**. Such children are also proposed to get free education, insurance, and preference in government jobs.
- A state population fund will be constituted for its implementation.

Reasons for high population growth

Part of demographic transition

- In the second stage of this transition, **the death rate declines faster than the birth rate** – driven by improvements in sanitation, hygiene, control of infectious diseases through antibiotics and vaccination. **Hence growth rate of the population rises.**

Low socio-economic development and literacy

- For example, UP has a literacy rate of 67.68% (Census 2011); and less than 25% of the women receive complete antenatal care. UP records an average of four children per couple.
- In contrast, in Kerala almost every person is literate and almost every woman receives antenatal care. Kerala records an average of two children per couple.

Infant mortality Rate or IMR (deaths of infants (less than one year) per 1000 live births)

- The current all India average is much lower at 32 (115 in 1961). However, in most developed countries this figure is less than 5. Empirical correlations suggest **that high IMR leads to greater desire for children**

Early marriage

- Nearly 27 per cent women were married before attaining 18 years of age. Not only does early marriage increase the likelihood of more children, it also puts the woman's health at risk.

Less use of contraceptives

- Nearly 75.4% of married men in India currently use no method of contraception, as per the National Family Health Survey. Only **18 % women have a final say in family planning decision.**

Other socio-economic factors

- The **desire for larger families particularly preference for a male child** also leads to higher birth rates. It is estimated that preference for a male child and high IMR together account for 20% of the total births in the country.
- **Families that have been through poverty, natural disasters, or are simply in need of more hands to work** are a major factor for overpopulation.

Arguments in favor of a Population Control Policy

At present, **India hosts around 16 per cent of the world's population** (According to a UN report, India will cross China as the **world's most populous country by 2027**) with only 2.45 per cent of the global surface area and 4 per cent of the water resources. This is resulting in **certain challenges in terms of:**

Pressure on food, clothing & housing

- A country with fast growing population has to face a serious problem of scarcity of necessary food, minimum clothing & proper housing facilities, which are basic needs of human life. Thus, it affects the life style and results into slum areas, starvation etc.

Unemployment

- The overpopulation aggravates the unemployment & disguised unemployment problem. The vacancy rate is negligible as compared to wants of employment, which ultimately results into low income groups and large families depending upon single earning person (earner).

Standard of living

- The overpopulation creates large families with low income reducing the standard of persons living therein.

Education

- The low income of large families cannot afford to provide education to their children. It results into creating a problem of illiteracy and again limited awareness among the class.

Eco-degradation

- Overpopulation leads to eco-degradation by increasing air, water, soil and noise pollution, unhygienic condition, deforestation leading to flood and soil erosion.

Pressure on infrastructure

- Development of infrastructural facilities is unfortunately not keeping pace with the growth of population. The result is lack of transportation, communication, housing, education, healthcare etc.

Inequitable income distribution

- In the face of an increasing population, unequal distribution of income and inequalities within the country widens.

Arguments against Population Control Policy

- **Already dipping Total Fertility Rate (TFR):** 28 out of 36 States/UTs have already achieved the replacement level fertility of 2.1 or less.
 - TFR is the number of children born to a woman during her lifetime. A fertility rate of 2.1 is the ballpark figure indicating population stabilization.
 - Also, Decadal growth rate has declined from 21.54% in 1990-2000 to 17.64% during 2001-11
- **China's experience:** Demographer after studying China's one child policy warned that strict population control measures would have negative consequences which includes accelerating population ageing, the skewed sex ratio, and the decline in the working-age population, which would threaten economic growth.
 - China relaxed the one-child rule in 2016
- **Discriminatory against women:** India has one of the world's highest rates of female sterilizations, with about 37% of women having the operations. Only a tiny fraction of men choose to have vasectomies.
- **Female feticide:** Policy may also lead to a worrying trend of gender discrimination as a desire for male children could led to reported abortions and infanticide.
- **Penalizing vulnerable section of the society:** De-incentivization, such as taking away subsidies, will only focus on a very small portion of people. Sometimes, it is due to extreme poverty, lack of awareness or the inability to afford contraceptives or abortion that people have more kids.
- **Could be counterproductive:** Studies have found that men divorced their wives to run for local body elections and families gave up children for adoption to avoid disqualification in states that had adopted a two-child policy.

Measures taken by government for population control

- India was the **first country in the world** to have launched a **National Programme for Family Planning in 1952**.
- **National Population Policy 2000** gave a focused approach to the problem of population stabilization.
 - **National Commission on Population was formed in the year 2000.** The Commission, chaired by the Prime Minister, has the mandate to review, monitor and give directions for implementation of the National Population Policy.
- **Mission Parivar Vikas** has been introduced for substantially increasing access to contraceptives and family planning services in 146 high fertility districts in 7 high focus states.
- **Expanded Contraceptive Choices:** The current contraceptive basket has been expanded with inclusion of new contraceptives namely Injectable contraceptive (Antara programme) and Cent chroman (Chhaya).
- **Post-partum Intrauterine contraceptive device (PPIUCD) incentive scheme** under which PPIUCD services are provided post-delivery.

- **Redesigned Contraceptive Packaging:** The packaging for Condoms, OCPs and ECPs has now been improved and redesigned to augment the demand for these commodities.
- **Family Planning Media Campaign:** A holistic media campaign is in place to generate contraceptive demand.
- **Vasectomy fortnight** is observed throughout the country in November each year to lay emphasis on male participation.
- **Scheme for Home Delivery of contraceptives** by ASHAs at doorstep of beneficiaries has been taken up.
- **Family Planning Logistics Management Information System (FP-LMIS)** is being implemented to ensure last mile availability of FP commodities.

Way Forward

- **Better Family Planning Programs:** They typically increase access to birth spacing and contraception, which has been proven to reduce malnutrition, lower household costs, and lower maternal and child mortality rates, further driving down fertility rates.
- **Women empowerment:** It will lead to more and more effective birth control, which has a positive effect on the survival of children, which in turn again facilitates birth control.
 - The **Cairo Consensus (1994)** underlines new approaches to population and development, with women's health, empowerment, and rights at the center.
- **Better health care:** It is crucial to understand that the decline in child mortality in the demographic transition always precedes the decline in fertility. Better health care is therefore essential, and a lack of good health care is one of the reasons for a persistently high fertility.
- **Investment in Education:** As it enhances the motivation for birth control, promotes a more forward-looking lifestyle and increases the potential for effective contraception.
 - If India would have ensured at least five years of schooling or primary education for its girls, its fertility rate could be well below replacement level.
- **Focus on demographic dividend:** India is on its way to completing its demographic transition. It should stop fretting about the population problem. Instead, it needs to invest massively in education and health and provide stable, well-paying jobs.
- **Choice-based strategy:** So that people voluntarily decide to have fewer children because of access to education or maybe by giving them positive incentives
- **Higher economic growth:** Aiming for a higher rate of economic growth, which automatically reduces the reproductive rate, is a better proposition than hoping to raise economic growth through limiting population growth.
 - If India manages to lift the poorest 20% out of poverty, the fertility rate would be about 1.9.

6.3. STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD 2021

Why in news?

Food and Agriculture Organization (FAO) has released State of Food Security and Nutrition in the World 2021 report.

About State of Food Security and Nutrition in the World 2021

- It was jointly prepared by the Food and Agriculture Organization of the United Nations (**FAO**), the International Fund for Agricultural Development (**IFAD**), the United Nations Children's Fund (**UNICEF**), the World Food Programme (**WFP**) and the World Health Organization (**WHO**).
- This report presents the **first global assessment of food insecurity and malnutrition for 2020** and highlights the need for a deeper reflection on how to better address the global food security and nutrition situation.

Key Findings of report

Parameter	Findings
People facing hunger in 2020	<ul style="list-style-type: none"> • Estimated between 720 and 811 million people. • Around 118 million more than in 2019. • 21 percent of the population was facing hunger in Africa (higher than any other region).
Prevalence of undernourishment	<ul style="list-style-type: none"> • World not on track to achieve targets for any of the nutrition indicators by 2030. • Remained virtually unchanged from 2014 to 2019. • Increased from 8.4 percent to around 9.9 percent between 2019 and 2020.

	<ul style="list-style-type: none"> • More than half live in Asia and more than one-third in Africa. • Adult obesity: 13.1 percent in 2016.
Moderate or severe food insecurity (based on the Food Insecurity Experience Scale) at the global level	<ul style="list-style-type: none"> • Risen from 22.6 percent in 2014 to 26.6 percent in 2019. • 10 percent higher among women than men in 2020. • One in three people in the world did not have access to adequate food in 2020.
Child malnutrition	<ul style="list-style-type: none"> • Stunting: 22.0 percent of children under the age of five years. • Wasting: 6.7 percent of children under the age of five years. • Overweight: 5.7 percent of children under the age of five years. • 44 percent of infants under 6 months of age were exclusively breastfed in 2019 (37% in 2012).

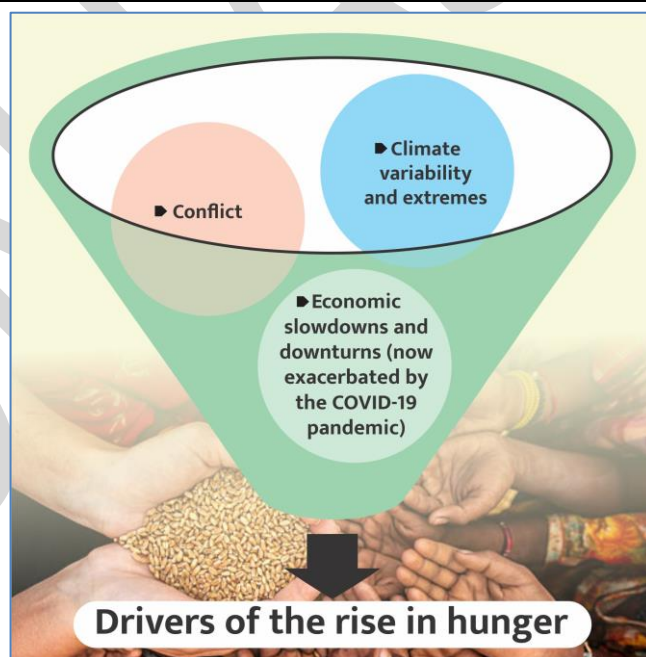
India Specific findings

Parameter	Findings
Prevalence of Undernourishment	<ul style="list-style-type: none"> • 15.3% during 2018-20 (21.6 % during 2004-06). • Adult obesity: 3.9% in 2016.
Child malnutrition	<ul style="list-style-type: none"> • Stunting: 30.9% of children under the age of five years. • Wasting: 17.3% of children under the age of five years. • Overweight: 1.9% of children under the age of five years. • Exclusive breastfeeding among infants 0-5 months of age: 58% in 2019.

Way Forward

Report recommends **six pathways** to address the major drivers of food insecurity and malnutrition:

- Integrating **humanitarian, development and peace building policies** in conflict-affected areas;
- Scaling up **climate resilience** across food systems;
- Strengthening the **resilience of the most vulnerable** to economic adversity;
- Intervening along the food supply chains to **lower the cost of nutritious foods**;
- Tackling poverty and structural inequalities, ensuring **interventions are pro-poor and inclusive**; and
- **Strengthening food environments and changing consumer behaviour** to promote dietary patterns with positive impacts on human health and the environment.



6.4. THE TRAFFICKING IN PERSONS (PREVENTION, CARE AND REHABILITATION) BILL, 2021

Why in news?

Ministry of Women and Child Development has invited comments/suggestions from all the stakeholders on the draft 'Trafficking in Persons (Prevention, Care and Rehabilitation) Bill, 2021' (TIP Bill).

About human trafficking

- Human trafficking is the **trade of humans**, most commonly for the purpose of forced labour, sexual slavery, or commercial sexual exploitation for the trafficker or others.
- People can be forced into trafficking **by many means such as physical force** being used upon them, **or false promises** made by traffickers.
- Currently, the crime of trafficking is covered under **Criminal Law Amendment Act, 2013**. Trafficking for the purpose of commercial sexual exploitation is covered under the **Immoral Trafficking (Prevention Act of 1956**.

- Despite these provisions, the NCRB data shows an **increasing trend of cases of trafficking** such as these increased by 14.3% in 2019 as compared to the previous year.

Reasons underscoring India's inability to eradicate human trafficking

- **Globalization:** Apart from the increased demand of cheap labour in the production sector, globalization has played a major part for the growth of tourism business and entertainment industries the world over. As a result, sex tourism has registered rapid growth.
- **A transit point of human trafficking:** Usually people from poorer countries like Bangladesh and Nepal are at the risk of exploitation and are trafficked to their neighboring country India. From India, there is further movement of these women and girls to the Middle East as well as other destinations.
- **High profit, low risk to traffickers:** Such conditions arise due to weak law enforcement and low levels of prosecution. To tackle human trafficking, prosecution and punishment of offenders must be pursued as well as legal action to seize the assets and profits of traffickers.
- **Child marriages:** Child marriage is one of the easiest modes applied by the traffickers to send young girls from one place to another.
- **Victimization of trafficked persons:** It has often been alleged that police harass the victims. These limitations not only make the socially and economically deprived sections of society vulnerable to trafficking and in some cases, re-trafficking.

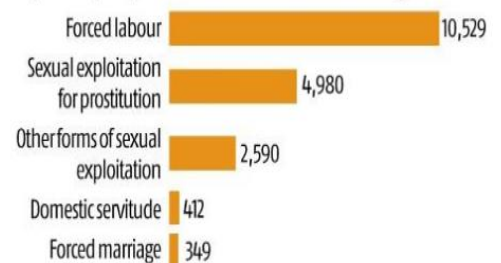
Steps taken

- **Ujjawala Schemes:** It is a comprehensive scheme that was launched in 2007 to combat trafficking and it provides for **Prevention, Rescue, Rehabilitation, Re-Integration and Re-Patriation** of victims trafficked for commercial sexual exploitation. It is mainly being implemented through non-governmental organizations (NGOs).
- **Anti-Human Trafficking Units:** Ministry of Home Affairs (MHA) under a Comprehensive Scheme of Strengthening law enforcement response in India against Trafficking in Persons through Training and Capacity Building, has released fund for establishment of Anti Human Trafficking Units for 270 districts of the country.
 - **Anti-Trafficking Cell (ATC):** Anti-Trafficking Nodal Cell was set up in the MHA in 2006 to act as a focal point for communicating various decisions and follow up on action taken by the State Governments to combat the crime of Human Trafficking. MHA conducts coordination meetings with the Nodal Officers of Anti Human Trafficking Units nominated in all States/UTs periodically.
- **Legislative measures:**
 - **The POCSO (Protection of Children from Sexual Offences) Act 2012** prohibits a range of sexual offences against children under the age of 18.

Key highlights of the Bill

- **Aim:** The legislation is aimed at **preventing and countering trafficking in persons**, especially women and children, to provide for care, protection, and rehabilitation to the victims, while respecting their rights, and creating a supportive legal, economic and social environment for them, and also to ensure prosecution of offenders.'
- **National Investigating and Coordinating Agency:** The National Investigation Agency (NIA) shall act as the national investigating and coordinating agency. The NIA shall be responsible for prevention and combating of trafficking in persons, investigation, prosecution and coordination in cases of trafficking in persons and other offences under this Act.
- **National Anti-Human Trafficking Committee:** This body shall be constituted by the Central Government for ensuring overall effective implementation of the provisions of this Act. Secretary, Ministry of Home Affairs, Government of India would be the Chairperson of this committee. Similar committees are to be created at the State and District Levels.
- **State Anti-Human Trafficking Nodal Officers:** It shall be appointed by the State Government. It shall be responsible for follow up action under this Act, as per the direction of the State Anti-Human Trafficking Committee and co-ordinate with other government agencies and civil society organizations.
- **Consent of the victim:** It could be irrelevant and immaterial in determination of the offence of trafficking in persons if the consent has been achieved through force, coercion etc.
- The Bill also defines human trafficking as an **organised crime with international implications**.
- The draft bill has proposed **severe punishment for offences classified as aggravated forms of trafficking**.

Top five purposes of human trafficking

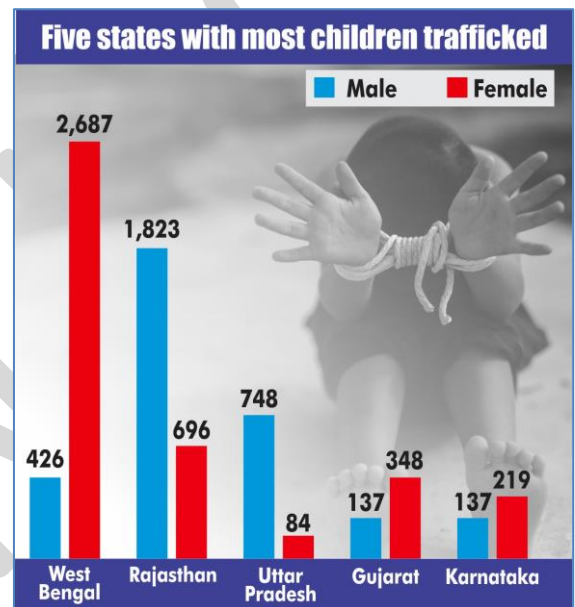


Note: Data for 2016; source: data and analysis by IndiaSpend

- **Criminal Law (amendment) Act 2013**, under Section 370 and 370A of the, provide for comprehensive measures to counter the menace of human trafficking.
- **Other specific legislations** enacted relating to trafficking in women and children Prohibition of Child Marriage Act, 2006, Bonded Labour System (Abolition) Act, 1976, Child Labour (Prohibition and Regulation) Act, 1986, Transplantation of Human Organs Act, 1994, apart from specific Sections in the IPC, e.g. Sections 372 and 373 dealing with selling and buying of girls for the purpose of prostitution.
- **Judicial Colloquium:** In order to train and sensitize the trial court judicial officers, Judicial Colloquium on human trafficking is being held at the High court level.
- **Efforts by State Government:** State Governments have also enacted specific legislations to deal with the issue. (e.g. The Punjab Prevention of Human Smuggling Act, 2012).
- **Cooperation at International level:** India is a signatory of the Protocol to Prevent, Suppress and Punish Trafficking in Persons of the UN Convention against Transnational Organised Crime (UNTOC).
- **Civil Societies:** Various NGOs like the Rescue Foundation, Bachpan Bachao Andolan have been successful in rescuing, rehabilitating, and repatriating victims of trafficking back to their families.

Way ahead

- **Legislative measures:** In the TIP Bill, 2021 concerns about absence of community-based rehabilitation, missing definition of reintegration and about the funds related to rehabilitation of survivors should be addressed. Some experts working in the area have pointed out that in absence of rescue protocol there is always the fear of forced rescue like prostitutes who may have been trafficked but do not wish to get rescued. Therefore, effective rescue protocols need to be implemented.
- **Border measures:** Stringent Enforcement of cross border trafficking, secure vigilance in trafficking routes and proper social accountability is needed.
- **Measures to improve institutions:** Police reforms for ensuring accountability and transparency, reducing the burden of judiciary, proper law enforcement, bilateral and multilateral cooperation, to discourage the demand that fosters all forms of exploitation of persons, especially women and children.
- **Economic and social policies:** Effective policy measures needs to be taken for raising levels of social protection, enhancing basic education, literacy, communication and other skills, and reduce barriers to entrepreneurship, creating employment opportunities, eliminating discrimination against women in the field of employment, promoting gender sensitization thus preventing violence against women.
- **Awareness-raising measures:** With the help of civil society and police officials, awareness programs in traffic prone places should be carried out at local schools, among kids of the poor society and public.
- **Implementing recommendations of Justice Verma Committee (2013) recommendations:**
 - The Committee noted that the **Immoral Trafficking Prevention Act, 1956 did not define trafficking comprehensively** since it only criminalised trafficking for the purpose of prostitution.
 - It recommended that the **provisions of the IPC on slavery be amended to criminalise trafficking by threat, force or inducement.**
 - It also recommended **criminalising employment of a trafficked person.**
 - The **juvenile and women protective homes should be placed under the legal guardianship of High Courts** and steps should be taken to reintegrate the victims into society.



Conclusion

Social evil like human trafficking jeopardizes the dignity and security of individuals, and severely violates their human rights. In order to combat trafficking, strong political will is vital in implementing anti-trafficking mandates. The problem is still in our hands to be solved if strong steps are taken deliberately and policies are made and implemented strictly.

6.5. NATIONAL EDUCATION POLICY

Why in news?

India completed one year of the **National Education Policy (NEP) 2020**.

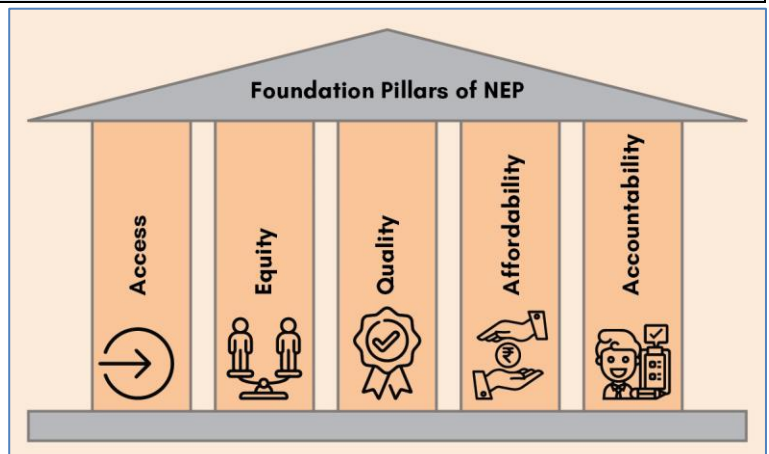
More on news

Prime Minister launched multiple key initiatives in the education sector to mark first year anniversary of the National Education Policy 2020. These are as given under:

Initiative	Details
Academic Bank of Credit	<ul style="list-style-type: none"> It is envisaged as a digital bank that shall deposit Credits awarded by Registered Higher Education Institutions, for Courses pursued therein, in the Academic Bank Account of the student. It is a major instrument for facilitating multidisciplinary and holistic education and will allow multiple entry and exit options for students of undergraduate and postgraduate degree courses.
Vidya Pravesh	<ul style="list-style-type: none"> It is a preschool preparation programme for Class 1st students. The program will consist of a three-month play module for these children to prepare them for school.
SAFAL (Structured Assessment For Analyzing Learning Levels)	<ul style="list-style-type: none"> An assessment programme for CBSE students to assess the progress of foundational skills and basic learning outcomes and competencies among students in classes 3, 5 and 8.
National Digital Education Architecture (NDEAR)	<ul style="list-style-type: none"> It will provide diverse education eco-system architecture for development of digital infrastructure, a federated but interoperable system that will ensure autonomy of all stakeholders, especially States and UTs. It will be beneficial for both Centre and States in planning, administering and governing school education as well as to teachers, students and schools for having a seamless digital learning experience.
National Education Technology Forum (NETF):	<ul style="list-style-type: none"> To provide a platform for the free exchange of ideas on the use of technology like artificial intelligence, blockchain, machine learning, smart boards, computing devices to enhance learning, assessment, planning, administration. It will provide independent evidence-based advice to central and state government agencies on technology-based interventions.
NISHTHA 2.0:	<ul style="list-style-type: none"> It will provide training to teachers as per their needs and they will be able to give their suggestions to the department. It will have 68 modules including 12 generic and 56 subject-specific modules and will cover around 10 lakh teachers. <ul style="list-style-type: none"> NISHTHA is the largest teachers' training programme, first of its kind in the world to motivate and equip teachers to encourage and foster critical thinking in students.
Other initiatives related to language	<ul style="list-style-type: none"> Mother tongue as medium of instruction in colleges: 14 engineering colleges in eight States are going to start engineering studies in five Indian languages: Hindi, Tamil, Telugu, Marathi and Bangla. Sign Language as a Subject in Secondary Level: Indian sign language, for the first time, has been accorded the status of language subject. This will give a boost to Indian sign language and will help the divyang people.

Background: About NEP

- The NEP, was launched in July 2020 as the **guiding philosophy for changing the learning landscape**, making education holistic and for building strong foundations for an Atmanirbhar Bharat.
- This is the **first education policy of the 21st century** and replaces the thirty-four year old National Policy on Education (NPE), 1986.
- The policy is **aligned to the 2030 Agenda for Sustainable Development** and aims to

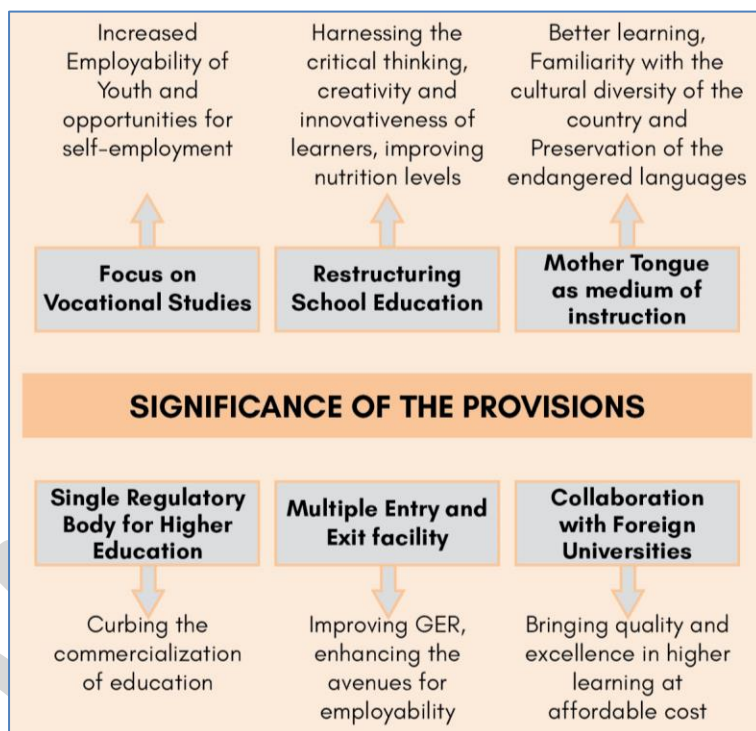


transform India into a vibrant knowledge society and global knowledge superpower by making both school and college education more holistic, flexible, multidisciplinary, suited to 21st century needs.

For detailed provisions of National Education Policy, 2020 refer to the appendix at the end of the document.

Implementation Challenges & Issues with the NEP 2020

- **Funding:** NEP talks about spending 6% of GDP on education. However, such an increase in funding has been proposed earlier but not achieved. This policy also does not elaborate how to raise this fund.
- **Multilingualism:** With **inter-state migration for employment**, and **India's large diversity of languages**, regional language will hobble some students' learning.
- **Vocational Education:** Stress on vocational training from the preparatory stage, many fear, would lead to students from marginalised backgrounds dropping out early to take up jobs. This may also impede a more holistic learning.
- **Legal complexities:** The policy has also been criticised due to the legal complexities surrounding the applicability of **two operative policies namely The Right to Education Act, 2009 and the National Education Policy, 2020**. Certain provisions such as the age of starting schooling will need to be deliberated upon, in order to resolve any conundrum between the statute and the recently introduced policy in the longer run.
- **Federal Setup:** In a federal system like India, where **education is a concurrent subject**, any educational reform can be implemented only with support from the States, and the Centre has the giant task of building a consensus on the many ambitious plans.
 - As an example, the proposed national assessment body or PARAKH and its realization requires active cooperation of as many as 60 education boards across the country.
- **Fear of Commercialisation and privatisation of education:**
 - The NEP suggests that admission to all higher education programmes should be based on standardised test scores conducted by the National Testing Authority. This **may encourage coaching classes and rote memorisation**, further eroding the value of examinations and assessments conducted by the schools, colleges, and universities.
 - **Fear of Privatisation:** Many experts argue that NEP, in the name of philanthropic schools and PPP, is laying the roadmap for entry of private players in education, which will further commercialise education and the existing inequalities will be exacerbated.
- **Ground realities:** Experiential learning, for instance, through project work requires significant financial resources for procuring project materials and setting up tinkering labs. Such activities also need more and good quality teachers, while the school systems presently face chronic and persistent teacher shortages.



Way Forward

- **Setting the right priorities:** There are two key players in the implementation of NEP – the **Ministry of Education** at the Centre and the **stakeholders, which includes state governments, schools and academic institutions**.
 - Both the players have to set the priorities right and these priorities should be based on both the **short-term and long-term needs of educational institutes**, funding requirements and **realistic deadlines** for achieving the set goals.
- The **Ministry of Education and Higher Education Commission of India (HECI) need to work in tandem with the states** and the educational institutes by collaboratively setting realistic and achievable targets and by tracking progress against critical policy priorities.

- **Attitudinal changes:** Many of the changes that NEP sets out to achieve require **attitudinal changes** by adopting effective teaching-learning processes, academic and administrative procedures.
- **Distinctly outlining the chain of command for implementation** to avoid duplication and overlap of efforts.
- **Define the key performance indicators**, both for the officials in the Ministry of Education and also the stakeholders. It is vital that there is a **periodic review of their performance indicators** with a view to **plug inefficient processes** that impede the policy from being turned into results in a time-bound manner.

Conclusion

The NEP, 2020, is a guiding philosophy for changing the learning landscape, making education holistic and for building strong foundations for an Aatmanirbhar Bharat.

6.6. NATIONAL INITIATIVE FOR PROFICIENCY IN READING WITH UNDERSTANDING AND NUMERACY (NIPUN BHARAT)

Why in News?

Recently, Ministry of Education (MoE) launched NIPUN Bharat programme, a National Mission on Foundational Literacy and Numeracy (FLN).

More on News

- Attaining FLN for all children has been **focused on National Education Policy 2020**. It accords highest priority to achieve **universal FLN in primary school and beyond by 2026-27**.
- The Mission will be **set up under the aegis of the centrally sponsored scheme of Samagra Shiksha** which is an integrated scheme of school education covering from Pre-School to Senior Secondary level.

About NIPUN

<p>Aim</p>	<ul style="list-style-type: none"> • Mission aims to ensure universal acquisition of FLN, so that by 2026-27 every child achieves the desired learning competencies in reading, writing and numeracy at the end of Grade III and not later than Grade V. <ul style="list-style-type: none"> ○ It aims to cover the learning needs of children in the age group of 3 to 9 years including pre-school to Grade 3. ○ The children who are in Class 4 and 5 and have not attained the foundational skills will be provided individual teacher guidance and support, peer support and age appropriate and supplementary graded learning materials to acquire the necessary competencies.
<p>Objectives of the Mission</p>	<ol style="list-style-type: none"> To ensure an inclusive classroom environment by incorporating play, discovery, and activity-based pedagogies, linking it to the daily life situations of the children and formal inclusion of children's home languages. To enable children to become motivated, independent, and engaged readers and writers with comprehension possessing sustainable reading and writing skills. To make children understand the reasoning in the domains of number, measurement, and shapes; and enable them to become independent in problem solving by way of numeracy and spatial understanding skills. To ensure availability and effective usage of high-quality and culturally responsive teaching learning material in children's familiar/home/mother language(s) To focus on continuous capacity building of teachers, head teachers, academic resource persons and education administrators. To actively engage with all stakeholder i.e., Teachers, Parents, Students and Community, policy makers for building a strong foundation of lifelong learning. To ensure assessment 'as, of and for' learning through portfolios, group and collaborative work, project work quizzes, role plays, games, oral presentation, short tests, etc. To ensure tracking of learning levels of all students.
<p>Focus of the Mission</p>	<ul style="list-style-type: none"> • Providing access and retaining children in foundational years of schooling; • Teacher capacity building; • Development of high quality and diversified Student and Teacher Resources/Learning Materials; and • Tracking the progress of each child in achieving learning outcomes.

<p>Implementation</p>	<ul style="list-style-type: none"> • A five-tier Implementation mechanism will be set up at National-State-District-Block-School level. • Department of School Education and Literacy, MoE will be the implementing agency at the national level and will be headed by a Mission Director. • Role of States/UTs <ul style="list-style-type: none"> ○ Creating multi-year Action plans to achieve their respective FLN targets. ○ Contextualise the National Mission by preparing state specific Stage-wise Action Plan. ○ Ensure availability of adequate number of Teachers in each school at each grade from pre-primary to grade 3 and extensive capacity building of teachers for implementing FLN in mission mode. ○ Mapping of database of each child enrolled in foundational grades. ○ Identify a pool of mentors to render academic support to teachers. ○ Ensuring delivery of textbooks and uniforms to students before the start of academic session. ○ School/public libraries will be made integral part of teaching learning process.
<p>Progress Tracking Mechanism</p>	<ul style="list-style-type: none"> • Learning outcomes have been divided into 3 three developmental goals: Goal 1-HW (Health and Wellbeing), Goal 2-EC (Effective Communicators), Goal 3-IL (Involved Learners). • Goals are set in the form of Lakshya Soochi or Targets for FLN (Refer infographic). <div data-bbox="331 663 1402 1413" style="border: 1px solid black; padding: 10px;"> <h3 style="text-align: center; background-color: #003366; color: white; padding: 5px;">Lakshyas: Learning Goals of the Mission</h3> <p>The National Mission will declare the overall national targets in achieving learning outcomes, including year wise outcomes to be achieved by the year 2026-27 by each State/UT. The overall literacy and numeracy targets to achieve the objectives of the mission are set in the form of Lakshya or Targets for Foundational Literacy and Numeracy starting from the Balvatika.</p> <p>Balvatika</p> <ul style="list-style-type: none"> • Recognises letters and corresponding sounds • Reads simple words comprising of at least 2 to 3 alphabets. • Recognises and reads numerals up to 10 • Arranges numbers / objects / shapes / occurrence of events in a sequence <p>Grade-1</p> <ul style="list-style-type: none"> • Reads small sentences consisting of at least 4-5 simple words in an age appropriate unknown text. • Read and write numbers up to 99 • Perform simple addition and subtraction <p>Grade-2</p> <ul style="list-style-type: none"> • Read with meaning 45-60 words per minute • Read and write numbers up to 99 • Subtract numbers up to 99 <p>Grade-3</p> <ul style="list-style-type: none"> • Read with meaning at least 60 words per minute • Read and write numbers up to 9999 • Solve simple multiplication problems </div>
<p>Outcomes envisaged</p>	<div data-bbox="331 1435 1366 2069" style="border: 1px solid black; padding: 10px;"> <h3 style="text-align: center; background-color: #ff6600; color: white; padding: 5px;">Impact of FLN mission</h3> <div style="display: flex; justify-content: space-around;"> <div style="width: 30%;"> <p>Emphasis on Activity- based learning. A conducive learning environment to improve the quality of education.</p> </div> <div style="width: 30%;"> <p>Assessment to be based on learning outcomes</p> </div> <div style="width: 30%;"> <p>Improvement in transition rate of primary to upper-primary</p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="width: 30%;"> <p>Since almost every child attends early grades, therefore, focus on that stage will also benefit the socio-economic disadvantaged group thus ensuring access to equitable and inclusive quality education</p> </div> <div style="width: 30%;"> <p>It will enable children to keep them in class thereby reducing the numbers of dropouts</p> </div> <div style="width: 30%;"> <p>Intensive capacity building of teachers to make them empowered and provide greater autonomy for choosing the pedagogy</p> </div> </div> <div style="background-color: #e0e0e0; padding: 10px; margin-top: 10px;"> <ul style="list-style-type: none"> • Children to achieve steeper learning trajectory which may have positive impact on later life outcomes and employment. • FLN will ensure holistic development of the child by focusing on different domains of development <ul style="list-style-type: none"> • Physical and motor development • Socio-emotional development • Literacy and numeracy development • Cognitive development • Life skills etc. </div> </div>

<p>Strategies outlined for success of the mission</p>	<ul style="list-style-type: none"> ● Pedagogy for creating an inclusive classroom <ul style="list-style-type: none"> ○ Contextualization of materials keeping in view the linguistic and social diversity of each State/UT. ○ Emphasis on Child Centered Pedagogy, Toy-based pedagogy, Play based, Art-integrated/sport-integrated, Story-telling-based, ICT-integrated learning etc. ○ Emphasis on interactive classroom including authentic, appropriate, and accessible toys and materials. ● Empowering Teachers <ul style="list-style-type: none"> ○ A special package for FLN under NISHTHA (National Initiative for School Heads and Teachers Holistic Advancement) is being developed by NCERT and around 25 lakh teachers teaching at pre-primary to primary grade will be trained this year on FLN. ● Using DIKSHA (offers teachers, students and parents engaging learning material relevant to the prescribed school curriculum) to enable <ul style="list-style-type: none"> ○ Student Learning: Ranging from explanation videos, interactive assessment items, worksheets, reading materials, etc. will be available ○ Teacher Professional Development
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About Foundational Literacy and Numeracy (FLN)

- Foundational learning is the **basis of all future learning for a child. Not achieving basic foundational skills** of being able to read with comprehension, writing and doing basic mathematics operations, **leaves the child unprepared for the complexities of the curriculum beyond grade 3.**
- **Foundational Language and Literacy**
 - Pre-existing knowledge of language **helps in building literacy skills** in languages.
 - **Key components in Foundational Language and Literacy are:** Oral language development, deciphering written words, reading fluency, reading comprehension and writing.
- **Foundational Numeracy and Mathematics Skills**
 - It means the **ability to reason and to apply simple numerical concepts in daily life problem solving.**
 - The major aspects and **components of early mathematics are:** Pre-number concepts, Numbers and operations on numbers, Shapes and Spatial Understanding, Measurement and Data Handling.

Related News

School Innovation Ambassador Training Program (SIATP)

SIATP launched for school teachers is a **collaborative effort of the Ministry of Education's Innovation Cell, Ministry of Tribal Affairs, CBSE and AICTE.**

- The program **aims at training 50,000 School Teachers** on Innovation, Entrepreneurship, Intellectual Property Rights (IPR), Design Thinking, Product development, Idea generation, among others.
 - The training will be delivered in **online mode** only.
- The innovative and one-of-its-kind program is **designed** by the **Innovation Cell of the Ministry of Education** and **AICTE** based on its "Innovation Ambassador Training Program for Higher Educational Institution's faculty members".

Significance of SIATP:

- **It will strengthen the mentoring capacity of teachers** for nurturing and handholding ideas from students.
- **It will help in providing quality education to children, especially in tribal areas.** This will **help in fostering a culture of innovation in school education** across the country.
- **It is in line with the National Education Policy (NEP)** that encourages innovation and critical thinking at school level.

6.7. DIGITAL INDIA

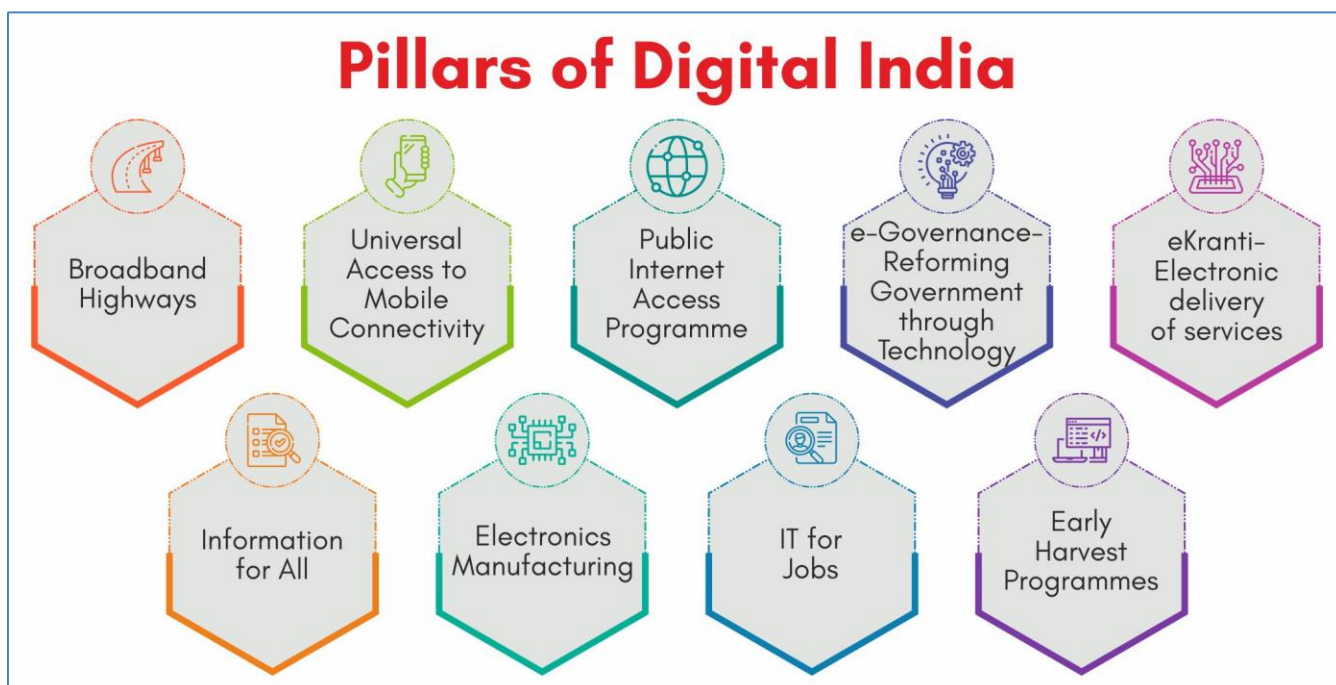
Why in News?

Recently, Prime Minister of India held a virtual event to mark the completion of six years of Digital India.




About Digital India

- Digital India is a flagship programme of the Government of India with a vision to transform India into a digitally empowered society and knowledge economy.
- The programme aimed to fill gaps in old e-governance models such as less interactive and isolated system that were thwarting the successful adoption of e-governance along the entire spectrum of governance.

Pillars of Digital India



Vision Areas of Digital India

 Digital Infrastructure as a Core Utility to Every Citizen	 Governance & Services on Demand	 Digital Empowerment of Citizen
<ul style="list-style-type: none"> ▶ Availability of high speed internet as a core utility for delivery of services to citizens ▶ Cradle to grave digital identity that is unique, lifelong, online and authenticable to every citizen ▶ Mobile phone & bank account enabling citizen participation in digital & financial space ▶ Easy access to Common Service Centre ▶ Shareable private space on a public cloud ▶ Safe and secure cyber-space 	<ul style="list-style-type: none"> ▶ Seamlessly integrated service across department or jurisdictions. ▶ Availability of services in real time from online & mobile platforms ▶ All citizen entitlements to be portable and available on the cloud ▶ Digitally transformed services for improving ease of doing business ▶ Making financial transactions electronic & cashless ▶ Leveraging Geospatial Information System (GIS) for decision support systems & development 	<ul style="list-style-type: none"> ▶ Universal digital literacy ▶ Universally accessible digital resources ▶ Availability of digital resources / services in Indian languages ▶ Collaborative digital platforms for participative governance ▶ Citizens not required to physically submit Govt. documents / certificates

Achievements

- **Unique Identification:** Aadhar probably is the most significant achievement of Digital India, covering 99% of the Indian population, allowing them access to important government digital services.
- **Enabled other initiatives:** The programme has played a role of an enabler for several important Government schemes, such as BharatNet, Make in India, Startup India and Standup India, industrial corridors, etc.
- **Boost to cashless payments:** The introduction of Unified Payments Interface and promotion of e-wallets, Unstructured Supplementary Service Data (USSD) services, etc. under Digital India gave boost to cashless payments in India.

- India saw a mammoth growth of 383% in digital payments between Financial Year 2018 and 2019.

- **Digital Connecting rural India:** The ambitious Bharat Net programme undertook the task of connecting 2.5 lakh gram panchayats (GPs) by fiber-optic network.

- As of June 2021, length of Optical Fiber Cable (OFC) laid is around 5, 25,706 Kms, number of GPs connected on OFC are 1,73,079 and number of GPs Made Service Ready (On fiber & satellite) are 1,60,076 GP.

- **Promotion of Digital inclusion:** Promoting digital inclusion, a core component of the initiative with programmes like Common Service Centers (CSCs), enabled the delivery of digital services through the internet in rural areas.

- The CSCs provide access to digital services to 400,000-500,000 people on a daily basis.

- **Development of technology startup ecosystem:** The growth in the e-commerce market, which is estimated to be worth \$54 billion in 2020 is testament to success of Digital India.

- To create a conducive ecosystem for Startups the Ministry of Electronics and Information Technology has launched programmes like TIDE (Technology Incubation and Development of Entrepreneurs), promotion of ESDM (Electronics System Design and Manufacturing) etc, under Digital India.

- **Increased global interest:** Major technological companies have been showing interest in India due to its highly competitive digital market. Digital India has provided Indian government and these companies a platform for collaboration. Examples-

- Google Inc. collaborated with the Indian Railways to set-up free Wi-Fi services at 100 major railway stations in India. Microsoft Inc. has worked with the Government of India with their most recent contribution being the “Digital Governance Tech Tour”.

- **Socio-economic development aided by digital means:** Wide variety of services offered through digital means, including Tele-medicine, online and open-source education, Direct benefit transfers for Public distribution system etc., have helped in sustainable development.

Challenges that still remain




- **Connectivity to Remote Areas:** There are also severe disparities in terms of infrastructure between states, with the Northeast faring the worst, partly because of challenging terrain, rain, and floods.

- **Digital Illiteracy:** Digital illiteracy is still high in the country which became very apparent during the ongoing COVID-19 vaccination programme. The government was forced to make offline arrangements as many people were not digitally literate enough to get themselves registered on the Cowin app for scheduling job appointments.

- **Cyber Crime and Security breach:** Nearly 1.16 million cases of cyberattacks were reported in 2020, up nearly three times from 2019 and more than 20 times compared to 2016. Risks like data leakage, phishing attacks, ransomware, spyware, apps with weak encryption (also known as broken cryptography) are some of the common cyber threats plaguing us.


- The security measures taken around protecting Aadhaar data and the Aadhaar ecosystem used by several government department remains vulnerable with little done to track and report misuse.

- **Privacy:** In return for secure online access to government services, citizens of India are being asked to give up vast amounts of personal information including Biometric data. This has created huge privacy related challenges.

Major initiatives under the programme	
 Infrastructure	<ul style="list-style-type: none"> ● Aadhaar ● Bharat Broadband Network (BBNL) ● DigiLocker ● Direct Benefit Transfer (DBT) ● MEGHRAJ ● Cert-In
 Services	<ul style="list-style-type: none"> ● Geological Survey of India ● Goods and Service Tax Network ● Accessible India Campaign and Mobile App ● BHIM ● Crime And Criminal Tracking Network & Systems ● mKISAN ● National Career Service Portal ● Nikshay ● Swatch Bhaarat App ● Umang
 Empowerment	<ul style="list-style-type: none"> ● Pradhan Mantri Jan-Dhan Yojana ● Pradhan Mantri Gramin Digital Saksharta Abhiyaan ● Pahal ● National Mission on Education Using ICT ● Aadhaar Enabled Payment System


Way Forward

- **Investing in a robust cybersecurity** that offers end-to-end security ecosystem for individual device and network to reliable data back-ups, regular third-party risk assessment, and strong multifactor authentication mechanism need to be put in place.
- **There is need of a strong legal framework for handling cyber-crime and protecting data privacy**, followed by a widespread awareness campaign about the significance of cyber security.
- **Private sector should be encouraged for development of last mile infrastructure in rural and remote areas.** To encourage private sector, there must be favorable taxation policies, quicker clearance of projects.
 - PPP models can be explored for sustainable development of digital infrastructure.

 <p>SMART QUIZ</p>	<p>You can scan this QR code to practice the Smart Quiz of Social Issues & Social Schemes at our open test online platform for testing your understanding and recalling of the concepts.</p>	
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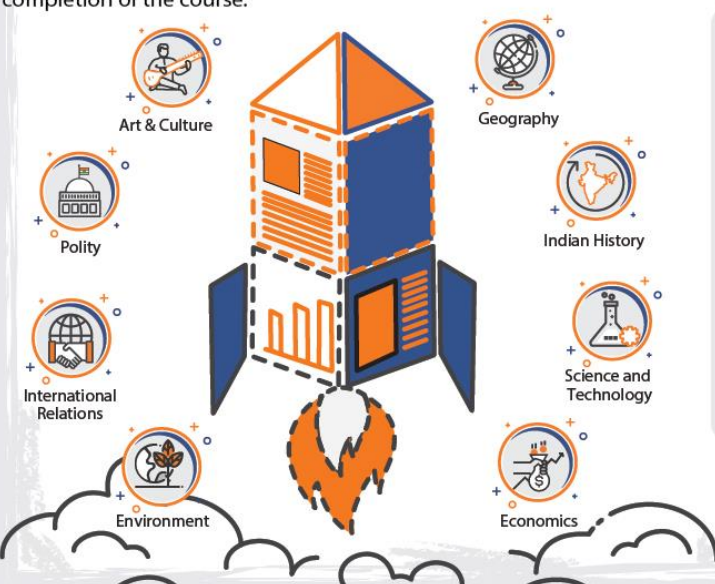
FAST TRACK COURSE 2021

GENERAL STUDIES PRELIMS







PURPOSE OF THIS COURSE

The GS Prelims Course is designed to help aspirants prepare for & increase their score in General Studies Paper I. It will not only include discussion of the entire GS Paper I Prelims syllabus but also that of previous years' UPSC papers along with practice & discussion of Vision IAS classroom tests. Our goal is that the aspirants become better test takers and can see a visible improvement in their Prelims score on completion of the course.



INCLUDES

-  Access to recorded live classes at your personal student platform.
-  Comprehensive, relevant & updated Soft Copy of the study material for prelims syllabus.
-  Access to PT 365 classes
-  Sectional mini test and Comprehensive Current Affairs.

COURSE BEGINS	TOTAL NO OF CLASSES
Admission Open	60

7. SCIENCE AND TECHNOLOGY

7.1. SPACE TOURISM

Why in news?

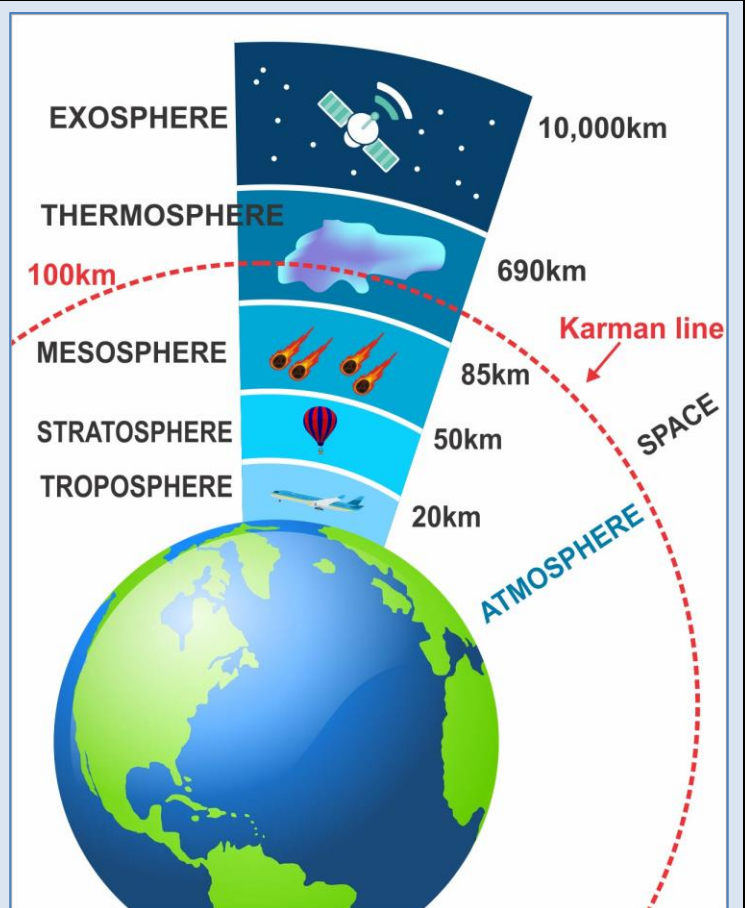
Several private companies are developing plans to take paying customers to space on a regular basis leading to a rapid growth in space tourism industry.

About Space Tourism

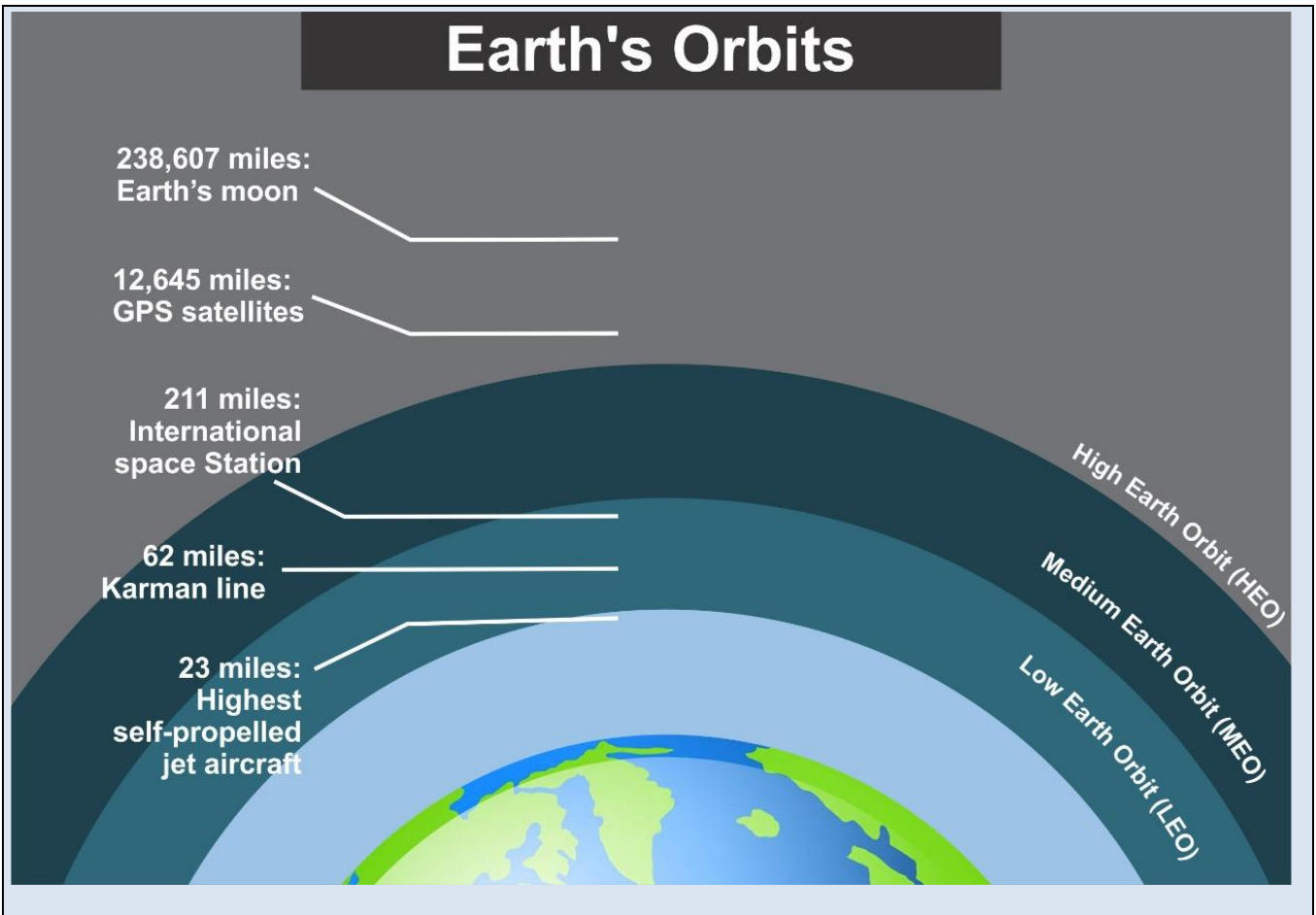
- Space tourism is **space travel for recreational, leisure or business purposes**. There are several different types of space tourism, including orbital, suborbital and lunar space tourism.
 - To date, orbital space tourism has been performed only by the Russian Aviation and Space Agency known as the Roscosmos State Corporation for Space Activities or Roscosmos.
 - Several private spaceflight companies are now working towards developing suborbital space tourism vehicles to take paying customers to space (*Refer infographic*).

What do we call space and space travel?

- According to the **Fédération Aéronautique Internationale** (world governing body for aeronautic and astronautic records), space starts at an altitude of 100 km (62 miles) above the surface of the earth.
 - This is the **Karman line** where atmospheric lift no longer supports a flying object and the object would need to reach orbital velocity or risk falling back to Earth.
- **Space travel** is referred to as any flight operation that takes one or more passengers beyond the altitude of 100 km and thus into space.
- The main **difference between orbital and suborbital flight** is the speed at which a vehicle is traveling.
 - An **orbital spacecraft must achieve orbital velocity** i.e. the speed that an object must maintain to remain in orbit around a planet. To orbit 125 miles (200 kilometers) above Earth for instance, a spacecraft must travel at a screaming 17,400 mph (28,000 km/h).
 - **Suborbital flight, in contrast, requires much lower speeds** and doesn't have the power to achieve orbit. Instead, it will fly up to a certain height that depends on its speed, and then come back down once its engines are shut off.
 - At the top of their flight arc in a suborbital flight, when the object is falling back toward Earth, passengers achieve a few minutes of weightlessness under zero gravity.



Earth's Orbits



Key market drivers for space tourism

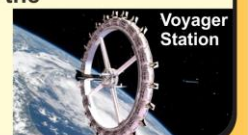
- The space tourism market is forecast to reach \$1.3bn by 2025, growing at a CAGR 12.4% during forecast period, 2020-2025. Major factors accounting for the same are:
 - **Decline in the cost of space tourism:** The total cost of a trip into space has reduced significantly from the initial price level of about \$600 000 to \$250,000 estimated to decline further to \$2000 per kilogram over coming years.
 - **Technological advancements:** such as development of suborbital **reusable launch vehicles** that is also the key to Lowering Spaceflight Costs. Companies such as Virgin Galactic and Blue Origin are testing suborbital flights that can carry space tourists and researchers at altitudes between 50 and 68 miles.
 - **International Interest in Space Tourism:** While the bulk of space tourism industry activities is centered in the United States, several countries are looking to tap into the market.
 - **Development of space accommodations:** In June 2019, NASA announced plans to allow private citizens to fly to the ISS with stay for short visits. Many private entities are also developing hotels in space for tourists' stay.
 - ✓ For instance, Orion Span has announced a plan to build world's first luxury hotel in space **Aurora Station** to be built by 2021.

DID YOU KNOW?



Aurora Station, developed by Orion Span, will orbit its guests around the globe 16 times each day. It means that every 90 minutes lucky travellers will experience a sunrise and a sunset.

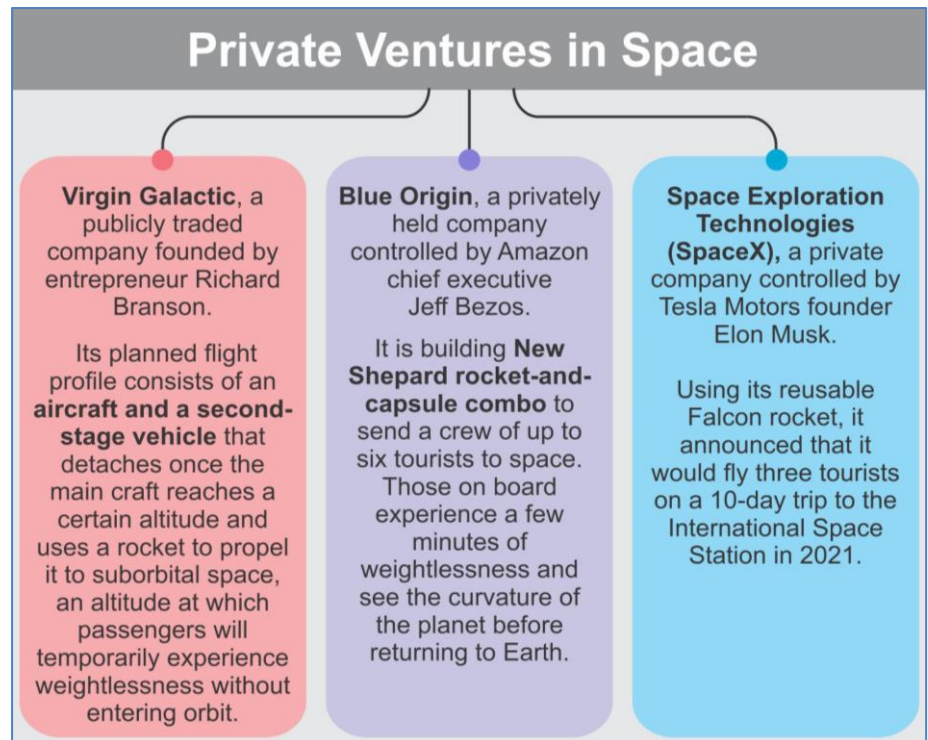
Similarly, Orbital Assembly Corporation, run by former pilot John Blincow, is planning to open a luxury space hotel Voyager Station by 2027 that would accommodate 280 guests and 112 crew members while aiming to be the first commercial space hotel, upon completion.



Issues with respect to emerging space tourism industry

Space tourism is a unique venture, and thus, the legality of activities around the proliferation of individuals in space for recreation is yet to be formulated. The current treaties relating to space are extremely outdated and fail to copiously deal with the legal challenges imposed by the space tourism industry. Various issues that arise are:

- Unclear status of Space tourist:** No international space law has defined space tourists. Existing space treaties such as Outer Space Treaty, Rescue Agreement etc. are only applicable to astronauts, envoys of mankind, or personnel of a spacecraft. Since recreational space tourists do not fall in the realm of the treaties, they are not rendered with these rights and states have no obligation to assist them.
- Authorization issues:** To send a vehicle to space, it is compulsory for the national and international space law to authorize it according to Article VI of the Outer Space Treaty. However, the national and international legislations and regulations are reticent on the subject of authorization of space travel with tourists aboard.
- Passenger Liability:** International treaties and conventions are aimed at regulating the signatory states and are bereft of the provisions to handle the liability of private entities in space. For instance, according to Article VII of the Montreal convention, the international liability for any damage incurred by a space object is imposed on the launching State, regardless of the space object being a public or a private entity.
- Space insurance:** It is an excruciatingly technical issue and requires expert knowledge of the launch vehicles, satellites, and other issues. However, the current regime for space insurance provides the insurance covers merely for the astronauts and personnel of a spacecraft and does not include any provisions of passenger liability for space tourists.
- Environment impact:** Although the carbon dioxide emissions from space-flights are negligible compared to other human activities or commercial aviation, there is a potential for longer term harm of the carbon emissions from the spacecrafts particularly to the ozone layer.
- Ethical issues:** Many health risks associated with space flight are still not well understood, and very little research has been done on medical consequences of such flights on the health of participants. National Aeronautics and Space Administration (NASA) recommended medical screening standards for tourist space flight participants in 2012, but these guidelines are not binding on companies that provide launch or accommodation for space travelers.



India's venture into space tourism

- The Indian Space Research Organization's **Gaganyaan mission** (primary manned mission to space) has the potential to grease the wheels for India to enter the space tourism market and open the avenues for mammoth commercial opportunities.
- India's endeavour with space tourism would have **numerous positive effects**, including the creation of employment and sizeable revenues and investments.
- However, where India is excelling at technology and low costs, it **lags behind with respect to the express laws and legislations** to govern outer space activities including space tourism.

Way ahead

- With the space tourism industry inching closer to launch every day, there emerges a dire need to formulate laws and legislations that shall regulate issues of space tourism including the regulation of private players.
- The role of the government includes a legal responsibility to authorize and supervise private activities in space, while ensuring that it gives the private sector enough levy to develop technologically and commercially and enhance their growth.

For more details on Space Explorations, Space treaties for regulation of space activities and other related issues, kindly refer to our Weekly Focus document "Space Exploration: Changing Dynamics and Pathway to the Future".



Space Exploration: Changing Dynamics and Pathway to the Future

Space exploration has played an important role for countries with regard to their economies and security. With the sector experiencing substantial growth, the need for collaboration in the sector has also increased. India being an emerging power in the sector can play a vital role in creating and enabling space collaboration.



7.2. BIOTECH-PRIDE GUIDELINES

Why in news?

“Biotech-PRIDE (Promotion of Research and Innovation through Data Exchange) Guidelines” developed by Department of Biotechnology (DBT), Ministry of Science and Technology were released recently.

About Guidelines

- Biotech-PRIDE guidelines have been formulated in conformity with the principles of **NDSAP (National Data Sharing and Accessibility Policy) 2012**, for enabling the **sharing, access and storage** of biological data.
 - At present, in India the biological data is deposited in International Repositories **and there are no guidelines** for sharing it.
- Under the guidelines, it is the **responsibility of the data-generator/ producer/submitter to deposit data** in an appropriate database in the notified Data Repository.
- Data withdrawal may be granted** if the individual or the organization, whose data have been placed on a publicly accessible database, make a **justified request either directly or through the submitter**, with valid claims to the data.
- These Guidelines will be implemented through **Indian Biological Data Centre (IBDC)** at Regional Center for Biotechnology supported by Department of Biotechnology. Other datasets/ data centres will be bridged to the IBDC which will be called **Bio-Grid**.
 - The Bio-Grid will be a **National Repository for all biological knowledge, information and data** generated through research within the country and will be responsible for:
 - ✓ **Enabling its exchange** to facilitate the Research and Innovation,
 - ✓ Developing measures for **safety, standards and quality for datasets** and
 - ✓ Establishing **detailed modalities** for accessing data.

Biological data

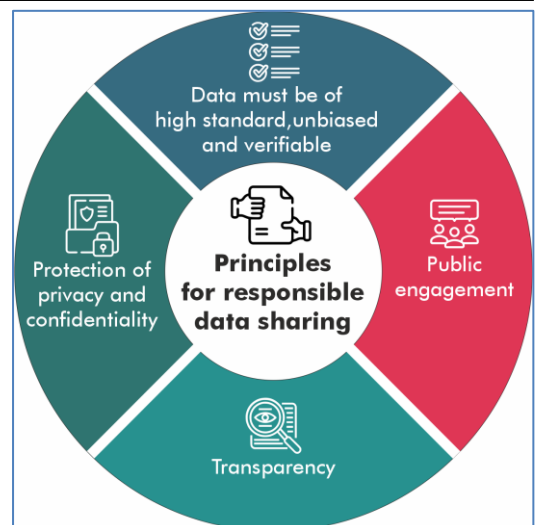
Term biological data includes, inter alia, DNA sequence data, RNA sequence transcriptomic data, Genotype data, Epigenomic data and protein structure data.

Characteristics of Biological Data

- It is **highly complex** when compared with most other applications.
- The amount and range of **variability** in data is high.

Benefits of sharing data

- Optimal usage of resources:** Generation of data entails **large amount of public funds** apart from significant time and other resources. Thus, sharing will help in obtaining **maximal benefits from investment** made in generating data. It will also **prevent duplicate efforts**.
- Opens new avenues for research**
- Reduces unintentional errors:** When preparing the data for sharing, **providing detailed documentation** will eliminate **guesswork, lost details, and maintain tacit knowledge** that might otherwise remain unrecorded.
- Ease in Finding:** **Posting data on public repositories** with links to the publication and links to data deposited ensures **findability of data**.
- Social Benefits:** It will enable understanding of **molecular and biological processes** that will contribute to areas like agriculture, animal husbandry etc.
- Data sharing is imperative to **ensure transparency and reproducibility of data**.



- The modalities for data sharing shall be managed by IBDC under **three categories** as follows:
 - **Open access:** Open access data are those which are **intended to be shared openly** by the data provider. All data, under 'open access' category, generated from public-funded research will be available to everyone (larger scientific community and public) under **FAIR (findable, accessible, interoperable and reusable) principles**.
 - **Managed access:** Managed access data are those which are **shared with specific restrictions** imposed by the data producer/generator/submitter. In case of data generated using public funds, restrictions to access and use of such data are to be **established by the funding agency** before its deposition.
 - **No access:** Access to '**sensitive data**' shall **not be permitted**, even if generated using public funds.

7.3. NUCLEIC ACID VACCINES

Why in News?

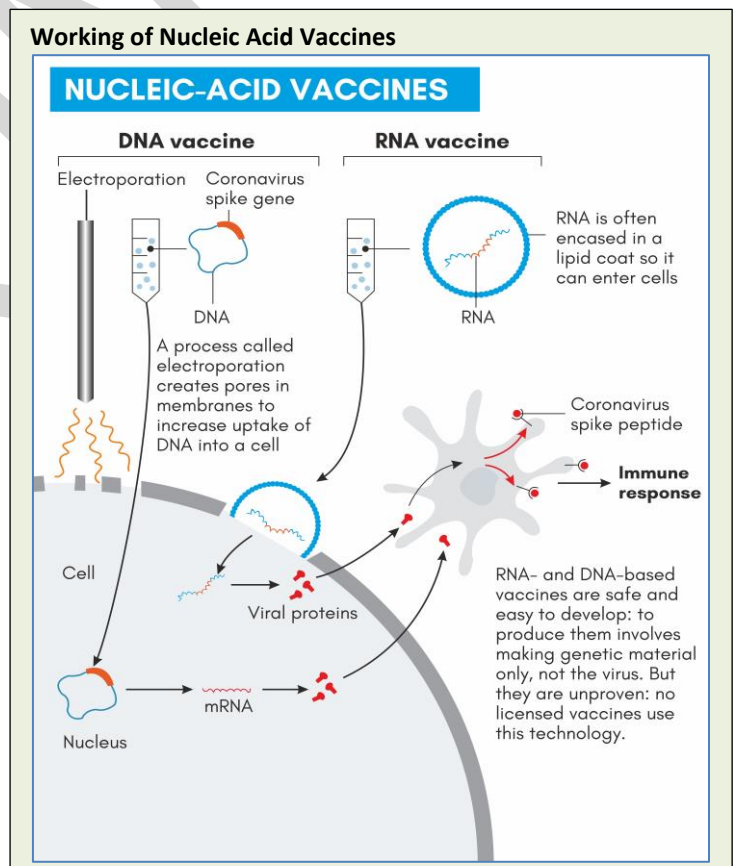
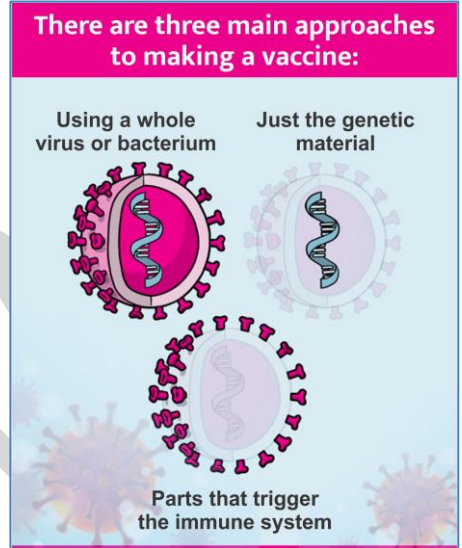
Recently, Zydus Cadilla, a pharmaceutical company, has approached Drug Controller General of India for **restricted emergency approval for ZyCoV-D, its plasmid DNA vaccine against COVID-19.**

More on News

- If approved for use, this **would be the world's first DNA vaccine against COVID-19.**
- Both **DNA and RNA are types of Nucleic acid vaccines** (also known as gene-based vaccines).

About Nucleic Acid vaccines

- Instead of injecting a weakened form of a virus or bacteria into the body, Nucleic acid vaccines **use genetic material from a disease-causing virus or bacterium (a pathogen) to stimulate an immune response** against it.
 - That **immune response, which produces antibodies**, is what protects us from getting infected if the real virus enters our bodies.
- Depending on the vaccine, the **genetic material could be DNA or RNA.**
 - DNA and RNA are the instructions our cells use to make proteins. In our cells, DNA is first turned into messenger RNA (mRNA), which is then used as the blueprint to make specific proteins.
 - **mRNA teaches cells how to make a protein** that triggers an immune response inside human bodies.
- In the case of DNA vaccines, **a piece of DNA encoding the antigen is first inserted into a bacterial plasmid.**
 - A plasmid is a small, **often circular DNA molecule** found in bacteria and other cells. They generally carry only a small number of genes, notably some associated with antibiotic resistance.
- DNA plasmids carrying the **antigen are usually injected into the muscle and then driven into cells** with the help of technologies like electroporation (short pulses of electric current are used to create temporary pores in patients' cell membranes).
- **RNA vaccines encode the antigen of interest in mRNA.**






- The RNA can be injected by itself, encapsulated within nanoparticles (as Pfizer’s mRNA-based Covid vaccine is), or driven into cells using some of the same techniques being developed for DNA vaccines.
- Unlike mRNA vaccines, DNA based vaccines do not require ultra-cold storage systems and are said to be more cost effective.

Advantages of Nucleic acid vaccines

- **Safe and non-infectious** as they are not made with pathogen particles or inactivated pathogen.
- **Can generate a stronger type of immunity** and are well tolerated as compared to traditional vaccines.
- **Can be produced more rapidly** as they do not require a host for growth, e.g., eggs or bacteria.

Other approaches to make a Vaccine		
Whole-microbe approach	<ul style="list-style-type: none"> • Inactivated vaccine by taking the disease-carrying virus or bacterium, or one very similar to it, and inactivating or killing it using chemicals, heat, or radiation. 	<ul style="list-style-type: none"> • This is the way the flu and polio vaccines are made – and vaccines can be manufactured on a reasonable scale. • Requires special laboratory facilities to grow the virus or bacterium safely, can have a relatively long production time, and will likely require two or three doses to be administered
	<ul style="list-style-type: none"> • Live-attenuated vaccine uses a living but weakened version of the virus or one that’s very similar. 	<ul style="list-style-type: none"> • Examples are measles, mumps and rubella (MMR) vaccine and the chickenpox and shingles vaccine. • Vaccines like this may not be suitable for people with compromised immune systems.
	<ul style="list-style-type: none"> • Viral vector vaccine uses a safe virus to deliver specific sub-parts – called proteins – of the germ of interest so that it can trigger an immune response without causing disease. 	<ul style="list-style-type: none"> • Ebola vaccine is a viral vector vaccine and this type can be developed rapidly.
Subunit approach	<ul style="list-style-type: none"> • Only uses the very specific parts (the subunits) of a virus or bacterium that the immune system needs to recognize. <ul style="list-style-type: none"> ○ The subunits may be proteins or sugars. 	<ul style="list-style-type: none"> • Most of the vaccines on the childhood schedule are subunit vaccines, protecting people from diseases such as whooping cough, tetanus, diphtheria and meningococcal meningitis.


 SMART QUIZ	<p>You can scan this QR code to practice the Smart Quiz of Science & Technology at our open test online platform for testing your understanding and recalling of the concepts.</p>	
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8. CULTURE

8.1. WORLD HERITAGE TAG

Why in News?

Recently, Kakatiya Rudreswara Temple (also known as the Ramappa Temple) and Dholavira have been inscribed on UNESCO's World Heritage list.

More on News

- With the addition of these two sites, **India now has 40 sites in the UNESCO's World Heritage list** (32 cultural, seven natural and one mixed).
- Dholavira is the first site of the ancient Indus Valley Civilisation (IVC) in India to get the tag.



What UNESCO tag means for these sites?

- It will galvanise national and international tourism not only to these sites but also to other historical sites in these states.
- A higher number of tourists automatically translates into better amenities and more money for the community where the heritage site is located.
- Once a site is inscribed on the World Heritage List, the resulting prestige often helps raise awareness among citizens and governments for heritage preservation.
- A country may also receive financial assistance and expert advice from the World Heritage Committee to support activities for the preservation of its sites.
- The inscribed site also gains protection under Geneva Convention against destruction during war.

Related News

- Recently, **UNESCO's 'Historic Urban Landscape Project (HULP)', for Gwalior and Orchha cities** (Madhya Pradesh) was launched.
- **Gwalior** was established in 9th century and ruled by **Gurjar Pratihar Rajvansh, Tomar, Baghel Kachvaho and Scindias**.
 - **Gwalior is known for its palaces and temples**, including Sas Bahu Temple.
- **Orchha is in the Bundelkhand region of MP** and was the 16th century capital of the erstwhile Bundela dynasty.
 - The famous spots in the town are **Raj Mahal, Jehangir Mahal, Ramraja Temple, Rai Praveen Mahal, and Laxminarayan Mandir**.
- HULP was started in 2011 as an approach for the **management of heritage resources in dynamic and constantly changing environments**.
 - It is based on the recognition and identification of a **layering and interconnection of natural and cultural, tangible and intangible, international and local values** present in any city.
- **Significance of HULP**
 - It aims to **enhance and integrate the urban heritage** of the cities, especially in the context of the Smart City initiative.
 - **Chemical treatment of historic spots will be done** so that art inscribed on them will become more visible.
 - **UNESCO will suggest best measures and resources** for the development of these places.
 - **Extensive survey work and mapping of the urban characteristics** of the historical cities will be carried out.

Related News

- Recently, **Liverpool (UK) was removed from the World Heritage List**.
 - Decision was taken citing **concerns about overdevelopment** including plans for a new football stadium.
- Liverpool was **added to World Heritage List in 2004** in recognition of its role as one of the world's major trading centres in the 18th and 19th centuries – and its pioneering dock technology, transport systems and port management.
- It is **only the third location to lose its World Heritage status**. **Arabian Oryx Sanctuary in Oman (2007)** and **Elbe Valley in Dresden, Germany (2009)** are the other two sites.

8.1.1. RUDRESHWARA TEMPLE

Rudreshwara Temple, at Palampet, Mulugu district, near Warangal in Telangana, is a masterpiece of **Kakatiyan style of Temple architecture** with the use of engineering innovation by creating **floating bricks, sand-box foundations, material selection knowledge** and ingenuity in stone sculpting as technological ensemble.

- Its **construction started in 1213 AD during the reign of Recherla Rudra**, a general of Kakatiya king Ganapati Deva.
 - It has been **built over 40 years by sculptor Ramappa**.
- It is a sandstone temple **dedicated to Ramalingeswara Swamy (Shiva)**. Ramappa is the main Shiva temple in a larger walled temple complex, which includes several smaller temples and structures.



About sand-box technique

- Using this technology, a **certain area is dug up, filled with sand, and then the structure is constructed** on top of it.
- Structures built on these 'sandboxes' have a robust foundation as the **seismic waves generated due to earthquakes are absorbed by the sand**.

- It is close to the shores of the Ramappa Cheruvu, a Kakatiya-built water reservoir.
- The temple building stands on a **6 feet high star-shaped platform** with intricate carvings on beams and pillars of carved granite and dolerite.
 - It includes **pyramidal Vimana** (horizontally stepped tower) made of lightweight porous bricks, so-called **'floating bricks'**, which reduced the weight of the roof structures.
 - ✓ Bricks were made of **clay mixed with acacia wood, chaff, and myrobalan** (a tree), making it sponge-like and allowing it to float on water.
 - The chamber of the temple is **crowned by a 'shikharam' and surrounded by 'pradakshinapatha'**.
- There is high artistic quality **illustration of regional dance customs and Kakatiyan culture** on walls, pillars, and ceilings.
- Famous Italian merchant and explorer Marco Polo had remarked that temple was **"brightest star in the galaxy of medieval temples of the Deccan"**.

About Marco Polo (1254-1324)

- He was a **Venetian merchant** believed to have journeyed across Asia at the height of the Mongol Empire.
- He **served the Mongol ruler Kublai Khan**, who sent him on special missions to places like Burma and India.
- In India, **Marco Polo stopped by in both Tamil Nadu and Kerala (1289-1293)**.
 - During his time in India, he witnessed people wearing fewer clothes, King wearing large amount of jewellery, people fondness with paan and wrote about Jain monk's simple lifestyle.
 - Marco Polo **praised Rudrama Devi's rule**.
- He also **wrote The Travels of Marco Polo** with the help of notes taken during his adventures.

About Kakatiyas (1123–1323 CE)

- Kakatiyas were the **political successors of the Kalyana Chalukyas** (Kannada speaking region) in the Telugu speaking region ruled by the Chalukyas.
 - The Kakatiyas, along with the Hoysalas and Yadavas had **announced themselves as rulers independent of the Chalukyas**.
- Kakatiya **ruled most of eastern Deccan region** comprising present day Telangana and Andhra Pradesh, and parts of eastern Karnataka and southern Odisha.
 - Their **capital was Orugallu, now known as Warangal**.
- **Important rulers of Kakatiya dynasty**
 - **Prolla II**: He was the first independent ruler of Kakatiya dynasty.
 - **Rudradeva (1163-1195)**: His exploits are described in his famous inscription in the Rudresvara temple at Anumakonda. From this inscription it is evident that he had defeated a large number of Chalukyan feudatories round his kingdom.
 - ✓ Rudradeva was succeeded by his brother **Mahadeva (1195–1198)**, and Mahadeva by his son **Ganapati (1199–1261)**.
 - Ganapati had no sons and **was succeeded by Rudrama Devi, one of the few queens in Indian history**. She was able to repulse the Pandyas of southern Tamil Nadu, Eastern Gangas of Orissa, and Seunas of Devagiri.
- In 1303, **Alauddin Khilji invaded the Kakatiya territory** which ended up as a disaster for him.

Contribution of Kakatiyas to art, architecture and literature

- Kakatiyas have carried forward the **stellate temple form and adopted the Vesara style of Vimana from the Chalukyas** and have very well adapted it to the cultural geography of Telangana.
 - The **use of simple material like sand in the construction of foundation** of a lofty temple making it an earthquake resistant structure is a masterpiece of the creative effort of the Kakatiyas in the field of construction and geo-technology.
 - The distinct style of Kakatiyas for the gateways to temple complexes, unique only to this region confirms the highly evolved proportions of aesthetics in temple and town gateways in South India.
- **Well planned irrigation systems** - devoid of any perennial water source, stand as characteristic features of Kakatiyan kingdom.
 - Recently, **Telangana Government also started 'Mission Kakatiya'** to restore tanks and irrigation network taking inspiration from Kakatiya Dynasty.
- **Telugu literature reached a level of maturity** in the 14th century during the Kakatiya period.
- **Nritta Ratnavali authored in 1253 A. D.** by Jayasenapati was inspired from the dancing female figures carved in Ramappa Temple.
- The study of Rudreshwara temple's dance sculptures gives an **understanding of the desi dance traditions such as perini, prekhana, gavundali, rasaka, dandarasaka ghatishiri nrttam** performed in the temple and the thrust on desi sthankas, charis and karnanas.

8.1.2. DHOLAVIRA

Dholavira (Occupied between ca. 3000-1500 BCE), the southern centre of the Harappan Civilization, is **sited on the arid island of Khadir (located within Rann of Kachchh)** in Gujarat. It was discovered in 1968 by archaeologist Jagat Pati Joshi.

- At Dholavira an entire sequence spanning the history of Harappan cities, **from early Harappan town / pre-urban phase to the height of the Harappan expansion and the late Harappan is observed.**



<p>About Indus Valley Civilisation (IVC) It is the earliest known urban civilisation of the Indian subcontinent.</p> <ul style="list-style-type: none"> Also called the Harappan culture, named after Harappa, the first site where this unique culture was discovered. It was a Bronze Age Civilization with three distinct phases <ul style="list-style-type: none"> Early Harappan Phase (3300 BCE-2600 BCE), Mature Harappan Phase (2600 BCE-1900 BCE), and Late Harappan Phase (1900 BCE-1300 BCE). Part of four contemporary urban civilizations (along with Egypt, Mesopotamia, and China), IVC people had: <ul style="list-style-type: none"> Know-how on geometric calculations and standards of measurement. A surplus and complex economy with deep trade and commercial links spreading from South India to West Asia. Some major sites of IVC (as shown in the map) 	<p style="text-align: center;">INDIA OUTLINE MAP (POLITICAL) Sites of India Valley Civilization</p>
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Key Features of Dholavira

Town Planning	<ul style="list-style-type: none"> Comprises of two parts: a walled city and a cemetery to the west of the city. <ul style="list-style-type: none"> The walled city consists of a fortified Castle with attached fortified Bailey i.e., outer wall (very similar to the Harappan settlement at Kalibangan) and Ceremonial Ground, and a fortified Middle Town and a Lower Town. A series of reservoirs are found to the east and south of the Citadel. The great majority of the burials in the Cemetery are memorial in nature.
Water Management /Conservation systems	<ul style="list-style-type: none"> Two seasonal streams provided water, a scarce resource in the region, to the walled city. Water diverted from seasonal streams, scanty precipitation and available ground was sourced, stored, in large stone-cut reservoirs which are extant along the eastern and southern fortification. To further access water, few rock-cut wells are evident in different parts of the city.
Artistic and Technological advancement	<ul style="list-style-type: none"> Bead processing workshops and artifacts of various kinds such as copper, shell, stone, jewellery of semi-precious stones, terracotta, gold, ivory and other materials have been found. Design, execution, harnessing of local materials in an effective manner.
Strategic location	<ul style="list-style-type: none"> Location in the island of Khadir was strategic to: <ul style="list-style-type: none"> Harness different mineral and raw material sources (copper, shell, agate-carnelian, steatite, lead, banded limestone, among others). Facilitate internal as well as external trade to the Magan (modern Oman peninsula) and Mesopotamian regions.
Other Features	<ul style="list-style-type: none"> Settlements like Surkotada, Juni Kuran in Gujarat indicates considerable inspiration drawn from Dholavira.

- **A stratified social order is demonstrated** by heavily fortified castle and ceremonial ground as well as streets and houses of different proportion quality.
- **Walls were made of sandstone or limestone** instead of mud bricks used in many other Harappan sites.
- **Some unique features of Dholavira include:** a cascading series of water reservoirs, outer fortification, two multi-purpose grounds, nine gates with unique designs, and funerary architecture featuring tumulus — hemispherical structures like the Buddhist Stupas.



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9. ETHICS

9.1. ETHICS: A SOLUTION TO CORRUPTION?

Introduction

'Transparency International's Corruption Perception Index falls short of nudging govts to undertake reforms', 'Prevention of Corruption Act has failed to achieve its objectives' and 'Corruption in FCI may spiral out of control'.

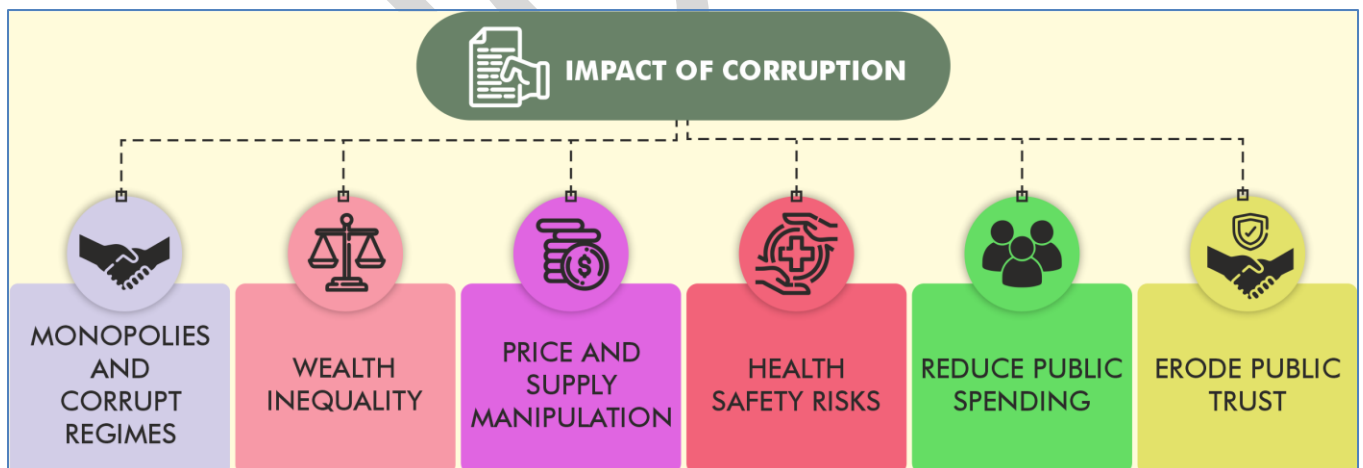
These newspaper headlines indicate that the prevalent efforts to eliminate corruption are not working as expected. That begs a question- 'Then what works?' Before we delve upon the solution, it is pertinent to understand the problem better.

What is corruption and why it happens?

In the simplest of terms, Corruption can be defined as an act of dishonesty, or an illegal behavior aimed for one's private gains. Such behavior may include **bribery** – the use of reward to pervert the judgment of a person in a position of trust; **nepotism** – bestowal of patronage by reason of ascriptive relationship rather than merit; **misappropriation** – illegal appropriation of public resources for private use.

But what is the motivation behind this action? Corruption is not an intrinsic need of the individual but is a means to an end. Following can be cited as key motivations which are the root of corruption-

- **Materialistic Value System:** The primary motive for corruption in majority of the cases is wealth accumulation which in turn translates to material possessions and societal status. Thus, having a materialistic value system which prioritizes consumption over values like honesty, equality and brotherhood justifies undertaking corrupt acts at the cost of society.
- **Individualistic Worldview:** Globally, the worldview is getting more and more individualistic. In such a scenario, the moral compass of the individual tends to get selfish and lacks the requisite empathy which is essential for co-existence. This narrow worldview indirectly justifies corruption as it maximizes the gain that can be extracted by the individual.
- **Context created by the socio-economic situation:** The socio-economic context created by the economies which suffers from ills like poverty, discrimination and inequality also indirectly breed corruption.



How can ethics act as an anti-corruption force?

Eliminating deep rooted corruption in the society translates to transforming narrow values and worldview of the individuals and the institutions. This can be done by inculcating or preaching following values within the individuals-

- **Truth and honesty:** Prevalence of honesty within the individual creates a natural guilt if s/he undertakes an illegal or corrupt act. For example, it would be very difficult for an honest person to take a bribe for executing an illegal act.

- **Penchant for justice:** An individual who preaches justice would not be interested in undertaking corrupt acts as these acts would be behest with injustice upon some or the other entity. For example, a just person would not do misappropriation as it would amount to injustice with the organization s/he is working for.
- **Sense of responsibility:** Having a sense of responsibility implies that the individual feels a sense of ownership towards the overall system, and s/he would refrain from harming their own system through acts of corruption. For example, an individual who feels that s/he is responsible towards the nation would refrain from evading taxes.
- **Feeling of altruism:** Altruism encourages acts of kindness and is driven by a sense of empathy towards fellow individuals. Such a value system runs directly counter to the individual worldview which is one of the major drivers of corruption within individuals.

What can be done to inculcate these ethical values for the elimination of corruption?

Inculcation of these values would require efforts on all entities which act as determinants of ethics within the individual (including family, schools, colleges, institutions among others).

- **Strengthening family as a repository of values:** This can be done by praising and encouraging family values which align with aforementioned values. For example, providing social recognition to families whose children showcase such values.
- **Making it a part of education:** Ethical conduct could be made part of the syllabus and the school conduct. This will shape the young minds towards more ethical human beings. For example, students can be encouraged to take up societal responsibilities to inculcate in them a sense of responsibility.
- **Institutions as active sources of these values:** The institutions, especially the government institutions whose culture can be molded at executive will, can act as a source of these values via their internal culture. For example, transparency in the functioning of the municipal bodies can encourage the culture of transparency in their area.
- **Making legal framework more supportive towards aforementioned values:** Law are a representation of a collective value system of the society. Laws which encourage these values would foster these values in the long-term. For example, the Good Samaritan law encourages altruistic acts from the individual in times of emergency.

Despite the effectiveness of the value systems, there are some limitations to the ethical approach to elimination of corruption.

What are the limitations of the ethical approach?

- **Absence of deterrence:** The ethical approach is subjective in nature, and it is extremely difficult to devise a punishment for the corrupt acts or a deterrence mechanism.
- **Unethical behavior reaps more rewards:** The ethical approach is voluntary. As a result, the entities which exhibit unethical behavior extract more rewards through corrupt acts. This discourages ethical behavior in the long run.
- **Changing the societal culture and individual behavior takes time:** The value system within a society changes gradually. Therefore, up till a point where these values take significant hold in the society, we would have to bear the ill-effects of corrupt practices.

Conclusion

The success of an ethics-based approach to anti-corruption is hinged upon the level of penetration of the desired values within the society. Inculcation of these values needs to be accompanied with alteration in the socio-economic-legal context where these values are cherished and creation of a well-functioning deterrence mechanism which acts as our last line of defence against corruption.

10. GOVERNMENT SCHEMES IN NEWS

10.1. PRADHAN MANTRI KISAN URJA SURAKSHA EVAM UTTAN MAHABHIYAN (KUSUM) SCHEME

Why in news?

Recently, to sensitize the farmers and the public about the PM-KUSUM scheme, an awareness camp was organized in different parts of country.

Objectives	Salient Features
<ul style="list-style-type: none"> • To provide financial and water security to farmers. <ul style="list-style-type: none"> ○ The goal was to de-dieselise the farm sector by replacing diesel pumps with so-larised ones. ○ It would also reduce the burden on state-owned discoms that have to supply subsidised electricity to the agriculture sector. • The Budget 2020-21 has also sought to expand the coverage: <ul style="list-style-type: none"> ○ Scheme to enable farmers to set up solar power generation capacity on their fallow/barren lands and to sell it to the grid. ○ 20 lakh farmers to be provided for setting up stand-alone solar pumps. ○ Another 15 lakh farmers to be helped to solarise their grid connected pump sets. 	<ul style="list-style-type: none"> • It was launched in 2018 by Ministry of New and Renewable Energy. • It aims to add a solar capacity of 30.8 gigawatt (GW) by 2022 (original target was 25.7 GW). <div data-bbox="579 607 1377 1155" style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p style="text-align: center; background-color: red; color: white; padding: 5px;">Components of Scheme</p> <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px dashed black; padding: 5px; width: 30%; text-align: center;"> <p>Component A</p> <p>10,000 MW of Decentralized Ground Mounted Grid Connected Renewable Power Plants.</p> </div> <div style="border: 1px dashed black; padding: 5px; width: 30%; text-align: center;"> <p>Component B</p> <p>Installation of Standalone Solar Powered Agriculture pumps</p> </div> <div style="border: 1px dashed black; padding: 5px; width: 30%; text-align: center;"> <p>Component C</p> <p>Solarisation of grid connected Agriculture Pumps</p> </div> </div> </div> <p>Support for various components:</p> <ul style="list-style-type: none"> • Component-A: Renewable power plants of capacity 500 KW to 2 MW will be setup by individual farmers/ cooperatives/panchayats /farmer producer organisations (FPO), on their barren or cultivable lands or pastureland and marshy land, referred as Renewable Power Generator (RPG). <ul style="list-style-type: none"> ○ no penalty to RPG for shortfall in solar power generation from minimum prescribed Capacity Utilization Factor (CUF) ○ Projects smaller than 500 kW may be allowed (earlier not allowed) by states based on techno-commercial feasibility. ○ The power generated will be purchased by the DISCOMs at Feed in tariffs determined by respective SERC. ○ Performance Based Incentives @ Rs. 0.40 per unit for five years to be provided to DISCOMs. • Component-B: Individual farmers will be supported to install standalone solar pumps of capacity up to 7.5 Horsepower (HP). <ul style="list-style-type: none"> ○ It will be mandatory to use indigenously manufactured solar panels with indigenous solar cells and modules. ○ Centre and state to share 30% of pump cost each; farmer to provide the remaining 40% (can access bank loan for up to 30% of the cost). ○ In Northeastern States, Sikkim, J&K, Himachal, Uttarakhand, Lakshadweep and A&N Islands, Central Financial Assistance of 50%, State Government subsidy 30%, remaining 20% by the farmer. ○ It will be mandatory to use indigenously manufactured solar panels with indigenous solar cells and modules. <ul style="list-style-type: none"> ✓ To remove delay in installation services, ministry has allowed joint venture of manufacturer of solar pump/solar panel/solar pump controller with integrators. • Component-C: Individual farmers will be supported to solarise pumps of capacity up to 7.5 HP.

- **MNRE will retain 33% of eligible service charges** for nationwide Information, Education and Communication (IEC) activities.

Recent changes

- The target of the scheme has been enhanced and the **component C has been restructured to shift focus to solarise agricultural feeders** instead of pumps.
 - Until now farmers were provided with **60% financial assistance (equally shared between Centre and State)** for solarising their agricultural pumps which meant 40% had to be borne by the farmers themselves.
 - Centre will now bear **30% of the cost of building a small solar plant to supply electricity to the feeder** and the balance 70% would be borne by **State-owned DISCOMs**.
 - This would **obviate need for farmers to replace every existing pump** in a village with a solar pump.

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11. NEWS IN SHORTS

11.1. WEST BENGAL ASSEMBLY PASSES RESOLUTION TO SET UP LEGISLATIVE COUNCIL

- Legislative Council (LC) is the upper house in the state and like the Rajya Sabha, it is a permanent House.
 - The members of the Council are **either nominated by the Governor of the state or are indirectly elected.**
 - **Tenure of the members of the council is six years**, and a third of the members of the House retire after every two years.
 - **Eligibility criteria:** Indian citizen who is at least 30 years of age; a person cannot simultaneously be a Member of Parliament and State legislature.
- **Article 169 of the Constitution** empowers the Legislative Assembly to create or abolish a Legislative Council by passing a resolution.
 - Also under **Article 171**, LC cannot have more than one-third of the number of MLAs in the state, and not less than 40 members. (Total number of members in LC of a State shall not exceed one-third of the total number of members in the Legislative Assembly of that State, provided that total number of members in LC shall in no case be less than forty.)
 - The resolution has to be **passed by two-thirds of the Assembly members.**
 - **Then a Bill to this effect has to be passed by Parliament.**
- At present **six states** namely Bihar, Uttar Pradesh, Maharashtra, Andhra Pradesh, Telangana and Karnataka have a Legislative Council.
- **Composition of LC**
 - 1/3rd are elected by the Legislative Assembly.
 - 1/3rd are elected by the local bodies like a municipality or other local authorities.
 - 1/12th are elected by graduates.
 - 1/12th are elected by teachers.
 - 1/6th are nominated by the Governor.

11.2. CABINET APPROVES CONTINUATION OF THREE SCHEMES

Scheme	Objective	Benefits
National Mission for Justice Delivery and Legal Reforms (Extended till March 2026)	<ul style="list-style-type: none"> • A centrally sponsored scheme launched in 1993-94 to augment state resources and develop infrastructural facilities for subordinate judiciary such as, Court buildings, Digital Computer Rooms etc. <ul style="list-style-type: none"> ○ The upgraded “Nyaya Vikas-2.0” web portal and mobile application is used for monitoring physical and financial progress of the scheme. • Cabinet also approved Rs 50 crore for Gram Nyayalayas infrastructure, established under the Gram Nyayalayas Act, 2008 for speedy and easy access to the justice system in the rural areas of India. 	<ul style="list-style-type: none"> • Improve digital capabilities and give impetus to the digitization initiation. • Improve the overall functioning and performance of the Judiciary. • Continued assistance to the Gram Nyayalayas will give impetus to providing speedy, substantial and affordable justice to the common man at his door step.
Rebate of State and Central taxes and Levies (RoSCTL- Extended till March 2024)	<p>Rebate of State Levies (ROSL) was launched in 2016 under which exporters of apparel, garment and made-ups were refunded embedded taxes and levies.</p> <p>In 2019, new scheme named RoSCTL was brought whereby exporters are issued a Duty Credit Scrip for the value of embedded taxes and levies contained in the exported product.</p> <ul style="list-style-type: none"> ○ Exporters can use this scrip to pay basic Customs duty for import of equipment, machinery or any other input. 	<ul style="list-style-type: none"> • Ensure stable and predictable policy regime for next 3 years • Increased export competitiveness against LDC nations or FTAs between nations • promotion of startups and entrepreneurship • Help in Job Creation
National AYUSH Mission (Extended till March 2026)	<p>A centrally sponsored scheme launched in 2014 to-</p> <ul style="list-style-type: none"> • Promote AYUSH medical systems through cost effective AYUSH services, • Strengthen institutional capacities of educational systems, pharmacies, laboratories etc. • Facilitate the enforcement of quality control and sustainable availability of ASU & H raw-materials and drugs. 	<ul style="list-style-type: none"> • Better access to AYUSH healthcare services • Improvement in AYUSH education. • To focus on reducing communicable/non-communicable diseases using AYUSH systems of healthcare.

11.3. INDIA-US RENEW GLOBAL DEVELOPMENT PARTNERSHIP DEAL FOR 5 YEARS

- India and the US renewed a global development partnership agreement that provides for jointly **offering assistance to their partner countries**.
 - Both sides signed amendment to the **Statement of Guiding Principles (SGP) on Triangular Cooperation** for Global Development, extending the **pact's validity up to 2026**.
 - **Feed The Future India Triangular Training Program (FTF ITT) for Africa** is an example of a project under this.
 - The SGP agreement **was initially signed in 2014** and renewed in 2019 till 2021.
- **Triangular cooperation**
 - Triangular cooperation **involves three actors (see infographic), two from the South (Facilitating and Beneficiary partner) and one from the North (pivotal partner)**. The latter can also be an international multilateral organization.
 - The **division of "North" and "South" is used to refer to the social, economic and political differences** that exist between developed countries (North) and developing countries (South).
- **India's other triangular Cooperation examples**
 - **India-Japan Cooperation: Asia-Africa Growth Corridor (AAGC)**.
 - The **India-Triangular** in the form of project called **"Supporting India's Trade Preferences for Africa" (SITA)**, funded by the DFID (UK's Department for International Development).



11.4. 3RD ARCTIC SCIENCE MINISTERIAL

- The 3rd Arctic Science Ministerial (ASM3) meeting was **jointly organised by Iceland and Japan**, for discussing research and cooperation in the Arctic.
- The meeting has been designed to **provide opportunities to various stakeholders**, including academia, indigenous communities, governments and policymakers, to

- Enhance collective understanding of the Arctic region,
- Emphasize and engage in constant monitoring, and
- Strengthen observations.
- The theme for this year was **'Knowledge for a Sustainable Arctic'**.
- The first two meetings—ASM1 and ASM2—were held in the USA in 2016 and Germany in 2018.
- India participated in the meeting and shared its plans to contribute observing systems in the Arctic, **both in-situ and by remote sensing**.
 - India would deploy **open ocean mooring** in the Arctic for **long-term monitoring of upper ocean variables** and **marine meteorological parameters**.
 - India also plans to launch **NISAR (NASA-ISRO Synthetic Aperture Radar) satellite by 2023**, a joint ISRO-NASA mission, for **global observations over all land masses** including Polar cryo-sphere and Indian Ocean region.

11.5. MEKONG-GANGA COOPERATION (MGC)

- India's Foreign Minister during the 11th MGC meeting said that **India is seeking a multi-dimensional engagement with the Mekong region**.
 - India also **called for a "collective and collaborative" response** to effectively deal with **coronavirus pandemic**.
- The MGC initiative comprising **six countries — India, Cambodia, Myanmar, Thailand, Laos and Vietnam —** was launched in **2000** to **boost cooperation** in a range of areas including **connectivity, education, tourism and culture**.



11.6. INDIA COVID 19 EMERGENCY RESPONSE AND HEALTH SYSTEMS PREPAREDNESS PACKAGE: PHASE II

- This new scheme was approved by Union Cabinet at a cost of Rs 23,123 crore for FY 2021-22.

- Phase 1 of the scheme was launched in March 2020 with Rs. 15,000 crore outlay.

- **It has two components:**

Central Sector (CS) components (Funding and execution both borne by Centre)	Centrally Sponsored Schemes (CSS) components (jointly funded by Centre and States but executed by States)
<ul style="list-style-type: none"> ● Support to Central Hospitals for repurposing beds for COVID management. ● National Centre for Disease Control would be strengthened by providing Genome Sequencing machines etc. ● Support for implementation of Hospital Management Information System in all the District Hospitals of the Country. ● Support for expanding National Architecture of eSanjeevani Tele-consultation platform to provide upto 5 lakhs tele-consultations per day (present 50,000 Tele-consultations per day). ● IT interventions, including strengthening COVID-19 Portal etc. 	<ul style="list-style-type: none"> ● Create Paediatric units in all 736 districts and to establish Paediatric Centre of Excellence in each State/UT. ● Creating pre-fabricated structures for adding additional beds at existing CHCs, PHCs and SHCs. ● Install Liquid Medical Oxygen Storage tanks, Augment the existing feet of ambulances, support to districts for essential medicines for COVID-19 management etc. ● Engage Undergraduate and post graduate medical interns and final year students for effective COVID management.

11.7. MODIFICATIONS IN CENTRAL SECTOR SCHEME OF FINANCING FACILITY UNDER AGRICULTURE INFRASTRUCTURE FUND (AIF)

- Launched in 2020 to deal with the Covid crisis, the **AIF scheme for financing** viable projects related to **postharvest management infrastructure and community farming assets.**
 - The duration of the scheme is 10 years.
 - Under the scheme, **Rs. 1 Lakh Crore will be provided by banks and financial institutions as loans with interest subvention of 3% per annum and credit guarantee coverage for loans up to Rs. 2 Crores.**
- Now the government has made the **following modifications**
 - **Inclusion of State agencies/APMCs** (Agricultural Produce Market Committee), National and State Cooperative Federations,

Farmers Producers Organizations (FPOs) and Self Help Groups (SHGs)

- **Extension of the interest subvention scheme and loan guarantee** for each project for a **maximum of 25 such projects, provided they are at different places.**
- **Overall period** of the scheme has been **extended to 13 years** (up to 2032-33)
- **Significance:**
 - APMCs can **strengthen their infrastructure** such as cold storages, processing plants etc.
 - ✓ Also it **allays farmers' fear** that APMC will be scrapped with the implementation of three agriculture laws.
 - SHGs and FPOs will bring **more investment** ensuring that benefits reach small and marginal farmers.

11.8. REAL TIME GROSS SETTLEMENT (RTGS) & NATIONAL ELECTRONIC FUND TRANSFER (NEFT) PAYMENT SYSTEMS OPENED FOR NON-BANKS

- **The Reserve Bank of India (RBI) has allowed Non-Banks** (like Prepaid Payment Instrument issuers, card networks, White label ATM operators) to **participate in its Centralized Payment Systems (CPS).**
 - **CPS** in India comprise of **Real Time Gross Settlement (RTGS)** and **National Electronic Funds Transfer (NEFT)** systems, both **owned and operated by the RBI.**
- Till now, **only Banks were allowed** to use both payment systems.
 - Apart from banks, very **few select non-banks have been approved to participate in CPS**-clearing corporations of stock exchanges, select financial institutions (NABARD, EXIM Bank) etc.
- With it, **Non-Banks will be allotted a separate Indian Financial System Code (IFSC); a current account will be opened with the RBI** in its core banking system (e-Kuber); a **settlement account** maintained with the RBI etc.
- **Advantages for non-banks**
 - Reduction in cost of payments
 - Minimise dependence on banks
 - Reduce time taken for completing payments
 - Facilitate better settlement risk management
 - Ensure expanding access and participation of non-banks, leading to diversity and resiliency of the payments ecosystem etc.

Particulars	NEFT	RTGS
Settlement	Happens in batches. Settlements occur every 30 minutes	Real-time and instantaneous
Transaction limits	Minimum: Rs 1 Maximum: No limit. However, individual banks may set their own limits for each transaction and the amount transacted per day	Minimum: Rs 2 lakh Maximum: No limit
Charges involved	Nil for online transactions. A fee may be charged for NEFT done via bank's branch	Nil for online transactions. A fee may be charged if done via bank's branch
When to use	Transferring small amounts, especially to settle accounts between family and friends	For making instant transfers of high-value amounts. For example: paying a vendor who supplies goods for your business

11.9. RBI ISSUES ADVISORY FOR TRANSITION FROM LIBOR

- Banks and other financial institutions have been asked for transitioning from London Interbank Offered Rate (LIBOR) by December 2021 to any widely accepted alternative reference rate (AAR) like AONIA (Australian Interbank Overnight Cash Rate) and SARON (Swiss Average Rate Overnight).
 - With demise of Libor, the Indian benchmark Mumbai Interbank Forward Outright Rate (MIFOR), which uses Libor as a benchmark, has to be scrapped too by December 2021.
- LIBOR will be **phased out by June 30, 2023**.
- About LIBOR**
 - London Interbank Offered Rate (LIBOR) is a **benchmark interest rate at which major global banks lend to one another** in the international interbank market for short-term loans.

11.10. BHARAT INTERFACE FOR MONEY - UNIFIED PAYMENTS INTERFACE (BHIM-UPI)

- Bhutan has become the first country to adopt India's UPI standards** for its quick response (QR) code.
 - It is also the **second country after Singapore to have BHIM-UPI acceptance at merchant locations**.
- BHIM-UPI is India's **real-time digital payment system** for safe, easy & instant digital payments.

- Developed (in 2016) and operated by NPCI, **BHIM application** (app) powers multiple bank accounts into a **single Virtual Payment Address (UPI ID)** with services like- instant bank-to-bank payments, bill payment, Scan and Pay, Request Money etc. via mobile number or UPI ID only.

11.11. DIGITAL INITIATIVES LAUNCHED

- Matsya Setu App:** Launched by Ministry for Fisheries, Animal Husbandry, and Dairying, it aims to **disseminate latest freshwater aquaculture technologies** to aqua farmers of the country.
- Kisan Sarathi Digital Platform:** It was jointly launched by the **Ministry of Agriculture and Electronics and Information Technology** on the occasion of Indian Council of Agricultural Research (ICAR) Foundation Day.
 - It facilitates farmers to **get right information at right time** in their desired language.
 - Empowers farmers with the technological interventions** and reach farmers in remote areas.
 - Farmers can **avail personalised advisories on agriculture and allied areas** directly from scientists of **KrishiVigyan Kendra** through the digital platform.
 - Highly valuable in **Agricultural Extension, Education and Research activities** of ICAR.

11.12. MINISTRY OF POWER RELEASES 9TH INTEGRATED RATINGS OF STATE POWER DISTRIBUTION UTILITIES

- Ratings have been carried out by ICRA (International Credit Rating Agency) Analytics Limited (IAL) & Care Advisory Research & Training Limited (CART), The Consulting Arms Of ICRA Ratings and Care respectively.
 - It is **aimed at helping banks and financial institutions assess risk** while lending to the distribution utilities.
 - Rankings will **impact their borrowing from the state-owned financial institutions**, including Power Finance Corporation (PFC) and Rural Electrification Corp. Ltd (REC).
- Key findings:**
 - Losses of state-owned electricity distribution companies (DISCOMs) have dropped by more than a third** to Rs.38,000 crore in FY20.
 - Gap between the cost of electricity bought (ACS- average cost of supply) and supplied (ARR- average realizable revenue) has come down.**
 - Five state distribution utilities of **Gujarat(4)** and **Haryana(1)** have **topped the ratings** for

- operational, financial, and regulatory parameters.
- **Atmanirbhar DISCOM package:** Infusion of **liquidity of Rs 90,000** through Power Finance REC and PFC by providing special long term transition loans.
 - **Reforms-based and Results-linked, Revamped Distribution Sector Scheme.**

11.13. NEW BILLS PASSED BY LOKSABHA

<p>Inland Vessels Bill, 2021</p>	<ul style="list-style-type: none"> • It will replace the Inland Vessels Act, 1917 to provide for a uniform regulatory framework for Inland vessel navigation across the country. <ul style="list-style-type: none"> ○ With only 0.5% modal share of Inland waterways transportation in India as compared to 42% in Netherlands, 8.7% in China, the new bill strengthens procedures governing the inland vessels. • Major Provisions <ul style="list-style-type: none"> ○ The Govt will prescribe classification, standards of design, construction and crew accommodation, and type and periodicity of surveys, for mechanically propelled inland vessels. ○ A mandatory certificate of survey, registration and insurance policy for vessels before operation. ○ It will ensure safe carriage of goods and passengers through <ul style="list-style-type: none"> ✓ Navigation safety standards. ✓ Pollution standards on discharge. ✓ Fix manning requirements with inquiry into all accidents. ○ Central Government will maintain electronic database on Inland Vessels. ○ A Development Fund for emergency preparedness, containment of pollution and boosting Inland navigation.
<p>Airport Economic Regulatory Authority of India (Amendment) Bill, 2021</p>	<ul style="list-style-type: none"> • It seeks to amend the Airports Economic Regulatory Authority of India Act, 2008, which established the Airport Economic Regulatory Authority (AERA). <ul style="list-style-type: none"> ○ AERA regulates tariffs and other charges for aeronautical services rendered at major airports in India. • Major provisions <ul style="list-style-type: none"> ○ Extend the definition of "major airports". <ul style="list-style-type: none"> ✓ The government may designate any airport as a major airport by a notification. <ul style="list-style-type: none"> ▪ The 2008 Act designates an airport as a major airport if it has annual passenger traffic of at least 35 lakh. ○ Grouping of airports and notify the group as a major airport. <ul style="list-style-type: none"> ✓ With this, the Bill seeks to group profitable airports with non-profitable ones, which could be offered in public-private partnership(PPP) mode as a package to the prospective bidders.
<p>Factoring Regulation (Amendment) Bill, 2020</p>	<ul style="list-style-type: none"> • The Bill seeks to amend the Factoring Regulation Act, 2011 to widen the scope of entities which can engage in factoring business. <ul style="list-style-type: none"> ○ Factoring is a transaction where a business entity sells its receivables from a customer to a third party which is a "factor" for immediate realisation of funds either in part or in full. ○ The Factoring Regulation Act, 2011 was enacted to provide for regulating the assignment of receivables to factors, registration of factors carrying on factoring business and the rights and obligations of parties to the contract for assignment of receivables. • Key provisions - <ul style="list-style-type: none"> ○ Amends the definition of "receivables", "assignment", and "factoring business" to bring them at par with international definitions. ○ Widen the scope of entities which can engage in factoring business. ○ Empowers the Reserve Bank of India to make regulations with respect to factoring business. • The amendments are expected to help micro, small and medium enterprises (MSMEs) significantly by providing added avenues for getting credit facility, especially through Trade Receivables Discounting System. <ul style="list-style-type: none"> ○ This may result in bringing down the cost of funds and enable greater access to the credit-starved small businesses, ensuring timely payments against their receivables. • It will empower the Reserve Bank of India to make regulations with respect to factoring business.
<p>National Institutes of Food Technology, Entrepreneurship and Management Bill, 2021</p>	<ul style="list-style-type: none"> • Bill declares National Institute of Food Technology Entrepreneurship and Management (NIFTEM)Kundali (Haryana) and Indian Institute of Food Processing Technology (IIFPT) Thanjabur (Tamil Nadu) under the Ministry of Food Processing Industries became Institutions of National Importance (INI). <ul style="list-style-type: none"> ○ INI is defined as one which serves as a pivotal player in developing highly skilled personnel within the specified region of the country/state. ○ For an institute to be declared as an INI, a special Act must be passed in the parliament that

provides the institute with this status.

- ✓ There are also certain criteria that the institutes must meet.
- These institutes will have **curricular provision related to food processing areas e.g. cold chain technology, food bio nanotechnology which can help in filling the technological gap.**

11.14. INDIA TO EXPLORE INDIGENOUS DEPOSITS OF PHOSPHATIC ROCK

- India plans to explore **indigenous deposits of Phosphatic rock and Potash and make it available to indigenous industries to produce DAP** (Diammonium Phosphate) and **SSP** (Single Super Phosphate), **NPK** (Nitrogen, Phosphorous and Potassium) and **MOP** (Muriate of Potash).
 - Rock Phosphate is the **key raw material for DAP and NPK fertilizers.**
- Fertiliser mineral resource deposits are available in Rajasthan, central part of peninsular India, Hirapur (Madhya Pradesh), Lalitpur (Uttar Pradesh), Mussoorie syncline, Cuddapah basin (Andhra Pradesh).

11.15. UNION CABINET APPROVED THE PRODUCTION LINKED INCENTIVE (PLI) SCHEME FOR SPECIALTY STEEL

- Specialty 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** which can be used in various strategic applications like Defence, Space, etc.
 - Out of the production of 102 million tonnes steel in India in 2020-21, **only 18 million tonnes value added steel/specialty steel was produced** in the country.
- PLI scheme incentivises companies for enhancing their domestic manufacturing apart from focusing on reducing import bills and improving the cost competitiveness of local goods.
- **Features**
 - **Duration:** Five years from 2023-24 to 2027-28.
 - **Budgetary outlay:** ₹6322 crores.
 - **Three slabs of incentives:** the lowest being 4% and highest being 12% which has been provided for electrical steel (CRGO).
 - **Five categories including coated, high strength, alloy etc.** of specialty steel which have been covered under PLI.

Benefits:-

- Enhanced exports and minimising dependence on imports for high end steel
- Bring in investment of approximately **\$40,000 crores**
- Employment generation potential of about **5.25 lakh**
- Capacity addition of **25 MT**
- Will incentivize steel sector to invest in technological capability building to contribute to global steel



11.16. AFRICA OPEN DEAL (DATA FOR THE ENVIRONMENT, AGRICULTURE AND LAND) INITIATIVE

- This initiative has made **Africa the first continent to complete the collection of accurate, comprehensive and harmonised digital land use and land use change data.**
- The data collection and analysis initiative is led by the Food and Agriculture Organization (FAO) and the African Union Commission (AUC).
 - It has revealed **7 billion trees outside forests for the first time** and discloses more forests and arable lands than were previously detected.

11.17. INDIA CYCLES4CHANGE CHALLENGE

- Recently, **11 cities** were awarded as India's **Top 11 Cycling Pioneers** with Rs.1 crore reward to scale up the cycling initiatives.
- **India Cycles4Change Challenge**, launched on **25th June 2020**, is an initiative of the **Smart Cities Mission, Ministry of Housing and Urban Affairs** to inspire and support Indian cities to implement quick cycling-friendly initiatives in response to COVID-19.
 - Cycling is seen as a means of staying healthy-physically and mentally.
- It promotes initiatives such as- **pop-up lanes, traffic-calmed streets, community cycle rental schemes, and cycle-training programs.**

11.18. CENTRE TO APPOINT NATIONAL MARITIME SECURITY COORDINATOR (NMSC)

- Two decades after the recommendation by the Kargil Review Committee, the government is set to appoint a NMSC with the objective of enhancing India's security architecture and energy security.
- **About NMSC**
 - **Interface between the civilian and military maritime domains.**
 - Will work **under the National Security Adviser (NSA)**
 - It will be the **principal advisor** to the government on maritime security domain.
- Maritime security is a general term for the **protection of vessels both internally and externally.**
 - The areas from which ships and maritime operations need protecting include **terrorism, piracy, robbery, illegal trafficking of goods and people, illegal fishing and pollution.**
- **Significance of NMSC**
 - **Improve efficiency** as Navy, Coast Guard and state maritime boards all tend to work in silos with overlapping jurisdictions and are constantly at odds with each other.
 - **Maritime and energy security** as China plans to reach to eastern sea board of Africa through Indian maritime domain.
 - Creation of NMSC is **part of Act East Policy vision that also includes SAGAR** (Security and Growth of All in the Region), the **Deep Ocean Mission, and the Sagarmala project.**

11.19. PROJECT 75 (INDIA) [P-75(I)]

- India's Defense Ministry Issues First P-75I Submarine Tender.
- Project-75(I) **envisages indigenous construction of six modern conventional submarines** with contemporary equipment, weapons & sensors **including Fuel-Cell based AIP (Air Independent Propulsion Plant) etc.**
 - **AIP technology allows conventional diesel-electric submarines to remain underwater for longer,** enhancing its lethality.
 - Other countries to have an AIP system include **China, Germany, Sweden, France, Spain and Russia.**
- P-75I submarine project – estimated at over \$5.5 billion – **is the first acquisition India has undertaken through its Strategic Partnership procurement model.**

11.20. NEW GENERATION AKASH MISSILE (AKASH-NG) AND MAN PORTABLE ANTITANK GUIDED MISSILE (MPATGM)

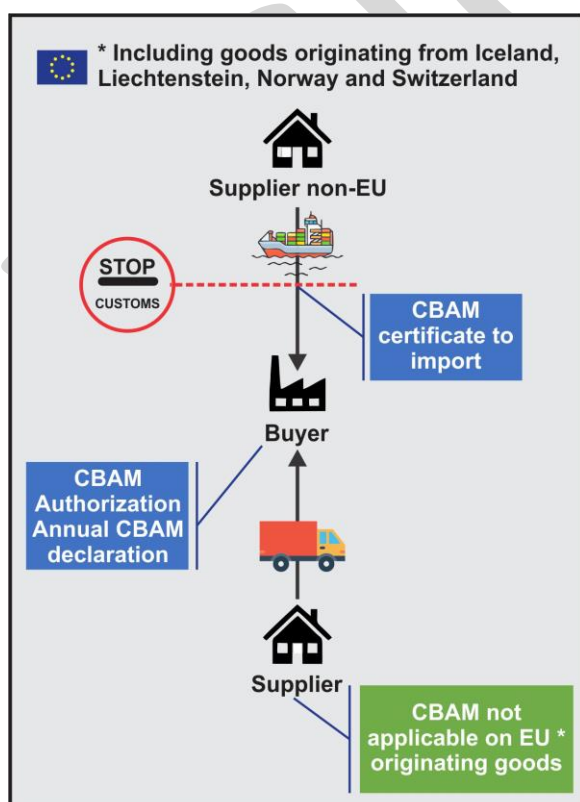
- Defence Research & Development Organisation (DRDO) tested two missile systems- MPATGM and a **new variant of the Akash Surface-to-Air Missile** called **Akash-NG.**
 - MPATGM is an indigenously developed low-weight, **fire-and-forget missile incorporated with state-of-the-art miniaturized infrared seeker** with advanced avionics.
 - Akash-NG has a **range of 60 km** and speed of **2.5 Mach.**
- Formed in 1958, **DRDO is the R&D wing of the Ministry of Defence** with a vision to empower India with cutting-edge defence technologies and a mission to achieve self-reliance in critical defence technologies and systems.

11.21. DEFENCE EXERCISES IN NEWS

- **INDRA: The 12th edition of Indo-Russia joint military Exercise INDRA 2021** held at **Volgograd, Russia in Baltic Sea.**
 - It was first initiated in 2003 to strengthen mutual confidence and interoperability of both countries.
- **CORPAT: The 36th edition of India-Indonesia coordinated patrol (CORPAT)** between **Indian Navy and the Indonesian Navy** has been conducted to **bolster the maritime cooperation between the two navies** across the Indo-Pacific.
- **Exercise Cutlass Express 2021: Indian Naval Ship Talwar** is participating in the **annual maritime exercise conducted along the East Coast of Africa.**
 - **12 Eastern African countries, US, UK, India and various international organisations** like International Maritime Organisation, United Nations Office on Drugs and Crime, Interpol etc. are participating.
 - The exercise **focuses on East Africa's coastal regions** and is **designed to assess and improve combined maritime law enforcement capacity, promote national and regional security and increase interoperability** between the regional navies.
- **Passage Exercise (PASSEX): Navies of India and the U.K. participated** in a two-day bilateral Passage Exercise in the Bay of Bengal from July 21 to 22.

11.22. CARBON BORDER ADJUSTMENT MECHANISM (CBAM)

- As part of the European Union (EU) ambitious target of reducing 55% of carbon emissions compared to 1990 levels by 2030 (Fit for 55 Initiative), it is pushing for the world's first carbon border tax on imported goods- Carbon Border Adjustment Mechanism (CBAM) from 2026.
 - It seeks to address carbon leakages i.e. companies decamp to places with cheaper pollution costs and looser climate regulations.
- A carbon border tax is a tax on carbon emissions imposed on imported goods from countries with less strict climate policies. It aims to create a level playing field between imports and domestic production.
- India's opposition
 - Developing countries, including India, have opposed CBAM calling it 'discriminatory' as it will ramp up prices of their goods in Europe and shrink demand.
 - ✓ EU is the third largest trading partner of India.
 - Also, it goes against the UN principle of Common but Differentiated Responsibilities and Respective Capabilities (CBDR-RC).
 - ✓ The principle acknowledges that richer countries have a responsibility of providing financial and technological assistance to developing and vulnerable countries to fight climate change.
- Working of CBAM



11.23. INDIA'S 14 TIGER RESERVES SET GLOBAL STANDARD IN TIGER CONSERVATION

- On the occasion of **Global Tiger Day, 2021**, **Ministry of Environment, Forest & Climate Change (MoEFCC)** announced **Conservation Assured Tiger Standards (CATS)** accreditation for 14 out of **India's 51 tiger reserves**.
 - The **theme** for this year International Tiger Day is- "**Their Survival is in our hands**".
- CATS are **globally accepted conservation tool** that sets **best practices and standards to manage tigers and assessments** to benchmark progress.
 - It was **launched in 2013**, implemented across 125 sites, including 94 in India.
 - **Global Tiger Forum and WWF India** are implementing partners of the National Tiger Conservation Authority (NTCA) for CATS assessment in India.
- The 14 reserves are **Manas, Kaziranga, and Orang** (Assam); **Sundarbans** (West Bengal); **Valmiki**(Bihar); **Dudhwa** (Uttar Pradesh); **Panna, Kanha, Satpuda and Pench** (Madhya Pradesh); **Anamalai and Mudumalai** (Tamil Nadu); **Parambikulam** (Kerala) and **Bandipur** (Karnataka).

Related News

- Ministry of environment, forest and climate change approved the conversion of Ramgarh Vishdhari Sanctuary in Rajasthan's Bundi district into fourth tiger reserve in the state.
- Ramgarh Vishdhari Sanctuary will link Ranthambore Tiger Reserve in the Northeast and Mukundra Hills Tiger Reserve on the southern side.
 - Sariska Tiger Reserve is third tiger reserve in the state

11.24. EARTH OVERSHOOT DAY

- Earth Overshoot Day marks the date when **humanity's demand for ecological resources and services** in a **given year** exceeds what **Earth can regenerate** in that year.
 - It is hosted and calculated by **Global Footprint Network** since **1970**.
 - **29th July** was the Earth overshoot day for 2021.
- **Last year the Earth Overshoot day was on 22nd August**, which was an exception to the advancing trend of overshoot till 2019 (29th July). This year the pre-2020 trend has returned due to
 - **Increased deforestation** of Amazon's rainforests.
 - **Increase in CO₂ emissions** by energy sector.

11.25. EXCESS IRRIGATION OVER NORTHERN INDIA SHIFTING MONSOONS TOWARDS NORTHWEST RISKING AGRICULTURE

- A recent study showed that **monsoon precipitation is sensitive to the choice of irrigation practices in South Asia**, one of the most heavily irrigated regions of the world.
- **Excess irrigation and consequent increase in evapotranspiration** (the sum of evaporation from the land surface plus transpiration from plants) over northern India **shifts the September monsoon rainfall towards the north-western part of the subcontinent** and increases widespread weather extremes over Central India.
- These hydro-climatic hazards related to precipitation extremes **are increasing the crops risk**.
 - Increasing crop risk is predominantly **driven by the decreasing number of farmers and also by increasing minimum temperatures during the crop growing season**.
- Study can help plan agricultural practices and **will directly benefit the National Initiative on Climate Resilient Agriculture (NICRA)**.
 - NICRA, a project of Indian Council of Agricultural Research, aims **to enhance resilience of Indian agriculture to climate change and climate vulnerability** through strategic research and technology demonstration.
 - It **critically assesses different crops/zones in the country for vulnerability** to climatic stresses and extreme events, in particular, intra seasonal variability of rainfall.

11.26. DRINK FROM TAP- SUJAL MISSION

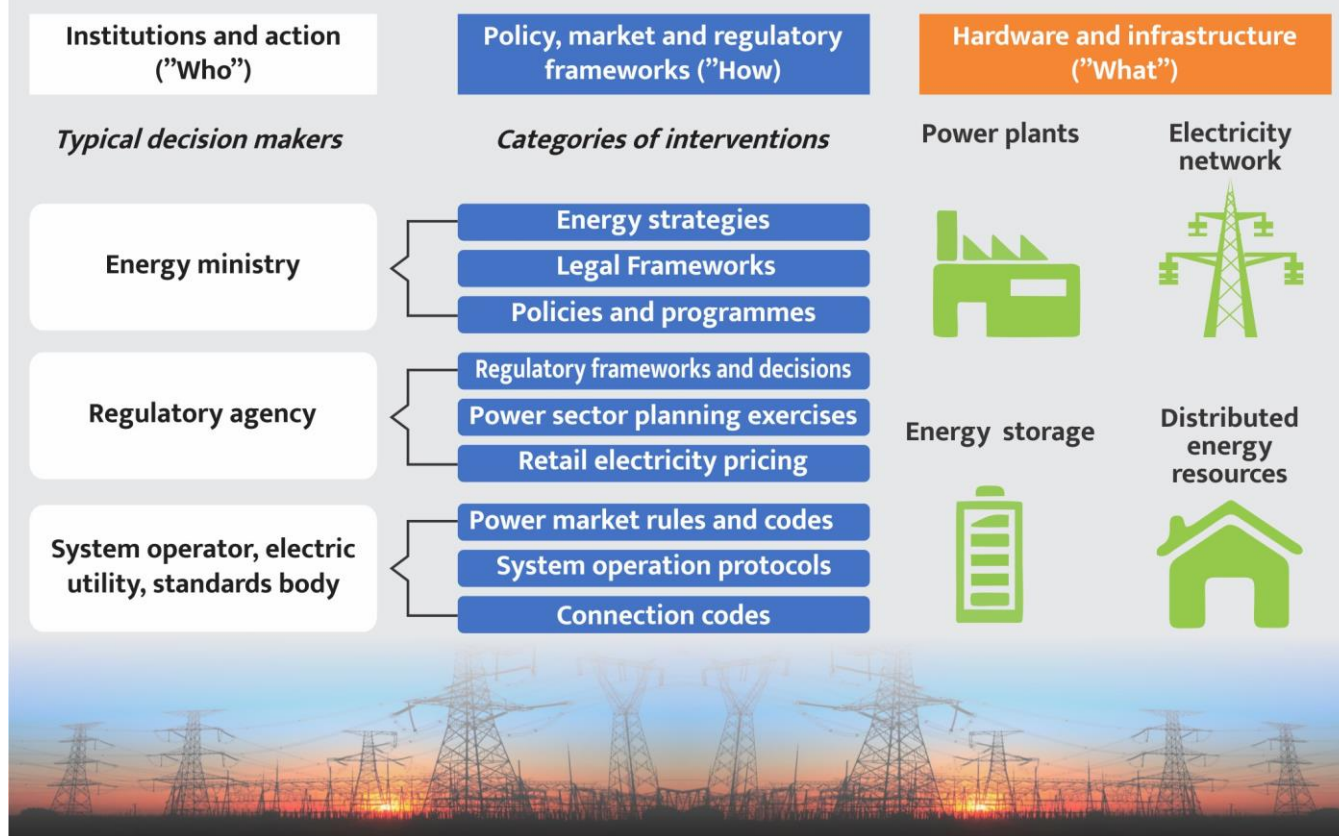
- **Puri (Odisha) has become the first city in the country** to have 'drink from tap' facility on 24-hour basis under the Sujal Mission.
- The Sujal Mission was launched in 2020 to ensure quality tapped drinking water in more than 15 urban areas.

- It includes 24/7 helpline centre with **interactive Voice Response System for grievance redressal**, and a **mobile water testing laboratory**.
- No metropolitan city in India has such facility yet.

11.27. NITI AAYOG AND INTERNATIONAL ENERGY AGENCY (IEA) LAUNCHED 'RENEWABLES INTEGRATION IN INDIA 2021' REPORT

- **Key findings**
 - India is the **third largest energy-consuming country in the world**.
 - **Per-capita electricity consumption is still around a third of the world average**, and is expected to continue increasing despite the government's intention to pursue strong energy efficiency standards, including LED lighting, efficient cooling and building standards.
 - Majority of **India's renewable capacity additions take the form of solar and wind**.
 - **Renewable energy penetration is highly variable** by state in India.
 - 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**.
- **Recommendations**
 - Remove **technical and economic barriers** between inter-state trading.
 - **Develop a regulatory and remuneration framework for energy storage** with specific reference to battery storage and pumped-storage hydro to capture their full value.
 - **Time of Use (ToU) tariffs** will be an effective tool to incentivise demand side management and encourage flexible consumption.
 - **Rooftop solar systems need to be monitored and managed**.

THE THREE LAYERS OF POWER SYSTEM TRANSFORMATION



11.28. FIRST GREEN HYDROGEN MOBILITY PROJECT

- Renewable Energy Limited (REL), a 100% subsidiary of National Thermal Power Corporation (NTPC), signed an MoU with the UT of Ladakh, to set up the country's first green Hydrogen Mobility project by plying hydrogen buses and setting up solar plant and green hydrogen generation unit in Leh.
 - Green hydrogen is hydrogen produced from electrolysis (splitting of water into oxygen and hydrogen) by passing electricity from renewable sources resulting in no carbon emissions.
- Also, NTPC REL is going to set-up India's largest solar park (4,750 MW) at Rann of Kutch, Gujarat.

11.29. INDIA INEQUALITY REPORT 2021

The Oxfam India report- **Inequality Report 2021: India's Unequal Healthcare Story**- reveals that sharp inequalities exist across different caste, religious, class and gender categories on various health indicators

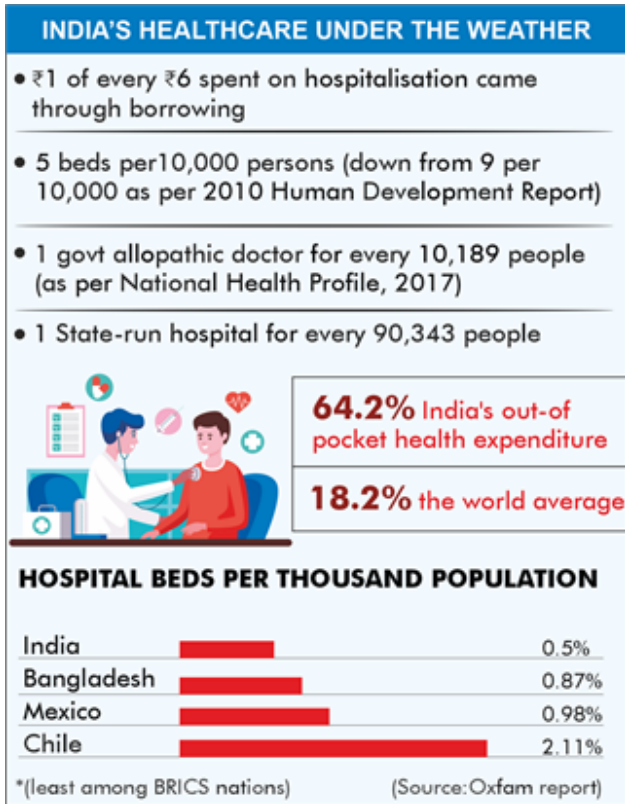
Key findings of the report

- Women literacy:** Though women's literacy has improved across social groups over the years, SC

and ST women lag behind the general category by 18.6% and 27.9%, respectively.

- Sanitation:** 65.7% households have access to improved, non-shared sanitation facilities in the general category while SC households are 28.5% behind them and ST are 39.8% behind them.
- Disparities in government health interventions:**
 - The share of institutional deliveries has increased from 38.7% in 2005-06 to 78.9% in 2015-16, but inequalities persist with ST households 15% below the general category and a 35% gap between the poorest and richest 20% of the population.
 - Similarly, immunisation in ST households at 55.8% is still 6.2% below the national average, and Muslims have the lowest rate across all socio-religious groups at 55.4%.
 - Despite improvement in child immunisation, the rate of female immunisation is lower than male child, and immunisation of children in urban areas is more than rural areas.
- Disparities in Covid-19 response**
 - States with higher health expenditure and lower inequality resulted in lower confirmed cases and higher rates of recovery from COVID-19.
 - Vaccination drives against COVID-19 ignores the country's digital divide- entering the pandemic, only 15% of rural households had an internet connection.

- The country's vision of 'health for all' is far from realised
 - Public funds for health are mostly invested in tertiary and secondary care rather than the provisioning of primary healthcare; instead private healthcare providers are burgeoning.
 - Health insurance schemes promoted to achieve Universal Health Care (UHC) and reduce out-of-pocket-expenditure (OOPE) have limited scope and coverage.



11.30. 'GATEKEEPER MODEL' TO PREVENT SUICIDES IN PRISON

- National Institute of Mental Health and Neuro Sciences (an Institute of National Importance) issued guidelines on the management of mental health issues of the prisoners and prison staff.
 - It recommended the "Gatekeeper Model" where selected inmates, trained to identify prisoners at risk of suicide, would refer them to treatment or supportive services.
- Referring to a study, the advisory pointed to the prevalence of mental illness and substance use disorder in about 80% of the prison population.

11.31. 24*7 HELPLINE FOR WOMEN (7827170170)

- National Commission for Women (NCW) has started 24*7 Helpline for Women affected by violence.
 - It has been developed in collaboration with Digital India Corporation.

- It can be used by any girl or woman aged 18 years and above.
- About NCW
 - It is a statutory body under the National Commission for Women Act (1990).
 - NCW works toward protection of Women Rights and help needy women through
 - ✓ Review the Constitutional and Legal safeguards for women.
 - ✓ Facilitate redressal of grievances.

11.32. MINISTRY OF HEAVY INDUSTRIES LAUNCHED SIX TECHNOLOGY INNOVATION PLATFORMS

- Six technology innovation platforms launched for development of technologies for globally competitive manufacturing in India.
 - This comes in the backdrop of production linked incentive (PLI) schemes launched last year that seek to create global manufacturing majors in India.
- 6 Platforms are
 - Drishti, developed by Central Manufacturing Technology Institute (CMTI), Bangalore focus on machine tool sector.
 - Technology & Innovation Platform, developed by HMT in association with IISc Bangalore, focuses on import reduction in machine tool sector.
 - SanRachna, a digitally enabled platform developed by Bharat Heavy Electricals Limited (BHEL) focuses on renewable energy and power electronics sector.
 - Kite (knowledge integration for technology enrichment) platform, developed by IIT Madras is focus on virtual reality, automation, advance manufacturing technologies and robotics.
 - ASPIRE (Automotive Solutions Portal for Industry Research & Education) platform, by International Centre for Automotive Technology (iCAT), focus on automotive technology.
 - TechNovuus by Automotive Research Association of India (ARAI) focuses on sustainable mobility.
- These platforms based on four pillars:
 - Industry seeking technology development,
 - PSUs and universities which develop these technologies,
 - Academia and students who host the development process and
 - R&D centres.

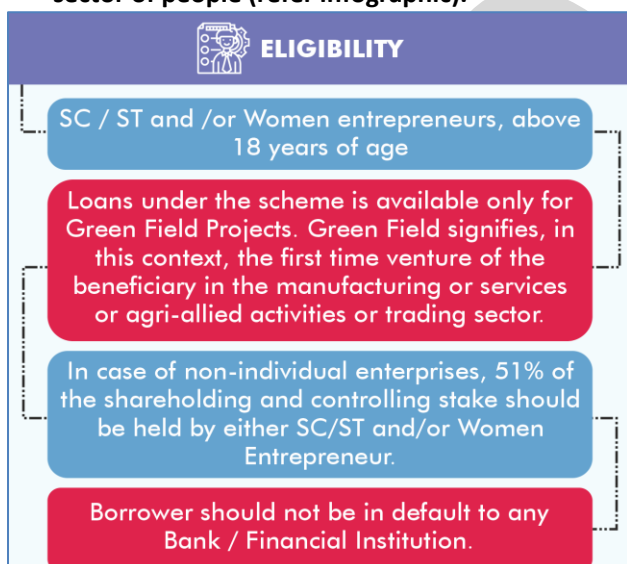


11.33. STAND UP INDIA SCHEME EXTENDED

Launched in 2016, the government has extended the Stand Up India (SUI) Scheme, up to the year 2025.

About Stand Up India

- SUI Scheme seeks to leverage the institutional credit structure to reach out to the underserved sector of people (refer infographic).



- Objective of SUI Scheme:** To facilitate bank loans between Rs. 10 lakh and Rs. 1 Crore to at least one SC or ST borrower and at least one woman borrower per bank branch.
 - As of June 2021, over 1.1 lakh loans amounting to over Rs. 26,000 crore have been extended under the Scheme since inception.
- The **SUI portal** (designed by Small Industries Development Bank of India) provides a digital platform to support enterprises promotion among SC, ST and women entrepreneurs through handholding support, providing information on financing and credit guarantee.

- Government does not allocate funds for loans under the Scheme.** Loans under the scheme are extended by the **Scheduled Commercial Banks (SCBs)** and can be accessed in three potential ways: Directly at the bank branch or SUI portal or Lead District Manager (LDM).
- Recent changes made in Budget (2021-22):**
 - The **margin money requirement** for loans under the Scheme has been reduced from 'upto 25%' to 'upto 15%'.
 - The margin money is the amount that a borrower needs to pay from one's own funds, while the balance amount of the loan will be paid by the bank.
 - Activities allied to agriculture have been included** in the Scheme.

11.34. INDIAN SCIENCE TECHNOLOGY AND ENGINEERING FACILITIES MAP (I-STEM) ENTERS PHASE-II

- I-STEM is the **national web portal for sharing R&D facilities**.
 - It was launched in 2020 as an initiative of **Office of Principal Scientific Adviser to Govt. of India** under aegis of **Prime Minister Science, Technology and Innovation Advisory Council** mission.
- Its goal is to strengthen R&D ecosystem** by connecting researchers with resources and by supporting researchers by enabling them access to existing publicly funded R&D facilities.
- Under Phase II, portal will host **indigenous technology products** and will also provide platform for **City Knowledge and Innovation Clusters**.

11.35. PARLIAMENTARY STANDING COMMITTEE ON COMMERCE SUGGESTED FOR PATENT WAIVER, COMPULSORY LICENSE FOR VACCINES


The committee in its report, titled '**Review of the Intellectual Property Rights Regime in India**' said that the

- National health emergency due to Covid-19 pandemic** has necessitated temporary **waiving off of patents rights**.
 - A **Patent** is an **exclusive right granted for an invention** (product/process) and the patentee has **exclusive rights over it for 20 years**, wherein **others are excluded from making any use of the patent**.
 - Also, at the **World Trade Organization, India and South Africa** have sought a **temporary patent waiver** to facilitate fair, affordable and universal access to covid jobs and drugs for all countries.

- It also recommended compulsory licensing for medicines and vaccines production.
 - Section 92 of the Patent Act, 1970, provides for issuing CL by the central government after paying a government-determined royalty to the patent owner.
 - The government can invoke CL in circumstances of “national emergency or in circumstances of extreme urgency or in case of public non-commercial use”.
- Large generic production without obligation of patents would help in removal of supply constraints ensuring availability of affordable drugs, medicines and vaccines.

THE SUGGESTIONS

<p>Voluntary licence, tech transfers to ease supply</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>Laws on IP financing, counterfeits</p> </div> <p>Uniform system of IP valuation as an intangible asset</p>	<p>IPR policy review as 64% patents filed by non-resident/foreign entities</p> <p>Re-establish include AI in Patents, Copyrights Acts</p>	<p>Patents to include entities' traditional knowledge for inclusivity</p> <p>Approve patents on plants, seeds with govt as participant 'Patent Pending marking to ward off infringements, copying</p>
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11.36. WHO ISSUES NEW RECOMMENDATIONS ON HUMAN GENOME EDITING FOR THE ADVANCEMENT OF PUBLIC HEALTH

- WHO has released **two reports**: Human genome Editing: A Framework for Governance and Human Genome Editing: Recommendations
 - Reports provide the **first global recommendations** to help establish human genome editing as a tool for public health, with an emphasis on **safety, effectiveness and ethics**.
- **Need for robust oversight**: The recent application of tools, such as CRISPR-Cas9 to **edit the human genome** raise ethical issues like **Safety** (off-target effects), **informed consent, gene-edited babies, justice and equity** etc.
- **Key highlights of Human Genome Editing: Recommendations.**
 - **Leadership by WHO and its Director-General** in terms of opportunities and challenges.
 - **Human genome editing registries**: Ensure that clinical trials are **reviewed and approved** by the appropriate research ethics committee before inclusion in the Registry.

- **Intellectual property**: Ensure equitable access to human genome editing interventions.
- Ethical values and principles for use by WHO
- **Human genome Editing: A Framework for Governance**
 - Develop a governance framework that draws from **good practices in the governance of emerging technologies** and applied them specifically to human genome editing.
 - Intended to help those tasked with strengthening oversight measures, regardless of whether this is at the **institutional, national, regional or international level**.
- **About Human Genome Editing Techniques**
 - Human genome editing (also called gene editing) is a group of technologies that give scientists **the ability to change an organism's DNA**, i.e. to add, remove or alter genetic material at a particular location.

11.37. ZIKA VIRUS

- Kerala has reported cases of Zika virus (ZV) for the first time.
- ZV spreads mostly by the **bite of an infected Aedes mosquito**, which bites during the day (the same mosquito that transmits dengue, chikungunya and yellow fever).
 - The virus can be **passed from a pregnant woman to her fetus** and can **cause infants to be born with microcephaly** (birth defect where a baby's head is smaller than expected), **congenital malformations, etc.**
 - Presently, there is **no specific treatment or vaccine** for the ZV.

11.38. EUTELSAT QUANTUM SATELLITE

- Eutelsat Quantum, the **world's first commercial fully re-programmable satellite** lifted off from French Guiana.
 - **Unlike conventional models that are designed and “hard-wired” on Earth** and cannot be repurposed once in orbit, Eutelsat Quantum allows users to tailor it almost in real-time.
 - This means the satellite **can be used to provide mobile coverage for moving objects** such as aircraft and oceangoing vessels, or coverage after a natural disaster or for one-off events.
- It has been developed under an **ESA (European Space Agency) partnership project** with Airbus.

11.39. NAUKA-RUSSIA MODULE

- **Nauka**, meaning **science** in Russian, is a **space module** launched by Russia to replace its existing

Pirs module at International Space Station (ISS) to serve as a research facility.

- **About ISS**
 - ISS is a **low-earth orbit space station**, launched in 1998, **with five participating space agencies as-** NASA (United States), Roscosmos (Russia), JAXA (Japan), ESA (Europe) and CSA (Canada)
 - It helps in carrying long-term research on human health under microgravity along with physical, material and space science.

11.40. ASTEROID RYUGU

- Recently, **NASA received its first sample of asteroid Ryugu**, which was **returned to Earth last December** by Japan Aerospace Exploration Agency's (JAXA) **Hayabusa2 spacecraft**.
- Ryugu, diamond-shaped space rock, **is orbiting the sun between Earth and Mars** and occasionally crosses Earth's orbit (therefore classified as potentially hazardous).
- Ryugu is **classified as a carbonaceous, or C-type asteroid**, which means it contains a lot of carbon and water.
- Studying asteroids like Ryugu could help in answering **questions about origins of solar system and where molecules like water came from**.

11.41. GANYMEDE

- Using **datasets from NASA's Hubble Space Telescope (Collaboration of NASA and European Space Agency)**, scientists for the **first time have discovered evidence of water vapour in the atmosphere of Jupiter's moon Ganymede**.
- Ganymede, the **largest moon in the solar system**, contains **more water than all of Earth's oceans**. However, temperatures there are so cold that water on the surface is frozen solid.

- Right now, **NASA's Juno mission is taking a close look at Ganymede and Jupiter**.

11.42. SPACE RICE

- China harvested its first batch of "space rice" from seeds that **returned from a lunar voyage (Chang'e-5 lunar probe) last year**.
 - The country has been taking seeds of rice and other crops to space since 1987.
- **Significance of farming in space**
 - After being **exposed to cosmic radiation and zero gravity**, some seeds can **mutate and produce higher yields when planted back on Earth**.
 - **contribute to China's hybrid rice breeding** by providing more and better genetic sources to expand the seed bank.

11.43. NANO UREA LIQUID (NUL) FERTILISER

- National Fertilisers Limited (NFL) and Rashtriya Chemicals and Fertilisers Ltd (RCF) signed **Memorandum of Understanding (MoU)** with Indian Farmers Fertiliser Cooperative Limited (IFFCO) for '**transfer of technology**' of NUL fertiliser.
 - NUL **contains nano-scale nitrogen particles** which have **more surface area and number of particles** making it more impactful.
- **Significance**
 - **Reduces the requirement of conventional Urea** by 50% or more.
 - Improves Soil, Air & Water quality.
 - **Cheaper than conventional urea**.
 - India has become the first country globally to start commercial production of NUL.

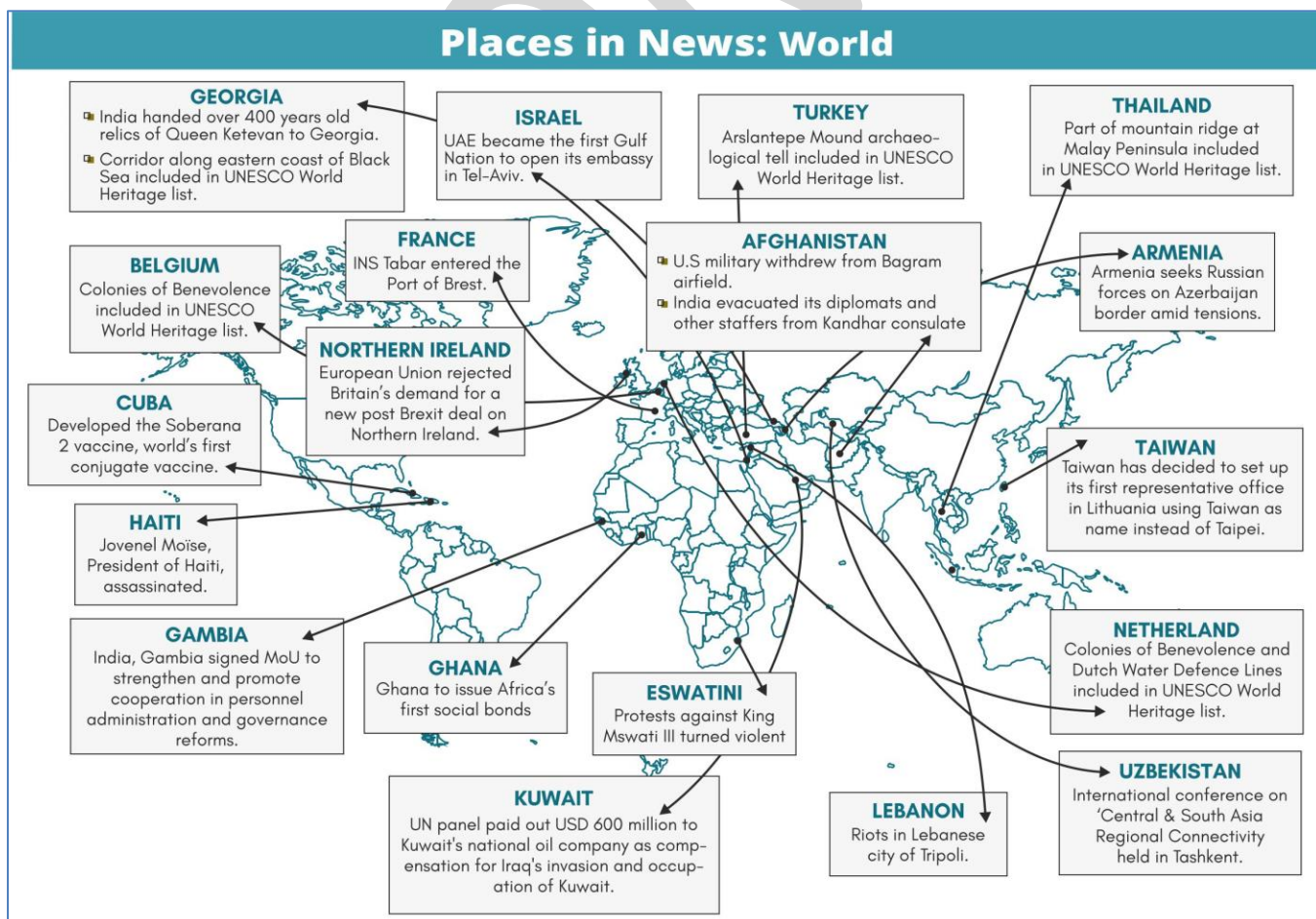
11.44. GEOGRAPHICAL INDICATION (GI) TAG PRODUCTS IN NEWS

Product	About
Traditional flowers	<ul style="list-style-type: none"> • Geographical Indication (GI) certified Madurai malli (a variety of jasmine flower) and other traditional flowers such as button rose, lily, chamanthi and marigold are being exported from Tamil Nadu to countries such as USA and UAE. • They were exported for ensuring that Indians living abroad get supplies of fresh flowers to deities at home and temples. • Madurai has emerged as a major market for the malli, and has evolved into the 'jasmine capital' of India.
Fazil mango	<ul style="list-style-type: none"> • A consignment of GI certified Fazil mango variety sourced from Malda district of West Bengal was exported to Bahrain. • A week-long Indian mango promotion programme was organised in Bahrain where 16 varieties of the fruit including 3 other GI certified varieties – Khirsapatin, Lakshmanbhog from West Bengal and Zardalu from Bihar - were displayed.
Bhalia Wheat	<ul style="list-style-type: none"> • First shipment of Geographical Indication (GI) certified Bhalia variety of wheat has been exported to Kenya and Sri Lanka from Gujarat. • The crop is grown mostly across Bhal region of Gujarat which includes Ahmadabad, Anand, Kheda, Bhavanagar, Surendranagar, Bharuch districts. • The unique characteristic of the wheat variety is that it is grown in rainfed condition without irrigation. • It has high protein content and is sweet in taste.

Places in News: India









Places in News: World







Personalities in News

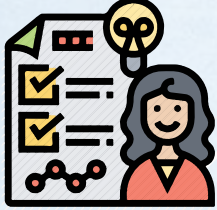



Personality	About	Ethical Values Exhibited by the personality
 <p>Lalleshwari or Lal Ded</p>	<ul style="list-style-type: none"> She was a 14th-century mystic poet of Kashmir. Known as Lal Vahs, her verses are the earliest compositions in the Kashmiri language. She served as a crucial link between traditional mysticism, the popular Bhakti movement and Sufism. 	<ul style="list-style-type: none"> Devotion and Spiritualism <ul style="list-style-type: none"> She dedicated her entire life towards worshipping divinity. She was well accepted by the people who respected her for her devotion. She helped the people to enter into the spiritual path and shown the way of enlightenment.
 <p>Srimanta Sankaradeva</p>	<ul style="list-style-type: none"> Born in Assam in Nagaon district's Batadrava, also spelt Bordowa, in September 1449. Founded a new Vaishnavite order within Hinduism. Conceived Sattriya dance, included among the classical dance forms of India. Fountainhead of Ankianaat, a form of one-act play. Poetic works: KirtanaGhosha, Harischandra-upakhyaana, Bali-Chalana etc. 	<ul style="list-style-type: none"> Social conscience and humanism <ul style="list-style-type: none"> He spearheaded the bhakti movement that influenced the spiritual and social life of people of North-east. His teachings imbibed his followers with the virtues of equality, tolerance, truthfulness and love for humanity.
 <p>Bal Gangadhar Tilak</p>	<ul style="list-style-type: none"> Tilak was the first to demand complete 'Swarajya'. He was called the Father of Indian Unrest by Valentine Chirol. He was charged with sedition in 1897. Its trial earned him the title Lokamanya (Beloved Leader of the People). He founded and served as president of the Indian Home Rule League (1916). He founded and edited two newspapers – Kesari (Marathi) and Mahratta (English). He also wrote the book, 'Gita Rahasya'. Coined the famous slogan 'Swaraj is my birthright, and I shall have it'. 	<ul style="list-style-type: none"> Patriotism and resilience <ul style="list-style-type: none"> His whole life revolves around the cause for self-determination and independence of India as a nation. He was imprisoned many times for his political writings but it did not affect his political views and he continued to write for political cause.
 <p>Kadambini Ganguly</p>	<ul style="list-style-type: none"> She was the first woman in modern India to become a trained physician in 1886 from Calcutta Medical College (along with Anandi Gopal Joshi, also in 1886 from Woman's Medical College of Pennsylvania). She was also the first female speaker at Indian National Congress, as part of six female delegates to the fifth session in 1889, and organised the 1906 Women's Conference in Calcutta after the Partition of Bengal. 	<ul style="list-style-type: none"> Professional commitment and Empathy <ul style="list-style-type: none"> She had to struggle a lot against social barriers and backlashes to become a women doctor and till death she did not turn down any medical calls. She fought for the women rights particularly for coal miner workers.
 <p>Swami Vivekananda</p>	<ul style="list-style-type: none"> Born as Narendra Nath Datta, he was a monk and chief disciple of Ramakrishna Paramhansa. His teachings and writings focus on Vedanta philosophy. He also established the Ramakrishna Mission and the Ramakrishna Math in 1897. He represented Hinduism at the 1893 World's Parliament of Religions in Chicago. His four classics includes: Jnana-Yoga, Bhakti-Yoga, Karma-Yoga, and Raja-Yoga, all of which are outstanding treatises on Hindu philosophy. 	<ul style="list-style-type: none"> Rationalism and Spiritualism <ul style="list-style-type: none"> Vivekananda emphasized on mass education for rational thinking and enlightened thoughts. Religion for him was essentially a spiritual force with humanism at its core.
 <p>Rukhmabai Raut</p>	<ul style="list-style-type: none"> Born in 1864, Rukhmabai Raut was among the earliest qualified women physicians of India and a feminist who raised voice on women rights. She was a major cause behind the enactment of Age of Consent Act in 1891, based on the Dadaji Bhikaji vs Rukhmabai case (1885). 	<ul style="list-style-type: none"> Free spirit and Courage <ul style="list-style-type: none"> All her life she exhibited quest to seek knowledge and struggle against the social conformity. She revolted against her child marriage status and worked for the cause of consent.
 <p>Dr Bidhan Chandra Roy</p>	<ul style="list-style-type: none"> Born in Patna, Roy was a friend and physician of Gandhi. He was instrumental in establishing TB and Cancer hospitals. <ul style="list-style-type: none"> He had served as a member of the Congress Working Committee, the mayor of Calcutta and vice-chancellor of Calcutta University. He defeated Surendranath Bannerjea in an election in the 1920s. He edited journals "Forward", "Bangabasi" and "Atmasakti" – started by Chittaranjan Das and "Liberty". He was the founding chairman of the United Press of India. In his honour, the first national Doctor's Day was celebrated in 1991. He was awarded with the Bharat Ratna in 1961. 	<ul style="list-style-type: none"> Professionalism and public spirit <ul style="list-style-type: none"> British Medical Journal wrote about him as having "the largest consulting practice in the world. News of his visit to a city or even railway station brings forth hordes of patients or would-be patients". He excelled not only as a doctor but also as administrator having served as Mayor, Vice-Chancellor and Governor of the state.
 <p>Chempaka Raman Pillai</p>	<ul style="list-style-type: none"> He was the originator of slogan 'Jai Hind'. During First World War, he formed an International pro-Indian committee in Switzerland. Also, on July 31, 1914, he formed the Indian National Voluntary Corps and urged all Indians to fight for India against British. Later, he went on to become the Berlin representative of the Indian Chamber of Commerce and inspired Subhash Chandra Bose to start an army. 	<ul style="list-style-type: none"> Courage and Leadership <ul style="list-style-type: none"> Pillai was responsible for mobilizing external support for the cause of Indian independence abroad by forming a provisional government in Kabul. He also led attack on Britishers in Madras during the First World War using the German warship.
 <p>K.Kamraj</p>	<ul style="list-style-type: none"> He participated in the freedom struggle, was elected President of Tamil Nadu Congress Committee in 1940 and became the Chief Minister of Madras in 1954. He was the first non-English knowing Chief Minister of India. In 1963 he came up with Kamraj Plan - Senior Congress leaders should leave ministerial posts to take up organisational work to dispel from their minds the lure for power. He was posthumously awarded with Bharat Ratna in 1976. 	<ul style="list-style-type: none"> Integrity and simplicity <ul style="list-style-type: none"> As a chief minister of Madras (later Tamil Nadu), he held the impeccable record of fulfilling the goals of public policies on public health, education and infrastructure. Coming from a very humble background, he never gave attention to his private life and lived a very modest life.

 <p>Chandra Shekhar Azad</p>	<ul style="list-style-type: none"> ● One of the most famous Indian revolutionaries, he joined the Hindustan Republican Association (HRA). ● Involved in the famous Kakori Train robbery (1925), the shooting of J. P. Saunders (Lahore, 1928) to avenge the killing of Lala Lajpat Rai. ● In September 1928, along with revolutionaries from North India reorganised HRA to form Hindustan Socialist Republican Association (HSRA). <ul style="list-style-type: none"> ▫ He was chosen as the commander-in-chief of the party. ● While retaining the objective of HRA, HSRA added two new points- <ul style="list-style-type: none"> ▫ Adoption of socialism as the ideology and goal of the party. ▫ Discarding religious and caste symbols. 	<ul style="list-style-type: none"> ● Leadership and Fearlessness <ul style="list-style-type: none"> ▫ He successfully led the group of Indian revolutionaries fighting against Britishers. ▫ He vowed to himself for not to touch by Britishers, hence he shot himself when surrounded by enemies to keep his vow.
 <p>Amrita Sher-Gil</p>	<ul style="list-style-type: none"> ● Born on 30th January, 1913 in Budapest, Hungary and died in 1941 at the age of 28. ● She was India's most famous woman artist and recognised by the Indian government as a "National Treasure", an honour which makes it illegal to take her art out of the country. 	<ul style="list-style-type: none"> ● Pioneering and free spirit <ul style="list-style-type: none"> ▫ She is often referred to as India's Frida Kahlo for aesthetically blending traditional and Western art forms. ▫ She was very spirited and lived a very carefree life with focus on her painting.
 <p>Bhageerathi Amma</p>	<ul style="list-style-type: none"> ● Kerala's oldest learner who passed a state literacy mission examination at the age of 105 has passed away. ● She was awarded the Nari Shakti Puraskar in 2020 for her contribution towards women empowerment. 	<ul style="list-style-type: none"> ● Endurance and responsibility <ul style="list-style-type: none"> ▫ She always yearned to study and gain knowledge, had to leave school after her mother died as she had to take care of her younger siblings. But she did not give up on her dreams and decided to study again at the age when people expect their countdown.
 <p>Giri Sarabhai</p>	<ul style="list-style-type: none"> ● She was the co-founder of the renowned National Institute of Design (NID) in Ahmedabad and a pioneer of design education in India. ● She also founded Calico Museum of textiles, one of India's most famous private museums. ● She received no formal education but was trained under famous designer Frank Lloyd Wright. 	<ul style="list-style-type: none"> ● Diligence and Commitment <ul style="list-style-type: none"> ▫ She was a very fine curator and caretaker of objects and artefacts, buildings, histories, legacies, and human values. ▫ She documented and archived everything with a strong sense of responsibility towards future generations.
 <p>Ila Mitra</p>	<ul style="list-style-type: none"> ● Born in 1925, she passed her BA with honours in Bengali literature in 1944 from Bethune College. ● From 1937, she had been an almost regular presence on the sports pages of Bengali and English language newspapers in Calcutta for her triumphs on the track. ● She was being considered for the Olympic contingent that would represent British India in 1940 Olympics. But due to World-War 2, the event got cancelled. ● She was an active in the Communist Movement of 1940s and later became the leader of the Tebhaga movement in Bengal which also earned her the title of "Rani Ma". 	<ul style="list-style-type: none"> ● Leadership and Compassion <ul style="list-style-type: none"> ▫ She gave leadership and momentum to the Tebhaga Movement by extensively touring the villages, publicly addressed the peasant meetings in the remote corners of the villages. ▫ Also, she extensively toured the affected areas in Bengal due to famine and cyclone in the 1940s along with Mahatma Gandhi. ▫ She remains immortal for her role in sharing the struggles of the people of Bangladesh.
 <p>Dalai Lama</p>	<ul style="list-style-type: none"> ● Prime Minister greeted Tenzin Gyatso, the 14th Dalai Lama of Tibetan Buddhism, on his 86th birthday. ● Dalai Lamas are believed by Tibetan Buddhists to be manifestations of Avalokiteshvara or Chenrezig, the Bodhisattva of Compassion and the patron saint of Tibet. ● Dalai Lama belongs to the Gelugpa tradition of Tibetan Buddhism, which is the largest and most influential tradition in Tibet. ● Dalai Lama is the head monk of Tibetan Buddhism and traditionally has been responsible for the governing of Tibet, until the Chinese government took control in 1959. 	<ul style="list-style-type: none"> ● Compassion and Selflessness <ul style="list-style-type: none"> ▫ According to him, True compassion is not an emotional response but a firm commitment founded on reason. Therefore, a truly compassionate attitude towards others does not change even if they behave negatively. ▫ Noble peace prize was awarded to him in 1989 for his selfless commitment to the peaceful solution to Tibetan cause.

Appendix: Provisions of National Education Policy, 2020

School Education

Dimensions	Provisions						
Early Childhood Care and Education (ECCE) 	<ul style="list-style-type: none"> ECCE to be delivered through Anganwadis and pre-schools with universal access for children of 3–6 years age. NCERT to develop a National Curricular and Pedagogical Framework for Early Childhood Care and Education (NCPFECCE) for children up to the age of 8. 						
Attainment of Foundational Literacy and Numeracy (FLN) 	<ul style="list-style-type: none"> National Mission on Foundational Literacy and Numeracy by Ministry of Education: Under it, States/UTs will prepare an implementation plan for attaining universal foundational literacy and numeracy in all primary schools for all learners by grade 3 by 2025. National Book Promotion Policy is to be formulated to ensure the availability, accessibility, quality, and readership of books across geographies, languages, levels, and genres. National Repository of high-quality resources on foundational literacy and numeracy will be made available on the Digital Infrastructure for Knowledge Sharing (DIKSHA). 						
Curtailling Dropout Rates and Ensuring Universal Access to Education at All Levels 	<p>Policy aims to achieve 100% GER in pre-school to secondary level by 2030. Following are the initiatives to achieve this:</p> <ul style="list-style-type: none"> Providing effective and sufficient infrastructure so that all students have access to safe and engaging school education. Open and Distance Learning (ODL) Programmes offered by the National Institute of Open Schooling (NIOS) and State Open Schools will be expanded and strengthened with special emphasis on Socio-Economically Disadvantaged Groups (SEDGs). Tracking students as well as their learning levels through counsellors or well-trained social workers. 						
Curriculum and Pedagogy 	<ul style="list-style-type: none"> Freedom of choosing a variety of subject combinations: no rigid separation among 'curricular', 'extracurricular', or 'co-curricular', among 'arts', 'humanities', and 'sciences', or between 'vocational' or 'academic' streams. <div data-bbox="528 1559 1541 2125" style="border: 1px solid black; padding: 10px;"> <p style="text-align: center;">Transforming Curricular & Pedagogical Structure</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">New Academic Structure</th> <th style="width: 50%; text-align: center;">Existing Academic Structure</th> <th></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;"> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="background-color: #f0e68c; padding: 5px; margin-bottom: 5px;">2 years (Age 16-18)</div> <div style="background-color: #333; color: white; padding: 5px; margin-bottom: 5px;">10 years (Age 6-16)</div> <div style="background-color: #00a0c9; padding: 5px;">3 years (Age 3-6)</div> </div> </td> <td style="text-align: center;"> <div style="display: flex; flex-direction: column; align-items: center;"> <div style="background-color: #f0e68c; padding: 5px; margin-bottom: 5px;">4 years (Class 9 to 12) (Age 14-18)</div> <div style="background-color: #333; color: white; padding: 5px; margin-bottom: 5px;">3 years (Class 6 to 8) (Age 11-14)</div> <div style="background-color: #76b82a; padding: 5px; margin-bottom: 5px;">3 years (Class 3 to 5) (Age 8-11)</div> <div style="background-color: #00a0c9; padding: 5px;">2 years (Class 1 to 2) (Age 6-8) 3 years (Anganwadi/Pre-School/Balvatika) (Ages 3-6)</div> </div> </td> <td style="text-align: center; vertical-align: middle;"> Secondary Middle Preparatory Foundational </td> </tr> </tbody> </table> <p>New Pedagogical and curricular structure of school education (5+3+3+4): 3 years in Anganwadi/pre-school and 12 years in school.</p> <ul style="list-style-type: none"> Secondary Stage(4) multidisciplinary study, greater critical thinking, flexibility and student choice of subjects. Middle Stage(3) experimental learning in the sciences, mathematics, arts, social sciences and humanities. Preparatory Stage(3) play, discovery and activity-based and interactive classroom learning. Foundational Stage(5) multilevel, play/activity-based learning. </div>	New Academic Structure	Existing Academic Structure		<div style="display: flex; flex-direction: column; align-items: center;"> <div style="background-color: #f0e68c; padding: 5px; margin-bottom: 5px;">2 years (Age 16-18)</div> <div style="background-color: #333; color: white; padding: 5px; margin-bottom: 5px;">10 years (Age 6-16)</div> <div style="background-color: #00a0c9; padding: 5px;">3 years (Age 3-6)</div> </div>	<div style="display: flex; flex-direction: column; align-items: center;"> <div style="background-color: #f0e68c; padding: 5px; margin-bottom: 5px;">4 years (Class 9 to 12) (Age 14-18)</div> <div style="background-color: #333; color: white; padding: 5px; margin-bottom: 5px;">3 years (Class 6 to 8) (Age 11-14)</div> <div style="background-color: #76b82a; padding: 5px; margin-bottom: 5px;">3 years (Class 3 to 5) (Age 8-11)</div> <div style="background-color: #00a0c9; padding: 5px;">2 years (Class 1 to 2) (Age 6-8) 3 years (Anganwadi/Pre-School/Balvatika) (Ages 3-6)</div> </div>	Secondary Middle Preparatory Foundational
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	<ul style="list-style-type: none">■ Introduction of contemporary subjects such as Artificial Intelligence, Design Thinking, Holistic Health, Organic Living, Environmental Education, Global Citizenship Education (GCED), etc.■ Vocational education through 10-day bagless period during Grades 6–8 where students will intern with local vocational experts such as carpenters, gardeners, potters, artists, etc.■ National Curricular Framework for School Education will be developed by the NCERT.
<p>Student Assessment</p> 	<ul style="list-style-type: none">■ School examinations in Grades 3, 5, and 8 which will be conducted by the appropriate authority.■ Board exams for Grades 10 and 12 will be continued but redesigned.■ National Assessment Centre, PARAKH (Performance Assessment, Review, and Analysis of Knowledge for Holistic Development), will be set up as a standard-setting body under Ministry of Education (MOE).■ Holistic Progress Card with 360-degree, multidimensional report that reflects the progress as well as the uniqueness of each learner in the cognitive, affective, and psychomotor domains. It will also include self-assessment, peer assessment, and teacher assessment.■ National Testing Agency (NTA) to serve as a autonomous testing organization to conduct entrance examinations for undergraduate and graduate admissions and fellowships in higher education institutions.
<p>Multilingualism</p> 	<ul style="list-style-type: none">■ Medium of instruction up till grade 5, and preferably till Grade 8 and beyond, will be home language/ mother-tongue/ local language.■ 'The Languages of India' a fun project/ activity on to be taken by every student under the 'Ek Bharat Shrestha Bharat' initiative.■ Three languages formula with greater flexibility.■ All classical languages (Sanskrit, Tamil, Telugu, Kannada, Malayalam, Odia) will be widely available in schools as options. In addition, Pali, Persian, and Prakrit will also be widely available as options.■ Indian Sign Language (ISL) will be standardized across the country.
<p>Equitable and Inclusive Education (Provisions for Socio-Economically Disadvantaged groups -SEDGs)</p> 	<ul style="list-style-type: none">■ Setting up of<ul style="list-style-type: none">● Gender Inclusion Fund for female and transgender students.● Special Education Zones (SEZs)- Large populations from SEDGs to be declared SEZs.■ Children with disabilities will be enabled to fully participate in the regular schooling process from the foundational stage to higher education.■ Every state/district will be encouraged to establish "Bal Bhavans" as a special daytime boarding school, to participate in art-related, career-related, and play-related activities.■ Free school infrastructure can be used as Samajik Chetna Kendras to promote social, intellectual, and voluntary activities.■ Special mechanisms for children belonging to tribal groups to receive quality education.■ Fee waivers and scholarships will be offered to meritorious students from all SEDGs.■ Additional Schools- Setting-up of additional JNVs and KVs in aspirational districts/SEZs.
<p>Robust Teacher Education and Recruitment</p> 	<ul style="list-style-type: none">■ New and comprehensive National Curriculum Framework for Teacher Education (by 2021).■ By 2030, the minimum degree qualification for teaching will be a 4-year integrated B.Ed. degree.■ NTA testing for admission to B.Ed.



- Setting-up of **National Mission for Mentoring** with a large pool of outstanding senior/retired faculty.
- **Teacher Eligibility Tests (TETs) for all teachers** across Foundational, Preparatory, Middle and Secondary stage in both public and private schools.
- More **autonomy to teachers** in choosing aspects of pedagogy in classroom teaching.
- **National Professional Standards for Teachers (NPST)** will be developed by the National Council for Teacher Education by 2022.
- **Restructuring of NCTE**- National Council for Teacher Education (NCTE) to be restructured as a Professional Standard Setting Body (PSSB) under General Education Council (GEC).

School Governance



- The **twinning/pairing of one public school** with one private school will be adopted across the country, so that such paired schools may learn from each other, and also share resources, if possible.

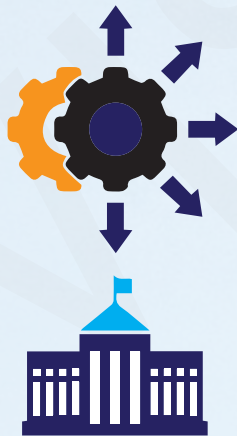
Standard-setting and Accreditation for School Education



- Independent **State School Standards Authority (SSSA)** to be set up by States/UTs.
- **School Quality Assessment and Accreditation Framework (SQAAF)** to be developed by SCERT.
- **Public and private schools** (except the schools that are managed/aided/controlled by the Central government) will **be assessed and accredited on the same criteria**.
- For a **periodic 'health check-up' of the overall system**, a sample-based **National Achievement Survey (NAS) of student learning levels will be carried out** by the proposed new National Assessment Centre, PARAKH.

Higher Education

Institutional Restructuring & Consolidation


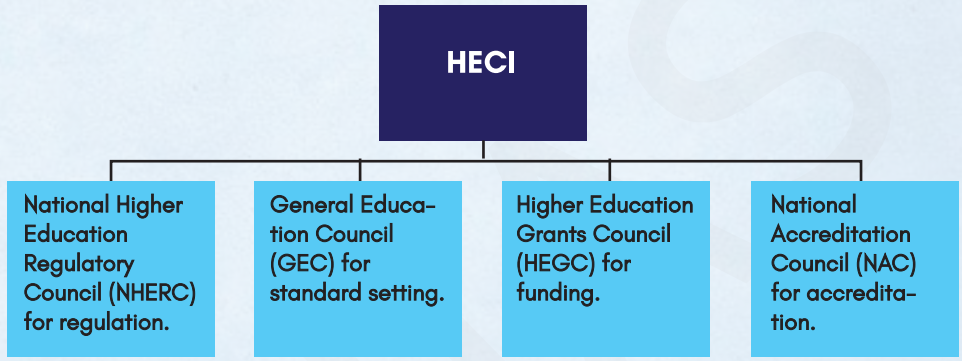




- All higher education institutions to be consolidated into three types of institutions:
 - **Research Universities** - equal focus on research and teaching.
 - **Teaching Universities** - primary focus on teaching with significant focus on research.
 - **Autonomous degree-granting colleges** - almost exclusive focus on teaching
- Affiliation of colleges is to be phased out in 15 years and a stage-wise mechanism is to be established for granting **graded autonomy** to colleges.
- Over a period of time, it is envisaged that every college would develop into either an Autonomous degree-granting College, or a constituent college of a university.
- There shall, by 2030, be **at least one large multidisciplinary HEI** in or near every district.
- By 2040, all higher education institutions (HEIs) shall aim to become multidisciplinary institutions.
- The aim will be to **increase the Gross Enrolment Ratio** in higher education including vocational education from **26.3% (2018) to 50% by 2035**.

Holistic Multi disciplinary Education









- The policy envisages undergraduate education with **flexible curricula, creative combinations of subjects, integration of vocational education and multiple entry and exit points** with appropriate certification.
- An **Academic Bank of Credit** is to be established for **digitally storing academic credits** earned from different HEIs so that these can be transferred and counted towards final degree earned.

	<ul style="list-style-type: none"> ■ Multidisciplinary Education and Research Universities (MERUs), at par with IITs, IIMs, to be set up as models of best multidisciplinary education of global standards. ■ The National Research Foundation will be created as an apex body for fostering a strong research culture and building research capacity across higher education.
<p style="text-align: center;">Regulation</p> 	<ul style="list-style-type: none"> ■ Public and private higher education institutions will be governed by the same set of norms for regulation, accreditation and academic standards. ■ Higher Education Commission of India (HECI) will be set up as a single overarching umbrella body for entire higher education, excluding medical and legal education. HECI to have four independent verticals - <div style="text-align: center;">  <pre> graph TD HECI[HECI] --> NHERC[National Higher Education Regulatory Council (NHERC) for regulation.] HECI --> GEC[General Education Council (GEC) for standard setting.] HECI --> HEGC[Higher Education Grants Council (HEGC) for funding.] HECI --> NAC[National Accreditation Council (NAC) for accreditation.] </pre> </div>
<p style="text-align: center;">Internationalization of HEIs</p> 	<ul style="list-style-type: none"> ■ Internationally relevant curricula, meaningful opportunities for social engagement, quality residential facilities and on-campus support, etc. ■ An International Students Office at each HEI hosting foreign students will be set up. ■ High performing Indian universities will be encouraged to set up campuses in other countries, and similarly, selected universities e.g., those from among the top 100 universities in the world will be facilitated to operate in India. ■ A legislative framework facilitating such entry will be put in place, and such universities will be given special dispensation regarding regulatory, governance, and content norms on par with other autonomous institutions of India. ■ Research collaboration and student exchanges between Indian institutions and global institutions will be promoted. ■ Credits acquired in foreign universities will be permitted, where appropriate as per the requirements of each HEI, to be counted for the award of a degree.
<p style="text-align: center;">Equity and Inclusion</p> 	<p>Steps to be taken by Governments</p> <ul style="list-style-type: none"> ■ Earmark suitable Government funds for the education of SEDGs. ■ Set clear targets for higher GER for SEDGs. ■ Enhance gender balance in admissions to HEIs. ■ Enhance access by establishing more high-quality HEIs in aspirational districts and Special Education Zones containing larger numbers of SEDGs. <p>Steps to be taken by all HEIs</p> <ul style="list-style-type: none"> ■ Mitigate opportunity costs and fees for pursuing higher education. ■ Provide more financial assistance and scholarships to SEDGs. ■ Make curriculum more inclusive. ■ Ensure sensitization of faculty, counsellor, and students on gender-identity issue. ■ Strictly enforce all no-discrimination and anti-harassment rules.

Other Major Provisions









<p style="text-align: center;">Financing Education</p>	<ul style="list-style-type: none"> ■ The Centre and the States will work together to increase the public investment in Education sector to reach 6% of GDP.
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	<ul style="list-style-type: none"> Policy calls for promotion and support for private philanthropic activity in education sector.
<p>Technology in Education</p> 	<ul style="list-style-type: none"> Appropriate integration of technology into all levels of education will be done to improve classroom processes, support teacher professional development, enhance educational access for disadvantaged groups.
<p>Adult Education</p> 	<ul style="list-style-type: none"> Policy aims to achieve 100% youth and adult literacy. Use of schools/ school complexes beyond school hours and public library spaces for adult education courses. Quality technology-based options for adult learning such as online courses, satellite-based TV channels and ICT-equipped libraries and Adult Education Centres, etc. will be developed.
<p>Online Education and Digital Education</p> 	<ul style="list-style-type: none"> A comprehensive set of recommendations for promoting online education in order to ensure preparedness with alternative modes of quality education whenever and wherever traditional and in-person modes of education are not possible, has been covered. A dedicated unit for the purpose of coordinating building of digital infrastructure, content and capacity building will be created in the MOE for both school and higher education.
<p>Professional Education</p> 	<p>All professional education institutions will be an integral part of the higher education system. Stand-alone technical universities, health science universities, legal and agricultural universities etc will aim to become multi-disciplinary institutions.</p>
<p>Promotion of Indian Languages, Arts, and Culture</p> 	<ul style="list-style-type: none"> Strong departments and programmes in Indian languages, comparative literature, creative writing, arts, music, philosophy, etc. will be launched and developed across the country, and degrees including 4- year B.Ed. dual degrees will be developed in these subjects. Outstanding local artists and craftspeople will be hired as guest faculty to promote local music, art, languages, and handicraft. Every higher education institution and every school or school complex will aim to have Artist(s)-in-Residence to expose students to art, creativity, and the rich treasures of the region/country. High-quality programmes and degrees in Translation and Interpretation, Art and Museum Administration, Archaeology etc will also be created. For each of the languages mentioned in the Eighth Schedule of the Constitution of India, Academies will be established consisting of scholars and native speakers to determine simple yet accurate vocabulary for the latest concepts, and to release dictionaries on regular basis.



WEEKLY FOCUS

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ISSUE	DESCRIPTION	LEARN MORE
 <p>Civil Society in India: Necessary Ingredient in Development or a Contested Idea?</p>	<p>In the current model of economic growth, the voluntary/ civil society sector has been recognized as a key player in in the process of nation building and achieving equitable, sustainable and inclusive development goals. Invariably, this has raised public debate about their legitimacy and role in the official policy space. Through this document we will understand the significance of civil society in a democracy and how civil societies can overcome the obstacles being faced by them and perform their desired objective in the emerging era .</p>	
 <p>Violence Against Women: Recognize, Respond, Prevent and Change</p>	<p>Volumes can be written about the status of our women and their heroic deeds from the Vedic period to the modern times. But later on, because of social, political and economic changes, women lost their status and were relegated to the background. This document digs deep into the factors behind rising number of cases of violence against women across the globe in the current times. Going ahead, it analyses what can be done to tackle this gruesome issue in India and restore the respectable status of women.</p>	
 <p>Cooperatives: Prosperity Through Cooperation</p>	<p>India has had a rich and successful history of the cooperative society and cooperatives today are the best channels to keep alive the spirit of collectivism and democracy afloat. The presence of a large network of social organizations, like cooperatives, would aid in the generation and utilization of social capital and greater the social capital greater would be the possibility of development. Highlighting the relevance and role played by the cooperative sector in India's development, this document examines the existing roadblocks for the sector and the way forward for the sector to flourish.</p>	
 <p>Port Connectivity: India's Conduit to the World</p>	<p>India has a rich maritime heritage. To shape our maritime prowess into a robust engine of the nation's development and to integrate well with the global economy, port-led development acquires top priority. This document is an appraisal of India's efforts towards harnessing the potential of our ports and persisting hurdles in achieving the same. Further, it guides the way ahead towards building a robust port infrastructure that will add strength to the nation's efforts towards a prosperous and Aatmanirbhar Bharat.</p>	

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Banda Bahadur Marg, Mukherjee Nagar



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