- India-South Korea: Friendship Park ................................................................. 42
- The Heart of Asia-Istanbul Process .............................................................. 44

**Science and Technology** ........................................................................46
- Double Mutant Coronavirus Variant .......................................................... 46
- Moving Black Hole ..................................................................................... 47
- Refrigeration System Pusa-FSF ................................................................ 48
- US India Artificial Intelligence Initiative .................................................. 49
- NISAR: Joint Earth Observing Mission of NASA and ISRO ...................... 50
- Asteroid Apophis ....................................................................................... 50

**Environment and Ecology** ..................................................................52
- World Air Quality Report 2020 ................................................................. 52
- Pilibhit Tiger Reserve: Uttar Pradesh ......................................................... 54
- Ranthambore Tiger Sanctuary: Rajasthan ................................................ 54
- Removal of Heavy Metals from Water ...................................................... 55
- Sundarbans ............................................................................................... 56
- India: Transforming to a Net-Zero Emissions Energy System ................. 57
- Climate Finance ....................................................................................... 59
- Coalition for Disaster Resilient Infrastructure ......................................... 60

**History** ..................................................................................................62
- Dr. Ram Manohar Lohia ........................................................................... 62
- Anangpal II: Tomar Dynasty ..................................................................... 63
- General Lachit Borphukan of Ahom Kingdom .......................................... 63
- Maharaja Chhatrasal ................................................................................ 64
- Shaheed Diwas ......................................................................................... 65

**Art & Culture** .........................................................................................67
- Haridwar Kumbh Mela ............................................................................ 67
- Shigmotsav: Goa .................................................................................... 67

**Geography** ............................................................................................69
- Eastern Rajasthan Canal Project .............................................................. 69
- Mullaperiyar Dam ................................................................................... 70
- Ken-Betwa Link Project .......................................................................... 71
- Suez Canal ............................................................................................... 72
- Cape of Good Hope ................................................................................. 73

**Social Issues** ..........................................................................................74
- Reservation Quota Limit of States ............................................................ 74
- Amend the NCC Act: Kerala High Court .................................................. 75
- Stop TB Partnership Board ..................................................................... 76
- Medical Termination of Pregnancy (Amendment) Bill, 2020 ................. 77
- Covid Increased Poverty: Pew Report .................................................... 79
- World Happiness Report 2021 ............................................................................................................. 80
- Right to Health........................................................................................................................................... 81
- Global Water Crisis: UNICEF ..................................................................................................................... 82
- Commitment to Reducing Inequality Index 2020: Oxfam ........................................................................ 84
- The Juvenile Justice Amendment Bill, 2021 .............................................................................................. 86

Security ...................................................................................................................................................... 88
- Exercise VAJRA PRAHAR ......................................................................................................................... 88
Pradhan Mantri Awaas Yojana-Gramin

Why in News

Due to adverse impact of Covid-19, only 5.4% of the sanctioned houses under the central government’s flagship rural housing scheme, Pradhan Mantri Awaas Yojana-Gramin, have reached completion for the year 2020-2021.

Key Points

- About the Pradhan Mantri Awaas Yojana-Gramin (PMAY-G):
  - Launch: To achieve the objective of “Housing for All” by 2022, the erstwhile rural housing scheme Indira Awaas Yojana (IAY) was restructured to Pradhan Mantri Awaas Yojana-Gramin (PMAY-G) w.e.f 1st April, 2016.
  - Ministry Involved: Ministry of Rural development.
  - Aim: To provide a pucca house with basic amenities to all rural families, who are homeless or living in kutcha or dilapidated houses by the end of March 2022.
  - To help rural people Below the Poverty Line (BPL) in construction of dwelling units and upgradation of existing unserviceable kutcha houses by providing assistance in the form of a full grant.

- Beneficiaries: People belonging to SCs/STs, freed bonded labourers and non-SC/ST categories, widows or next-of-kin of defence personnel killed in action, ex servicemen and retired members of the paramilitary forces, disabled persons and minorities.

- Selection of Beneficiaries: Through a three stage validation – Socio Economic Caste Census 2011, Gram Sabha, and geo-tagging.

- Cost Sharing: The cost of unit assistance is shared between Central and State Governments in the ratio 60:40 in plain areas and 90:10 for North Eastern and hilly states.

- Features:
  - The minimum size of the house has been increased to 25 sq.mt (from 20sq.mt) with a hygienic cooking space.
  - The unit assistance has been increased from Rs. 70,000 to Rs. 1.20 lakh in plain and from Rs. 75,000 to Rs. 1.30 lakh in hilly states.
  - The assistance for construction of toilets shall be leveraged through convergence with Swachh Bharat Mission-Gramin (SBM-G), MGNREGS or any other dedicated source of funding.
• Convergence for piped drinking water, electricity connection, LPG gas connection etc. different Government programmers are also to be attempted.

Orientation of the Scheme:
- Only 55% of the construction target has been completed.
- Of the 2.28 crore houses to be built for the rural poor, less than 1.27 crore had been built by January 2021.
- Money has been sanctioned to almost 85% of beneficiaries.
- This scheme has helped in employment generation. Many states provided employment to their migrant labourers during lock down.

Pradhan Mantri Awas Yojana – Urban
- Launch: 25th June 2015, intends to provide housing for all in urban areas by year 2022.
- Implemented by: Ministry of Housing and Urban Affairs
- Features:
  - Addresses Urban housing shortage among the Urban Poor including the Slum Dwellers by ensuring a pucca house to eligible urban poor.
  - The Mission covers the entire urban area consisting of Statutory Towns, Notified Planning Areas, Development Authorities, Special Area Development Authorities, Industrial Development Authorities or any such authority under State legislation which is entrusted with the functions of urban planning & regulations.
  - All houses under PMAY(U) have basic amenities like toilet, water supply, electricity and kitchen.
  - The Mission promotes women empowerment by providing the ownership of houses in the name of female members or in joint name.
  - Preference is also given to differently abled persons, senior citizens, SCs, STs, OBCs, Minority, single women, transgender and other weaker & vulnerable sections of the society.
- Divided into Four Verticals:
  - In-situ Rehabilitation of existing slum dwellers using land as a resource through private participation.
  - Credit Linked Subsidy.

Shifting Health to the Concurrent List

Why in News
Fifteenth Finance Commission Chairman N.K. Singh said that health should be shifted to the Concurrent list under the Constitution. Presently, ‘Health’ is under the State List.
- He also pitched for a Developmental Finance Institution (DFI) dedicated to healthcare investments.

Key Points
- Arguments for Shifting ‘Health’ to the Concurrent List:
  - Centre with Greater Flexibility: Bringing health into the Concurrent list would give the Centre greater flexibility to enact regulatory changes and reinforce the obligation of all stakeholders towards providing better healthcare.
  - Rationalisation and Streamlining of the Multiple Acts: There is a multiplicity of Acts, rules and regulations, and mushrooming institutions, yet the regulation of the sector is far from adequate.
    - With the health in the concurrent list, uniformity of acts can be ensured.
  - Centre Expertise to States: The Central government is also technically better equipped to come up with the health schemes because it has the assistance of multiple research bodies and departments dedicated to the management of public health.
    - States on the other hand do not have the technical expertise to independently design comprehensive public health policies.
- Arguments Against Shifting ‘Health’ to the Concurrent List:
  - Right to Health: It is neither necessary nor sufficient to guarantee the provision of accessible, affordable and adequate healthcare for all.
    - Besides, the right to health is, arguably, already provided for via the Constitution’s Article 21 that guarantees protection of life and liberty.
Challenges Federal Structure: Shifting ever more subjects from the states to the Centre would erode India’s federal nature and impair efficiency by abandoning the principle of subsidiarity, which holds that any task should be left to the level of government best placed to do it.

- Trust Cooperative Federalism: The centre must direct its energies to designing policy that would help states deliver on their constitutional mandate to provide adequate, accessible and affordable healthcare for all.

More Burden With Centre: The Centre has onerous responsibilities of its own, for which it struggles to find resources. Taking more functions would help neither the states nor the Centre discharge their constitutional obligations.

- Encourage States: The Centre devolves 41% of the taxes it collects to the states. The Centre should encourage the states to do what they are supposed to do, while the Centre optimises use of its own resources, focusing on its obligations.
  - Health being a state subject does not preclude the Centre offering constructive support.
  - The NITI Aayog’s Health Index, financial assistance through the insurance-based programme Ayushman Bharat, improved regulatory environment for healthcare providers and medical education are examples of such support that can nudge states in the right direction.

- Developmental Finance Institution (DFI) for Health Care:
  - A health sector-specific DFI is much needed on the same lines as that of DFIs for other sectors like National Bank for Agriculture and Rural Development -NABARD (agriculture), National Housing Bank- NHB (Housing) and Tourism Finance Corporation of India Ltd. - TFCI (tourism).
  - Such a DFI would increase health care access in tier-2 and tier-3 cities and also come with technical assistance that ensures proper usage of funds.

- Other Suggestions by N.K. Singh:
  - Increase the government spending on health to 2.5% of GDP by 2025.
  - Primary healthcare should be a fundamental commitment of all States in particular and should be allocated at least two-thirds of health spending.

- To have a standardisation of health care codes for both the Centre and states.
- Forming an All India Medical and Health Service.
  - Given the inter-state disparity in the availability of medical doctors, it is essential to constitute the Service as is envisaged under Section 2A of the All-India Services Act, 1951.
- Emphasised the importance of universalising healthcare insurance, as a large section of the society still remain uncovered.

Need for Universalisation of Healthcare Insurance:
- Existing Insurance Coverage: The Pradhan Mantri Jan Arogya Yojana (PMJAY) covers the bottom two income quintiles and commercial insurance largely covers top-income quintiles, thereby creating a ‘missing middle’ class in between.
- Missing Middle: This refers to people in the middle two income quintiles, where the population is not rich enough to afford commercial insurance and not poor enough to be covered under government-sponsored health insurance schemes.

Concurrent List
- The subject-wise distribution of legislative power is given in the three lists of the Seventh Schedule of the Constitution:
  - List-I- the Union List
  - List-II- the State List
  - List-III- the Concurrent List
- Both, the Parliament and state legislature can make laws with respect to any of the matters enumerated in the Concurrent List.
- It includes the matters on which uniformity of legislation throughout the country is desirable but not essential.
- However State legislation operates to the extent that it is not in conflict with the Central legislation. At times, the very presence of a central legislation can negate the state’s ability to legislate.
- This list has at present 52 subjects (originally 47) like criminal law and procedure, civil procedure, marriage and divorce, population control and family planning, electricity, labour welfare, economic and social planning, drugs, newspapers, books and printing press, and others.
- The 42nd Amendment Act of 1976 transferred five subjects to Concurrent List from State List i.e.
education, forests, weights and measures, protection of wild animals and birds, and administration of justice; constitution and organisation of all courts except the Supreme Court and the High Courts.

Development Finance Institution
- These are specialized institutions set up primarily to provide development/Project finance especially in developing countries.
- These DFIs are usually majority-owned by national governments.
- The source of capital of these banks is national or international development funds.
- This ensures their creditworthiness and their ability to provide project finance at a very competitive rate.

Electoral Bonds

**Why in News**

The Supreme Court flagged the possibility of misuse of money received by political parties through electoral bonds for ulterior objects like funding terror or violent protests.

- The court also asked the government whether there is any “control” over how these donations were used by political parties.

**Electoral Bond**
- Electoral Bond is a financial instrument for making donations to political parties.
- The bonds are issued in multiples of Rs. 1,000, Rs. 10,000, Rs. 1 lakh, Rs. 10 lakh and Rs. 1 crore without any maximum limit.
- State Bank of India is authorised to issue and encash these bonds, which are valid for fifteen days from the date of issuance.
- These bonds are redeemable in the designated account of a registered political party.
- The bonds are available for purchase by any person (who is a citizen of India or incorporated or established in India) for a period of ten days each in the months of January, April, July and October as may be specified by the Central Government.
- A person being an individual can buy bonds, either singly or jointly with other individuals.
- Donor’s name is not mentioned on the bond.

**Key Points**

- **Background:** The Electoral Bond Scheme acts as a check against traditional under-the-table donations as it insists on cheque and digital paper trails of transactions, however, several key provisions of the scheme make it highly controversial.
- **Misuse of Electoral Bonds as Pointed Out in the Supreme Court:**
  - **Anonymity:** Neither the donor (who could be an individual or a corporate) nor the political party is obligated to reveal whom the donation comes from.
  - **Asymmetrically Opaque:** Because the bonds are purchased through the State Bank of India (SBI), the government is always in a position to know who the donor is.
    - This asymmetry of information threatens to colour the process in favour of whichever political party is ruling at the time.
  - **Chanel of Blackmoney:** Elimination of a cap of 7.5% on corporate donations, elimination of requirement to reveal political contributions in profit and loss statements and also the elimination of the provision that a corporation must be three years in existence, undercuts the intent of the scheme.
    - A shell company can donate an unlimited amount anonymously to a political party giving it a convenient channel for business to round-trip its cash parked in tax havens for a favour or advantage granted in return for something.
- **Government’s Defence:**
  - **Conditions for Electoral Bonds:** Only parties registered under the Representation of the People Act 1951 could receive donations through electoral bonds, and they also should not have secured less than 1% of the votes polled in the previous elections.
  - **To Take on the Menace of Black Money in Politics:** Only white money is involved in the Bonds as the amounts are paid only through cheque or demand draft.
    - KYC norms are also followed.
  - **Election Commission of India’s Support:** ECI was not opposed to the bonds but was only concerned about the aspect of anonymity.
    - It also urged the court not to stay the bonds and said the scheme is one step forward compared to the old system of cash funding, which was unaccountable.
Anti-Corruption Strategies

Why in News

Recently, the Lokpal of India organized a Webinar on ‘Bringing Synergies in Anti-Corruption Strategies’.

Key Points

- **Corruption** can be defined as the abuse of entrusted power for private gain. It can impact a nation’s development in various ways.
- **Impact of Corruption:**
  - **Political Costs:** The political costs of corruption are manifested in weakened public trust in political institutions, reduced political participation, perversion of the electoral process, restricted political choices available to citizens and loss of legitimacy of the democratic system.
  - **Economic Costs:** Corruption reduces economic efficiency by misallocation of resources in favour of rent seeking activities, increasing the cost of public transactions, acting as an additional tax on business thereby reducing investment, reducing genuine business competition.
  - **Social Costs:** Corruption distorts the value systems and wrongly attaches elevated status to occupations that have rent seeking opportunities. This results in a disillusioned public, a weak civil society, which attracts unscrupulous leaders to political life.
  - **Environmental Costs:** Environmentally devastating projects are given preference in funding, because they are easy targets for siphoning off public money into private pockets.
  - **Issues of national security:** Corruption within security agencies can lead to a threat to national security, including through distortion of procurement, recruitment of ineligible persons, providing an easy route for smuggling of weapons and terrorist elements into the country and money laundering.

Legal Framework for Fighting Corruption:

- **Prevention of Corruption Act, 1988** provides for penalties in relation to corruption by public servants and also for those who are involved in the abetment of an act of corruption.
  - Amendment of 2018 criminalised both bribe-taking by public servants as well as bribe giving by any person.
- **The Prevention of Money Laundering Act, 2002** aims to prevent instances of money laundering and prohibits use of the ‘proceeds of crime’ in India.
  - The offence of money laundering prescribes strict punishment, including imprisonment of up to 10 years and the attachment of property of accused persons (even at a preliminary stage of investigation and not necessarily after conviction).
- **The Companies Act, 2013** provides for corporate governance and prevention of corruption and fraud in the corporate sector. The term ‘fraud’ has been given a broad definition and is a criminal offence under the Companies Act.
  - In cases involving fraud specifically, the Serious Frauds Investigation Office (SFIO) has been set up under the Ministry of Corporate Affairs, which is responsible for dealing with white collar crimes and offences in companies.
  - The SFIO conducts investigation under the provisions of the Companies Act.
- **The Indian Penal Code, 1860** sets out provisions which can be interpreted to cover bribery and fraud matters, including offences relating to criminal breach of trust and cheating.
- **The Foreign Contribution (Regulation) Act, 2010** regulates the acceptance and use of foreign contributions and hospitality by individuals and corporations.
  - Prior registration or prior approval of the Ministry of Home Affairs is required for receipt of foreign contributions and in the absence of such registration or approval, receipt of foreign contributions may be considered illegal.

Regulatory Framework:

- **The Lokpal and Lokayuktas Act, 2013** provides for an establishment of an ombudsman for the central
and state governments (Lokpal and Lokayuktas, respectively).
  - These bodies are required to act independently from the government and have been empowered to investigate allegations of corruption against public servants, which include the prime minister and other ministers.
  - The Central Vigilance Commission though created in 1964, became an independent statutory body only in 2003 by an Act of Parliament.
  - Its mandate is to oversee the vigilance administration and to advise and assist the executive in matters relating to corruption.

**MPLAD Scheme**

**Why in News**

Recently, funds from Members of Parliament Local Area Development Scheme (MPLADS) were disbursed to the village panchayats of Goa.

**Key Points**

- **About:**
  - MPLAD is a **Central Sector Scheme** which was announced in December 1993.
  - Initially, it came under the control of the Ministry of Rural Development. Later, in October 1994, it was transferred to the **Ministry of Statistics and Programme Implementation**.

- **Functioning:**
  - Each year, MPs receive Rs. 5 crore in two instalments of Rs. 2.5 crore each. Funds under MPLADS are non-lapsable.
  - Lok Sabha MPs have to **recommend the district authorities** projects in their Lok Sabha constituencies, while Rajya Sabha MPs have to spend it in the **state that has elected** them to the House.
  - Nominated Members of both the Rajya Sabha and Lok Sabha can **recommend works anywhere in the country**.

---

**MPLAD Scheme**

**Why in News**

Recently, funds from Members of Parliament Local Area Development Scheme (MPLADS) were disbursed to the village panchayats of Goa.

**Key Points**

- **About:**
  - MPLAD is a **Central Sector Scheme** which was announced in December 1993.
  - Initially, it came under the control of the Ministry of Rural Development. Later, in October 1994, it was transferred to the **Ministry of Statistics and Programme Implementation**.

- **Functioning:**
  - Each year, MPs receive Rs. 5 crore in two instalments of Rs. 2.5 crore each. Funds under MPLADS are non-lapsable.
  - Lok Sabha MPs have to **recommend the district authorities** projects in their Lok Sabha constituencies, while Rajya Sabha MPs have to spend it in the **state that has elected** them to the House.
  - Nominated Members of both the Rajya Sabha and Lok Sabha can **recommend works anywhere in the country**.

**Lokpal and Lokayukta**

- **The Lokpal and Lokayukta Act, 2013** provided for the establishment of Lokpal for the Union and Lokayukta for States.
  - The Bill was passed in 2013 in both the Houses of Parliament and came into force on 16th January 2014.
  - These institutions are **statutory bodies** without any constitutional status.
  - They perform the function of an “ombudsman” and inquire into allegations of corruption against certain public functionaries and for related matters.
  - The term Lokpal and Lokayukta were coined by Dr L. M. Singhvi.

- **Composition:**
  - Lokpal is a **multi-member body**, that consists of one chairperson and a maximum of 8 members.
  - Out of the maximum eight members, half to be judicial members and minimum 50% of the Members will be from SC/ST/OBC/Minorities and women.
  - The Chairperson of the Lokpal should be either the former Chief Justice of India or the former Judge of Supreme Court or an eminent person with impeccable integrity and outstanding ability.
  - The **term of office** for Lokpal Chairman and Members is 5 years or till the age of 70 years.

- **Jurisdiction of Lokpal** includes Prime Minister, Ministers, members of Parliament, Groups A, B, C and D officers and officials of Central Government.
  - However, the jurisdiction of the Lokpal included the Prime Minister except on allegations of corruption relating to international relations, security, the public order, atomic energy and space.
  - The Lokpal does not have jurisdiction over Ministers and MPs in the matter of anything said in Parliament or a vote given there.
Priority Projects:
- The projects include assets building such as drinking water facilities, primary education, public health sanitation and roads.
- Since June 2016, the MPLAD funds can also be used for implementation of the schemes such as Swachh Bharat Abhiyan, Accessible India Campaign (Sugamya Bharat Abhiyan), conservation of water through rain water harvesting and Sansad Aadarsh Gram Yojana, etc.

Criticism:
- Implementation Lapses: The Comptroller and Auditor-General of India (CAG) has flagged instances of financial mismanagement and artificial inflation of amounts spent.
- No Statutory Backing: The scheme is not governed by any statutory law and is subject to the whims and fancies of the government of the day.
- Monitoring and Regulation: The scheme was launched for promoting participatory development but there is no indicator available to measure level of participation.
- Breach of Federalism: MPLADS encroaches upon the domain of local self-governing institutions and thereby violates Part IX and IX-A of the Constitution.
- Conflict with Doctrine of Separation of Powers: MPs are getting involved in executive functions.

Debate over Constitutionality:
- National Commission to Review the Working of the Constitution, 2002: Recommended immediate discontinuation of the MPLAD scheme on the ground that it was inconsistent with the spirit of federalism and distribution of powers between the centre and the state.
- 2nd Administrative Reforms Commission’s report on “Ethics in Governance”, 2005: Opined that it seriously erodes the notion of separation of powers, as the legislator directly becomes the executive.
- Supreme Court Judgement, 2010: A five-judge bench of the Supreme Court ruled that there was no violation of the concept of separation of powers because the role of an MP in this case is recommendatory and the actual work is carried out by the Panchayats and Municipalities which belong to the executive organ.

Government of NCT of Delhi (Amendment) Bill, 2021

Why in News

- It aims to “further define the responsibilities of the elected government and Lieutenant Governor (LG) in Delhi”.

Centre vs Delhi govt again

Key Points
- Provisions of the Bill:
  - “Government” to mean “Lieutenant Governor (LG)”: The expression ‘Government’ referred to in any law to be made by the Legislative Assembly shall mean the Lieutenant Governor (LG).
  - Widening of Discretionary Powers of LG: The Bill gives discretionary powers to the LG even in matters where the Legislative Assembly of Delhi is empowered to make laws.
  - Necessarily Granted an Opportunity to LG: It seeks to ensure that the LG is “necessarily granted an opportunity” to give her/his opinion before any decision taken by the Council of Ministers (or the Delhi Cabinet) is implemented.
  - Related to Administrative Decisions: The amendment also says that “Legislative Assembly shall not make any rule to enable itself to consider
the matters of day-to-day administration of the Capital or conduct inquiries in relation to the administrative decisions”.

- **Need of the Amendment:**
  - **For Structural Clarity:** The Ministry of Home Affairs’ statement on “objects and reasons” of the Bill stated that Section 44 of the 1991 Act deals with conduct of business and there is **no structural mechanism for effective time-bound implementation** of the said section.
  - Also, there is no clarity as to what proposal or matters are required to be submitted to Lieutenant Governor before issuing order thereon.
  - **Section 44 of the 1991 Act says** all executive actions of the LG, whether taken on the advice of his Ministers or otherwise shall be expressed to be taken in the name of the LG.

- **Background of the Events:**
  - In its **2018 verdict**, the five-judge Bench had held that the LG’s concurrence is not required on issues other than police, public order and land.
  - It had added that decisions of the Council of Ministers will, however, have to be communicated to the LG.
  - The LG was bound by the aid and advice of the council of ministers.
  - The court also said that the status of the LG of Delhi is not that of a Governor of a State, rather he remains an Administrator, in a limited sense, working with the designation of Lieutenant Governor”.
  - It had also pointed out that the elected government must keep in mind that Delhi is not a state.
  - Encouraged by the Supreme Court verdict, the elected government had stopped sending files on executive matters to the LG before the implementation of any decision.
  - It has been keeping the LG informed of all administrative developments, but not necessarily before implementing or executing any decision.
  - But the amendment, if cleared, will **force the elected government to take LG’s advice before taking any action on any cabinet decision.**

- Delhi’s current status as a Union Territory with a Legislative Assembly is an outcome of the 69th Amendment Act through which Articles 239AA and 239BB were introduced in the Constitution.
- The Government of National Capital Territory of Delhi (GNCTD) Act was passed simultaneously to supplement the constitutional provisions relating to the Assembly and the Council of Ministers in the national capital.
- For all practical purposes, the GNCTD Act **outlines the powers of the Assembly, the discretionary powers enjoyed by the LG, and the duties of the Chief Minister** with respect to the need to furnish information to the LG.

### Damages Recovery Bill

#### Why in News
Recently, the Government of Haryana has passed the **Haraya Recovery of Damages to Property During Disturbance to Public Order Bill, 2021**.

- It can be noted that earlier **Uttar Pradesh Government** too had passed a similar bill named **“Uttar Pradesh Recovery of Damages to Public and Private Property Act, 2020.”**

#### Key Points

- **About the Bill:**
  - **Recovery of Damages:** The Bill provides for recovery of damages to properties caused by persons during disturbances to public order by an assembly, lawful or unlawful, including riots and violent disorder.
  - **Compensation to Victims:** It also ensures compensation to the victims.
  - **Comprehensive Coverage:** The recovery will not only be made from those who indulge in violence but also from those who lead the protest, the organizers, those involved in its planning and provide encouragement and the participants.
  - **Establishes a Claim Tribunal:** The provision for the constitution of Claims Tribunal to determine the liability, to assess the damages caused and to award compensation.
Attachment of Property: The power to attach property or bank account of any person against whom an award has been passed by the Claims Tribunal to pay compensation.

Appeal against Tribunal: Any person aggrieved by the award passed by the Claims Tribunal may file an appeal before the High Court of Punjab and Haryana.

- No civil court shall have the jurisdiction to entertain any question relating to the claim for the compensation

Government’s Stand:

- Responsibility of Government: It is the responsibility of the state government to protect the property of the state, whether it is private or government.
- Balance between Rights and Responsibility: In a democracy everyone has the right to speak and protest peacefully, but no one has the right to damage property.
- Deterrence: There should be a legal framework to cause deterrence in the minds of the perpetrators of violence as also the organisers, instigators etc.

Criticism:

- Against SC Guidelines: Composition of Claim Tribunal may violate SC judgement.
  - The SC, in 2019 struck down the Finance Act of 2017 which altered the appointments to 19 key judicial tribunals for not being in conformity with the principles delineated by the Supreme Court.
- Against Fundamental Rights: Violates the fundamental rights enshrined in Article 19 of the Constitution of freedom of expression.
- Vague and Unclear: The Supreme Court had only issued broad guidelines and many aspects like identifying offenders, executing a plan to recover losses, and penalties for non-compliance remains unclear.

Legal Provisions in India

India has no central legislation governing recovery of damages. At present, action against rioters is limited to the toothless Prevention of Damage to Public Property Act, 1984, which prescribes a jail term and fine for convicts but has no provision for recovery for damages.

- Despite a law against the destruction of property, incidents of rioting, vandalism, and arson have been common during protests across the country.
- In 2007, the Supreme Court (SC) took suo motu cognizance of the issue and set up two Committees headed by Justice K T Thomas and senior advocate Fali Nariman to suggest changes to the law.
- In 2009, the Supreme Court issued guidelines based on the recommendations of the two expert Committees.
- Like the law, the guidelines too, have had a limited impact. In Koshy Jacob vs Union Of India, 2017 the court reiterated that the law needed to be updated.

Right to Protests vs Recovery of Damages:

- Fundamental Rights vs. Order:
  - While agitators point to their fundamental right to protest, the plight of the people affected by agitations and their right to continue with normal activity often get ignored.

Indian Scenario:

- India’s history of public protests derives its legitimacy from Mahatma Gandhi’s path of civil disobedience and nonviolent protests, which were an integral part of our freedom struggle.
- This legacy continued and intensified over the year and the acceptance of bandhs, and hartals became part of people’s lives in many parts of the country.
- In fact agitations and disruptions are so steeped into our culture that we often make a virtue of it.

Global Example:

- The United States has state-wise laws with heightened penalties for protesters who block traffic and authorises law enforcement agencies to recover costs from protesters who damage or obstruct “critical infrastructure”.

Suggestions:

- Every organiser of a protest must make a clear declaration ensuring his followers will not damage public property and if they do, must be held financially liable.
- Facial recognition technology and the databases can help the police nail down vandals in a manner that can stand court scrutiny.
- With the increased deployment of surveillance cameras, protest organisers and frontline leaders could be monitored, subject to privacy laws.
Prevention of Damage to Public Property Act, 1984

- It punishes anyone “who commits mischief by doing any act in respect of any public property” with a jail term of up to five years and a fine or both. Provisions of this law can be coupled with those under the Indian Penal Code.
- Under this Act, public property includes “any building, installation or other property used in connection with the production, distribution or supply of water, light, power or energy; any oil installation; any sewage works; any mine or factory; any means of public transportation or of telecommunications, or any building, installation or other property used in connection therewith”.

Thomas Committee

- The Thomas Committee recommended reversing the burden of proof against protesters. The court should have the power to draw a presumption that the accused is guilty of destroying public property, and it would then be open to the accused to rebut such presumption.
  - Such a reversal of the burden of proof is applicable in cases of sexual violence, among others.
  - Generally, the law presumes that the accused is innocent until the prosecution proves its case.
- The court accepted the suggestion.

Nariman Committee

- The recommendations of this committee dealt with extracting damages for destruction.
- The court accepted them and ruled that the rioters should be made strictly liable and compensation must be collected for the damage done.
- Apart from this, the Supreme Court directed High Courts to order suo motu action and to set up a machinery to investigate the damage caused and award compensation wherever mass destruction to the property takes place due to protests.

Key Points

- **About:** It is needed when the amount authorised by the Parliament through the appropriation act for a particular service for the current financial year is found to be insufficient for that year.
  - This grant is presented and passed by the Parliament before the end of the financial year.
- **Constitutional Provisions:** Article 115 pertains to supplementary, additional or excess grants.
- **Other Grants:**
  - **Additional Grant:** It is granted when a need has arisen during the current financial year for additional expenditure upon some new service not contemplated in the budget for that year.
  - **Excess Grant:** It is granted when money has been spent on any service during a financial year in excess of the amount granted for that service in the budget for that year. It is voted by the Lok Sabha after the financial year. Before the demands for excess grants are submitted to the Lok Sabha for voting, they must be approved by the Public Accounts Committee of Parliament.
  - **Vote of Credit:** It is granted for meeting an unexpected demand upon the resources of India, when on account of the magnitude or the indefinite character of the service, the demand cannot be stated with the details ordinarily given in a budget. Hence, it is like a blank cheque given to the Executive by the Lok Sabha.
  - **Exceptional Grant:** It is granted for a special purpose and forms no part of the current service of any financial year.
  - **Token Grant:** It is granted when funds to meet the proposed expenditure on a new service can be made available by reappropriation. A demand for the grant of a token sum (of Re 1) is submitted to the vote of the Lok Sabha and if assented, funds are made available.
    - Reappropriation involves transfer of funds from one head to another. It does not involve any additional expenditure.
- **Article 116** of the Constitution pertains to Votes on account, votes of credit and exceptional grants.
- Supplementary, additional, excess and exceptional grants and vote of credit are regulated by the same procedure which is applicable in the case of a regular budget.

Supplementary Demand for Grants

**Why in News**

The Lok Sabha has passed supplementary demand for grants for the second batch (2020-2021).
Inter-Parliamentary Union

**Why in News**

Recently, the President of the Inter-Parliamentary Union (IPU) addressed Members of Parliament at the Central Hall of the Indian Parliament.

**Key Points**

- **About:**
  - IPU is an international organisation of national parliaments. It was established in 1889 in Paris.
  - It was founded by statesmen Frédéric Passy of France and William Randal Cremer of the United Kingdom.
  - It works with close co-operation with the United Nations (UN), regional parliamentary organisations, international intergovernmental organisations and non-governmental organisations for the arbitration of conflict.
  - It is a unique platform for observing political opinions and trends around the world.

- **Aim:**
  - To promote parliamentary dialogue world-wide and works for peace and cooperation among the peoples.
  - To promote democratic governance, accountability, and cooperation among its members.

- **Slogan:**
  - For democracy. For everyone

- **Functions:**
  - Promoting parliamentary action by addressing international concerns in six main areas:
    - Representative democracy.
    - Peace and security.
    - Sustainable development.
    - Human rights and humanitarian law.
    - Women in politics.
    - Education, science, and culture.

- **Members:**
  - 179 countries are members of the IPU.
  - 13 regional parliamentary assemblies are associate members.
  - India is a member.

- **Headquarters:**
  - Geneva, Switzerland.

The Appropriation Bill

**Why in News**

Recently, the Lok Sabha cleared the Appropriation Bill, allowing the Central government to draw funds from the Consolidated Fund of India.

**Key Points**

- **About:**
  - Appropriation Bill gives power to the government to withdraw funds from the Consolidated Fund of India for meeting the expenditure during the financial year.
  - As per Article 114 of the Constitution, the government can withdraw money from the Consolidated Fund only after receiving approval from Parliament.
  - The amount withdrawn is used to meet the current expenditure during the financial year.

- **Procedure Followed:**
  - The Appropriation Bill is introduced in the Lok Sabha after discussions on Budget proposals and Voting on Demand for Grants.
  - The defeat of an Appropriation Bill in a parliamentary vote would lead to the resignation of a government or a general election.
  - Once it is passed by the Lok Sabha it is sent to the Rajya Sabha.
  - Power of Rajya Sabha:
    - It has the power to recommend any amendments in this Bill. However, it is the prerogative of the Lok Sabha to either accept or reject the recommendations made by the Rajya Sabha.
    - After the bill receives assent from the President it becomes an Appropriation Act.
    - The unique feature of the Appropriation Bill is its automatic repeal clause, whereby the Act gets repealed by itself after it meets its statutory purpose.
  - The government cannot withdraw money from the Consolidated Fund of India till the enactment...
of the appropriation bill. However, this takes time and the government needs money to carry on its normal activities. To meet the immediate expenses the Constitution has authorised the Lok Sabha to make any grant in advance for a part of the financial year. This provision is known as the ‘Vote on Account’.

### Vote on Account

**About:**
- A vote on account, as defined by Article 116 of the Indian Constitution, is a grant in advance for the central government to meet short-term expenditure needs from the Consolidated Fund of India, generally lasting for a few months till the new financial year kicks in.

**Need:**
- During an election year the Government either opts for ‘interim Budget’ or for ‘Vote on Account’ as after the election the Ruling Government may change and so the policies.

**Amendment:**
- No amendment can be proposed to an Appropriation Bill which will have the effect of varying the amount or altering the destination of any grant so made or of varying the amount of any expenditure charged on the Consolidated Fund of India, and the decision of the Lok Sabha Speaker as to whether such an amendment is admissible is final.

**Appropriation Bill vs Finance Bill:**
- While the Finance Bill contains provisions on financing the expenditure of the government, an Appropriation Bill specifies the quantum and purpose for withdrawing money.
- Both appropriation and finance bills are classified as money bills which do not require the explicit consent of the Rajya Sabha. The Rajya Sabha only discusses them and returns the bills.

- **Money Bill:**
  - A Bill is said to be a Money Bill if it only contains provisions related to taxation, borrowing of money by the government, expenditure from or receipt to the Consolidated Fund of India.
  - Bills that only contain provisions that are incidental to these matters would also be regarded as Money Bills.

### Consolidated Fund of India

- It was constituted under Article 266 (1) of the Constitution of India.
- It is made up of:
  - All revenues received by the Centre by way of taxes (Income Tax, Central Excise, Customs and other receipts) and all non-tax revenues.
  - All loans raised by the Centre by issue of Public notifications, treasury bills (internal debt) and from foreign governments and international institutions (external debt).
- All government expenditures are incurred from this fund (except exceptional items which are met from the Contingency Fund or the Public Account) and no amount can be withdrawn from the Fund without authorization from the Parliament.
- The Comptroller and Auditor-General of India (CAG) audits the fund and reports to the relevant legislatures on the management.

### Stages of Budget in the Parliament

- Presentation of Budget.
- General discussion.
- Scrutiny by Departmental Committees.
- Voting on Demands for Grants.
- Passing an Appropriation Bill.
- Passing of Finance Bill.

### UDAN 4.1

#### Why in News

On the commencement of the ‘Azadi Ka Amrit Mahotsav (India@75)’, the Ministry of Civil Aviation (MoCA) has proposed about 392 routes under UDAN 4.1 bidding process.

#### Key Points

- **About UDAN 4.1:**
  - The UDAN 4.1 focuses on connecting smaller airports, along with special helicopter and seaplane routes.
  - Some new routes have been proposed under the Sagarmala Seaplane services.
  - Sagarmala Seaplane Services is an ambitious project under the Ministry of Ports, Shipping and Waterways with potential airline operators.
One such seaplane service is already in operation between Kevadia and Sabarmati Riverfront in Ahmedabad, which was started in October 2020.

About UDAN Scheme:
- Ude Desh ka Aam Nagrik (UDAN) was launched as a regional connectivity scheme under the Ministry of Civil Aviation in 2016.
- It is an innovative scheme to develop the regional Aviation market.
- The objective of the scheme is to create affordable yet economically viable and profitable flights on regional routes so that flying becomes affordable to the common man even in small towns.
- The scheme envisages providing connectivity to un-served and underserved airports of the country through the revival of existing air-strips and airports. The scheme is operational for a period of 10 years.
  - Under-served airports are those which do not have more than one flight a day, while unserved airports are those where there are no operations.
- Financial incentives from the Centre, state governments and airport operators are extended to selected airlines to encourage operations from unserved and under-served airports, and keep airfares affordable.
- Till date, 325 routes and 56 airports including 5 heliports and 2 water aerodromes have been operationalised under the scheme.

UDAN 1.0:
- Under this phase, 5 airlines companies were awarded 128 flight routes to 70 airports (including 36 newly made operational airports).

UDAN 2.0:
- In 2018, the Ministry of Civil Aviation announced 73 underserved and unserved airports.
- For the first time, helipads were also connected under phase 2 of the UDAN scheme.

UDAN 3.0:
- Inclusion of Tourism Routes under UDAN 3 in coordination with the Ministry of Tourism.
- Inclusion of Seaplanes for connecting Water Aerodromes.
- Bringing in a number of routes in the North-East Region under the ambit of UDAN.

UDAN 4.0:
- In 2020, 78 new routes were approved under the 4th round of Regional Connectivity Scheme (RCS) - UdeDeshKaAamNagrik (UDAN) to further enhance the connectivity to remote & regional areas of the country.
- Kavaratti, Agatti, and Minicoy islands of Lakshadweep will be connected by the new routes of UDAN 4.0.

Vehicle Scrapping Policy

Why in News
Recently, the Union Road and Transport Minister announced the Vehicle Scrapping Policy in the Lok Sabha.
- It was first announced in the Union Budget for 2021-22.
- The policy is estimated to cover 51 lakh Light Motor Vehicles (LMVs) that are above 20 years of age and another 34 lakh LMVs above 15 years of age.
- India will also implement a Global Positioning System (GPS)-based toll collection system and do away with all toll booths within a year.

Key Points
- Aim:
  - Reducing the population of old and defective vehicles, bringing down vehicular air pollutants, improving road and vehicular safety.
- Provisions:
  - Old vehicles will have to pass a fitness test before re-registration and as per the policy government commercial vehicles more than 15 years old and private vehicles which are over 20 years old will be scrapped.
  - Old vehicles will be tested at the Automated Fitness Center and the fitness test of the vehicles will be conducted according to international standards.
    - Emission test, braking system, safety components will be tested and the vehicles which fail in the fitness test will be scrapped.
    - The Ministry has also issued rules for registration procedure for scrapping facilities, their powers, and scrapping procedure to be followed.
Road Tax Rebate:
- The state governments may be advised to offer a road-tax rebate of up to 25% for personal vehicles and up to 15% for commercial vehicles to provide incentive to owners of old vehicles to scrap old and unfit vehicles.

Vehicle Discount:
- Vehicle manufacturers will also give a discount of 5% to people who will produce the 'Scrapping Certificate' and registration fees will be waived off on the purchase of a new vehicle.

Disincentive:
- As a disincentive, increased re-registration fees would be applicable for vehicles 15 years or older from the initial date registration.

Significance:
- Creation of Scrap yards:
  - It will lead to creation for more scrap yards in the country and effective recovery of waste from old vehicles.
- Employment:
  - In the new fitness centers, 35 thousand people will get employment and an investment of Rs 10,000 crores will be pumped in.
- Improved Revenue:
  - This will boost sales of heavy and medium commercial vehicles that had been in the contraction zone as a result of economic slowdown triggered by the bankruptcy of IL&FS (Infrastructure Leasing & Financial Services) and Covid-19 pandemic.
- The government treasury is expected to get around Rs. 30,000 to 40,000 crores of money through Goods and Services Tax (GST) from this policy.

- Reduction in Prices:
  - Prices of auto components would fall substantially with the recycling of metal and plastic parts.
  - As scrapped materials will get cheaper the production cost of the vehicle manufacturers will also reduce.

- Reduce Pollution:
  - It will help improve fuel efficiency and reduce pollution.
  - As older vehicles pollute the environment 10 to 12 times more, and estimated that 17 lakh medium and heavy commercial vehicles are more than 15 years old.

Other Initiatives to Curb Vehicular Pollution:
- Go Electric Campaign
- FAME India Scheme Phase II.
- Hydrogen Fuel Cell Based Bus and Car Project.

GRAM UJALA

Why in News
Recently, the Government has launched the Gram UJALA Programme - an ambitious scheme offering the world’s cheapest LED bulbs in rural areas at a mere Rs. 10.

Key Points
- Coverage: In its first phase launched from Arrah in Bihar, 15 million LED bulbs will be distributed across villages of 5 districts - Aarah (Bihar), Varanasi (Uttar Pradesh), Vijayawada (Andhra Pradesh), Nagpur (Maharashtra), and villages in western Gujarat.
- The light-emitting diode (LED) is one of today’s most energy-efficient and rapidly-developing lighting technologies.
Note: www.drishtiIAS.com

- 7 watt and 12-watt LED bulbs with 3 years warranty will be given to rural consumers against submission of working Incandescent bulbs.
  - Each household will get up to 5 LEDs.
  - Participating rural households will also have metres installed in their houses to account for usage.
- The LED bulbs are offered by state-run Energy Efficiency Services Ltd's (EESL's) subsidiary Convergence Energy Services Ltd (CESL).
  - EESL is a Public Sector Undertaking (PSU) under the Ministry of Power.

Financing Mechanism:
- The programme will be financed entirely through carbon credits and will be the first such programme in India.
- The revenue earned from carbon credits will contribute Rs. 60 per LED bulb piece, with the balance Rs. 10 to be paid by the rural consumer.
  - Carbon credit (or “carbon offsets”) are certificates generated by projects or activities that reduce, avoid, or destroy greenhouse gases.
  - Project owners, such as solar and wind energy developers, or protectors of endangered forestlands can sell these certificates to an individual or a company to earn revenues to keep expanding their projects into the future.
  - When one purchases carbon offsets, one is funding the reduction or elimination of carbon.
- Further on, carbon credit documentation will be sent to United Nations (UN) accredited validators for inclusion into the Shine Program of activities.
  - Carbon credits will be prepared under the Shine Program of Activities with an option for verifying under the Voluntary Carbon Standard, depending on the needs of buyers.
  - Carbon Credit Buyers will also be sought through an open process based on initial discussions with the market.

Significance:
- Help in meeting intended nationally determined contributions under paris climate accord.
  - If all 300 million lights in India were replaced, the total energy savings would be 40,743 million kWh/year, avoiding peak demand of 22,743MW/year and CO₂ reductions of 37 million tons per year.
- Through extra carbon credit, India will boost its position in global carbon trade.
- Boost to efforts to ensure 24-hour power supply.
  - The Prime Minister of India, in his Independence Day speech of 2015, promised that all villages where electricity was yet to reach, will have power within 1,000 days.
  - To create basic power infrastructure and connectivity, the government had announced a scheme - the Deendayal Upadhyay Gram Jyoti Yojana.
- Help in the growth of domestic LED markets.
- Meet the benefit of sustainable development goals (SDG).
  - Specially SDG7: To ensure universal access to affordable, reliable and modern energy services.

Other Schemes for Encouraging Use of LED Bulbs:
- Unnat Jyoti by Affordable LEDs for All (UJALA).
- Street Lighting National Programme (SLNP).

Rising Cases of Diphtheria

Why in News
A recent study has found that Diphtheria, which is a relatively easily-preventable infection, could become a major global threat.

Key Points

Data:
- Global Rise: The number of diphtheria cases reported globally has been increasing gradually. In 2018, there were 16,651 reported cases, more than double the yearly average for 1996-2017 (8,105 cases).
- Indian Scenario: According to the World Health Organization (WHO), India reported 2,365 cases in 2015. However, in 2016, 2017 and 2018, the numbers rose successively to 3,380, 5,293 and 8,788.
  - As per the WHO, India accounted for 60% of all diphtheria cases globally in 2017.
  - In 2018, Delhi witnessed the death of more than 50 children because of Diphtheria.

Reasons:
- Antimicrobial Resistance (AMR): Diphtheria has started to become resistant to several classes of antibiotics.
Antimicrobial resistance is the resistance acquired by any microorganism (bacteria, viruses, fungi, parasite, etc.) against antimicrobial drugs (such as antibiotics, antifungals, antivirals, antimalarials, and anthelmintics) that are used to treat infections.

**Covid-19 Impact:** Covid-19 has severely impacted vaccination schedules in different parts of the world.

According to the recently released UN Report on the Impact of Covid-19 on Children, suspension of immunization campaigns will set back the decades-long effort to eliminate various diseases.

**Misunderstanding of Disease:** Parents often misunderstand the disease as usual cough and cold and take medicines from a physician. Since the child has not been given diphtheria shots, with the passage of time, the toxin released from the bacteria starts hampering the functioning of the kidney, heart and nervous system.

**Vaccine Hesitancy:** It refers to delay in acceptance or refusal of vaccines despite availability of vaccine services. It is complex and context specific varying across time, place and vaccine.

It is influenced by factors such as complacency, convenience and confidence.

**Diphtheria**

- **Caused by Bacteria:**
  - Diphtheria is primarily caused by the bacterium *Corynebacterium diphtheriae*.

- **Symptoms:**
  - Common cold, fever, chills, swollen gland in neck, sore throat, bluish skin etc.

- **Impact:**
  - The primary infection is in the throat and upper airways. Produces a toxin affecting other organs.
  - One type of diphtheria affects the throat and sometimes the tonsils.
  - Another type causes ulcers on the skin.

- **Spread:**
  - It is mainly spread by coughs and sneezes, or through close contact with someone infected.

- **Target Population:**
  - Diphtheria particularly affects children aged 1 to 5 years.
  - Occurrence of diphtheria cases in under-five children reflects low coverage of primary diphtheria vaccination.

- **Fatality Rate:**
  - Diphtheria is fatal in only 5-10% cases.
  - Fatality Rate is the proportion of people who die from a specified disease among all individuals diagnosed with the disease over a certain period of time.

- **Treatment:**
  - Administering diphtheria antitoxin to neutralize the effects of the toxin, as well as antibiotics to kill the bacteria.
  - Diphtheria is preventable with use of antibiotics and vaccines.

- **Vaccination:**
  - The diphtheria vaccine is among the oldest vaccines in India’s Universal Immunisation Programme. As per data from the National Family Health Survey-4, the coverage of diphtheria vaccine is 78.4%.
  - In 1978, India launched the Expanded Programme on Immunisation.
  - The first three vaccines in the programme were BCG (against TB), DPT (diphtheria, pertussis, tetanus) and cholera.
  - In 1985, the programme was converted to the Universal Immunisation Programme (UIP). DPT continues to be a part of UIP, which now includes 12 vaccines.
  - It is now incorporated as a pentavalent vaccine (containing a vaccine against diphtheria, pertussis, tetanus, Hepatitis B and Haemophilus influenzae type B).
  - It is also included among the combination of eight vaccine doses which are administered in the first year of life under the full immunisation programme.
  - Recently, the Intensified Mission Indradhanush (IMI) 3.0 scheme has been rolled out to cover children and pregnant women who missed routine immunisation during the Covid-19 pandemic.
**Gandhi Peace Prize**

**Why in News**

The father of the nation of Bangladesh Sheikh Mujibur Rahman and the late Sultan of Oman, Qaboos bin Said Al Said are to be awarded the Gandhi Peace Prize for 2020 and 2019 respectively.

**Key Points**

- **About the Gandhi Peace Prize:**
  - **Institution of Award:** The annual award was instituted by the Government of India in 1995 during the commemoration of the 125th birth anniversary of Mahatma Gandhi for those involved in social, economic and political transformation through non-violence.
  - **Rewards:** The award carries an amount of Rs. 1 crore, a Citation in a scroll, a plaque as well as an exquisite traditional handicraft/handloom item.
  - **Conferred Upon:** The prize can be given to individuals, associations, institutions or organizations.
  - It can be divided between two persons/institutions who are considered by the Jury to be equally deserving of recognition in a given year.
  - It is open to all persons regardless of nationality, creed, race or sex.
  - **Selection Committee:** The jury chaired by the Prime Minister and other members are the Chief Justice of India, the leader of the single largest Opposition party in the Lok Sabha, Lok Sabha Speaker and founder of Sulabh International.

- **Sheikh Mujibur Rahman:**
  - He was known as Bangabandhu. Also regarded as “Jatir Janak” or “Jatir Pita” (both meaning “Father of the Nation”) of Bangladesh.
  - He was born on 17th March 1920 in Tungipara, India (now in Bangladesh) and passed away on 15th August 1975 in Dhaka, Bangladesh.
  - Year 2020 marked the birth centenary of Bangabandhu.
  - He was a Bengali leader who became the first prime minister of Bangladesh (1972–75) and later became the president of the same in 1975.

- **Qaboos bin Said Al Said:**
  - He has been the Arab world’s longest-serving ruler. He ruled Oman for almost half a century.
  - In 1970, with the help of British, Qaboos overthrew his father in a bloodless coup, emerging as the Sultan at age 29.

- He was a visionary leader whose twin policy of moderation and mediation in addressing international issues won him praise and respect across the globe.
- He was also the architect of the special ties between India and Oman.
  - He had studied in India and always maintained a special relationship with India.
- The Gandhi Peace Prize 2019 recognises his leadership in strengthening the ties between India and Oman and his efforts to promote peace in the Gulf region.

- He began his formal political career in 1949 as a co-founder of the Awami League.
- He played a crucial role in advocating political autonomy for East Pakistan, the detached eastern part of Pakistan (now Bangladesh).
- He was chosen for Gandhi Peace Prize 2020 in recognition of his outstanding contributions towards social, economic and political transformation through non-violent and other Gandhian methods.
- He was a champion of human rights and freedom, and is a hero to Indians as well.
  - The legacy and inspiration of Bangabandhu has made the heritage of both countries more comprehensive and deep-rooted, and that the path shown by Bangabandhu has laid a strong foundation for the partnership, progress and prosperity of both countries over the last decade.
**Reservation Quota Limit of States**

**Why in News**

Tamil Nadu told a Constitution Bench of the Supreme Court that the percentage of reservation should be left to the “subjective satisfaction” of individual States.

- Subjective satisfaction refers to the State’s discretion to identify its socially and educationally backward classes and fix the percentage of reservation for them in State government jobs and educational admissions.
- A nine-judge bench in the Indra Sawhney case (famously known as the Mandal Commission case) imposed the ceiling of 50% on total reservation.

**Key Points**

- **Indra Sawhney & Others vs Union of India, 1992:**
  - The Supreme Court while upholding the 27% quota for backward classes, struck down the government notification reserving 10% government jobs for economically backward classes among the higher castes.
  - SC in the same case also upheld the principle that the combined reservation beneficiaries should not exceed 50% of India’s population.
  - The concept of ‘creamy layer’ also gained currency through this judgment and provision that reservation for backward classes should be confined to initial appointments only and not extend to promotions.

- **Breach of the Limit by the States:**
  - Notwithstanding the judgement passed by the Supreme Court, since Indra Sawhney judgment 1992, many states have passed laws breaching the limit of 50% such as Maharashtra, Telangana, Tamil Nadu, Haryana, Chhattisgarh, Rajasthan and Madhya Pradesh.
  - Tamil Nadu Reservation Act, 1993 provides 69% reservation in State government jobs and educational institutions.
  - In January 2000, the Governor of the erstwhile state of Andhra Pradesh declared 100% reservation to Scheduled Tribes (ST) candidates in posts of school teachers in Scheduled Areas.
  - However, it was ruled as unconstitutional by the apex court.

- The Maharashtra State Reservation for Socially and Educationally Backward Classes (SEBC) Act of 2018, which provides 12% to 13% quota benefits for the Maratha community, takes the reservation percentage in the State across the 50% mark, was enacted.

- **States’ Concern:**
  - Tamil Nadu and Karnataka agreed with Maharashtra that the 50% ceiling limit on reservation introduced in the Indira Sawhney judgment was not “cast in stone” (Permanently fixed or firmly established”).
  - The Indira Sawhney judgment required a re-look. The ground situation had changed a lot since that judgment in 1992.
  - Also, there is contention regarding the Constitution (One Hundred and Second Amendment) Act of 2018, which introduces the National Commission for Backward Classes, that it interferes with the authority of State Legislatures to provide benefit to the social and educationally backward communities (SEBCs) in their own jurisdiction.
  - However, in an affidavit, the Ministry of Social justice and Empowerment has said the power to identify SEBCs lies with Parliament only with reference to the central list and states can have a separate list of SEBCs for reservation.

**Constitution and Reservation**

- **77th Constitutional Amendment Act, 1995:** The Indra Sawhney verdict had held there would be reservation only in initial appointments and not promotions.
  - However, addition of the article 16(4A) to the Constitution, empowered the state to make provisions for reservation in matters of promotion to SC/ST employees, if the state feels they are not adequately represented.

- **81st Constitutional Amendment Act, 2000:** It introduced Article 16(4B), which says unfilled SC/ST quota of a particular year, when carried forward to the next year, will be treated separately and not clubbed with the regular vacancies of that year.

- **85th Constitutional Amendment Act, 2001:** It provided for the reservation in promotion can be applied with ‘consequential seniority’ for the government servants belonging to the SCs and STs with retrospective effect from June 1995.
The National Commission for Allied and Healthcare Professions Bill, 2020

Why in News

Recently, the National Commission for Allied and Healthcare Professions Bill, 2020 was passed unanimously by the Lok Sabha.

- The Bill seeks to regulate and standardise the education and practice of allied and healthcare professionals.
- The group of allied professionals is large and the Bill is trying to regulate this field by providing dignity to their roles.

Key Points

- **Allied Health Professional:**
  - The Bill defines an ‘allied health professional’ as an associate, technician, or technologist trained to support the diagnosis and treatment of any illness, disease, injury, or impairment.
  - Such a professional should have obtained a diploma or degree.
    - The duration of the degree /diploma should be at least 2,000 hours (over a period of two to four years).

- **Healthcare Professional:**
  - A ‘healthcare professional’ includes a scientist, therapist, or any other professional who studies, advises, researches, supervises, or provides preventive, curative, rehabilitative, therapeutic, or promotional health services.
  - Such a professional should have obtained a degree.
    - The duration of the degree should be at least 3,600 hours (over a period of three to six years).

- **Allied and Healthcare Professions:**
  - The Bill specifies certain categories of allied and healthcare professions as recognised categories.
  - These are mentioned in the Schedule to the Bill and include life science professionals, trauma and burn care professionals, surgical and anaesthesia related technology professionals, physiotherapists, and nutrition science professionals.
  - The central government may amend this Schedule after consultation with the National Commission for Allied and Healthcare Profession.

- **National Commission for Allied and Healthcare Professions:** The Bill sets up the National Commission for Allied and Healthcare Professions.
  - **Structure:**
    - It will consist of a Chairperson, Vice-Chairperson, five members representing various Departments/Ministries of the central government, one representative from the Directorate General of Health Services, three Deputy Directors or Medical Superintendents appointed on a rotational basis from amongst medical institutions and 12 part-time members representing State Councils, among others.
  - **Functions:** The Commission will perform the following functions with regard to Allied and Healthcare Professionals:
    - Creating and maintaining an online Central Register of all registered professionals.
    - Providing basic standards of education, courses, curriculum, staff qualifications, examination, training, maximum fee payable for various categories.
  - **Professional Councils:**
    - The Commission will constitute a Professional Council for every recognised category of allied and healthcare professions.
    - The Professional Council will consist of a president and four to 24 members, representing each profession in the recognised category.
    - The Commission may delegate any of its functions to this Council.
  - **State Councils:**
    - Within six months from the passage of the Bill, state governments will constitute State Allied and Healthcare Councils.
    - It will complement the functioning of the National Commission and maintain a State Register.
Permission for Establishment of Institutions:
- Prior permission of the State Council will be required to:
- Establish a new institution.
- Open new courses, increase the admission capacity, or admit a new batch of students to existing institutions.
- If such permission is not sought, then any qualification granted to a student from such an institution will not be recognised under the Bill.

Offences and Penalties:
- No person is allowed to practice as a qualified allied and healthcare practitioner other than those enrolled in a State Register or the National Register.
- Any person who contravenes this provision will be punished with a fine of Rs. 50,000.

The Constitution (125th Amendment) Bill, 2019

Why in News
Recently, the Ministry of Home Affairs (MHA) informed the Lok Sabha that presently, there is no proposal to implement Panchayati Raj System in Sixth Schedule areas of Assam.

In January 2019, the Constitution (125th Amendment) Bill, 2019 was introduced in the Rajya Sabha to amend the provisions related to the Finance Commission and the Sixth Schedule of the Constitution.

The Sixth Schedule relates to the administration of tribal areas in the states of Assam, Meghalaya, Tripura and Mizoram.

Key Points
- Proposed Amendments:
  - Village and Municipal Councils:
    - Village and Municipal Councils:
      - It provides for Village and Municipal Councils in addition to the District and Regional Councils. Village Councils will be established for villages or groups of villages in rural areas, and Municipal Councils will be established in urban areas of each district.
    - Structure of the Village and Municipal Councils:
  - Structure of the Village and Municipal Councils:

The District Councils may make laws on various issues, including:
1. Number of Village and Municipal Councils to be formed, and their composition,
2. Delimitation of constituencies for election to the Village and Municipal Councils.

Rules for Devolution of Powers:
- Governor may make rules for devolution of powers and responsibilities to the Village and Municipal Councils.
- Such rules may be framed in relation to:
  1. Preparation of plans for economic development.
  2. Implementation of land reforms.
  3. Urban and town planning.
  4. Regulation of land-use, among other functions.

State Finance Commission:
- The Bill provides the appointment of a Finance Commission for these states, to review the financial position of District, Village, and Municipal Councils.
- The Commission will make recommendations regarding:
  - Distribution of taxes between states and District Councils.
  - Grants-in-aid to District, Village, and Municipal Councils from the Consolidated Fund of the state.

Elections to Councils:
- All elections to the District Councils, Regional Councils, Village Councils, and Municipal Councils will be conducted by the State Election Commission appointed by the Governor, for these four states.

Disqualification of Members of Councils:
- The Sixth Schedule provides that the Governor may make rules for the constitution of District and Regional Councils, including qualifications for being elected as members of these councils.
- The Bill adds that the Governor may make rules for the disqualification of such members on the grounds of defection.
Sixth Schedule:
- About:
  - The Sixth Schedule was originally intended for the predominantly tribal areas (tribal population over 90%) of undivided Assam, which was categorised as “excluded areas” under the Government of India Act, 1935 and was under the direct control of the Governor.
  - It provides for the administration of tribal areas in Assam, Meghalaya, Tripura and Mizoram to safeguard the rights of the tribal population in these states.
    - This special provision is provided under Article 244 (2) and Article 275 (1) of the Constitution.
    - It provides for autonomy in the administration of these areas through Autonomous District Councils (ADCs).
      - ADCs are empowered to make laws in respect of areas under their jurisdiction, which cover the land, forest, cultivation, inheritance, indigenous customs and traditions of tribals, etc. and also to collect land revenues and certain other taxes.
      - ADCs are like miniature states having specific powers and responsibilities in respect of all the three arms of governance: Legislature, executive and judiciary.
  - Autonomous Districts:
    - About:
      - The Governor is empowered to organise and re-organise the autonomous districts. Thus, he can increase or decrease their areas or change their names or define their boundaries and so on.
      - If there are different tribes in an autonomous district, the governor can divide the district into several autonomous regions.
    - Composition:
      - Each autonomous district has a district council consisting of 30 members, of whom four are nominated by the governor and the remaining 26 are elected on the basis of adult franchise and they hold office for five years.
      - Each autonomous region also has a separate regional council.

1. The district and regional councils administer the areas under their jurisdiction.
2. The district and regional councils within their territorial jurisdictions can constitute village councils or courts for trial of suits and cases between the tribes. They hear appeals from them.
3. The jurisdiction of the high court over these suits and cases is specified by the Governor.

Sixth Schedule Areas:

Autonomous Regions:

Meghalaya
- Khasi Hills Autonomous District Council
- Jaintia Hills Autonomous District Council
- Garo Hills Autonomous District Council

Tripura
- Tripura Tribal Areas Autonomous District Council

Mizoram
- Chakma Autonomous District Council
- Lai Autonomous District Council

Assam
- Dima Hasao Autonomous Council
- Karbi Anglong Autonomous Council
- Bodoland Territorial Council

Panchayati Raj Institutions
- About:
  - Panchayats were included in Article 40 under the Directive Principles of the Constitution of India.
  - Government in 1992 introduced the 73rd Amendment to make the Panchayati Raj Institutions (PRIs) Constitutional machinery.
- Scheduled Areas:
  - The tribal dominated states under 5th and 6th schedules of the Constitution were, however, given the option either to introduce Panchayati Raj institutions or to continue with their traditional self-government institutions.
  - All the states of India including 5th and 6th schedule states except Jammu & Kashmir, Nagaland, Meghalaya, Mizoram and the autonomous areas of Assam and Tripura amended their Panchayati Raj Act to accommodate the provisions of the 73rd Amendment Act.
- Provisions of PRIs:
Establishment of a **three-tier structure** (Village Panchayat, Panchayat Samiti or intermediate level Panchayat and Zilla Parishad or district level Panchayat).

Establishment of Gram Sabhas at the village level.

Regular elections to Panchayats every five years.

Proportionate seat **reservation** for SCs/STs.

Reservation of not less than **1/3 seats for women**.

Constitution of **State Finance Commissions** to recommend measures to improve the finances of Panchayats.

**Power to Panchayats:**

- The Constitution (73rd Amendment) Act, 1992 vests power in the State Government to endow Panchayats with such powers and authority as may be necessary to enable them to function as institutions of self-government such as:
  - Preparation of plans and their execution for economic development and social justice in relation to 29 subjects listed in the **XI schedule** of the Constitution.
  - To levy, collect and appropriate taxes, duties, tolls and fees. Transfer of taxes, duties, tolls and fees collected by the States to Panchayats.

**N.V. Ramana:**

48th **Chief Justice of India**

**Why in News**

N.V. Ramana, the senior most judge of the Supreme Court, has been recommended as the next top judge by the present Chief Justice of India (S A Bobde).

Justice Ramana will take over as the 48th **Chief Justice of India (CJI)** from 24th April 2021. He would be the CJI till 26th August, 2022.

**Key Points**

- **Appointment of the CJI:**
  - The Chief Justice of India and the Judges of the **Supreme Court (SC)** are appointed by the President under clause (2) of Article 124 of the Constitution.
  - As far as the CJI is concerned, the **outgoing CJI recommends his successor.**
  - The Union Law Minister forwards the recommendation to the Prime Minister who, in turn, advises the President.
  - SC in the **Second Judges Case (1993),** ruled that the senior most judge of the Supreme Court should alone be appointed to the office of the CJI.
  - The **Supreme Court collegium is headed by the Chief Justice of India** and comprises four other senior most judges of the court.
  - The collegium system is the **system of appointment and transfer of judges** that has evolved through judgments of the Supreme Court (Judges Cases), and not by an Act of Parliament or by a provision of the Constitution.

- **Administrative Powers of CJI (Master of Roster):**
  - It is common to refer to the office as primus inter pares – **first amongst equals.**
  - Besides his **adjudicatory role,** the CJI also plays the role of the **administrative head of the Court.**
  - In his administrative capacity, the Chief Justice exercises the prerogative of allocating cases to particular benches.
  - The Chief Justice also decides the number of judges that will hear a case.
    - Thus, he can influence the result by simply choosing judges that he thinks may favour a particular outcome.
  - Such administrative powers **can be exercised without collegial consensus,** and without any stated reasons.

- **Recent Development:**
  - In 2019, the SC ruled that the **office of Chief Justice of India (CJI) comes under the purview of the Right to Information (RTI) Act, 2005.**
Business Responsibility and Sustainability Report

Why in News

The Securities and Exchange Board of India (SEBI) has decided to introduce new requirements for business sustainability reporting by listed entities.

- This new report will be called the Business Responsibility and Sustainability Report (BRSR) and will replace the existing Business Responsibility Report (BRR).

Key Points

- Background:
  - SEBI, in 2012, mandated the top 100 listed entities by market capitalisation to file Business Responsibility Reports (BRR) as per the disclosure requirement emanating from the ‘National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business’ (NVGs).
  - In 2019, the Ministry of Corporate Affairs revised NVGs and formulated the National Guidelines on Responsible Business Conduct (NGRBC).
  - In December 2019, SEBI extended the BRR requirement to the top 1000 listed entities by market capitalisation, from the financial year 2019-20.
  - Listed Entity: A company whose shares are traded on an official stock exchange.
  - Market Capitalization: It refers to how much a company is worth as determined by the stock market. It is defined as the total market value of all outstanding shares.

- Recommendations to Amend the Consumer Protection (E-Commerce) Rules, 2020
- Helium Crisis for India
- National Bank for Financing Infrastructure and Development Bill, 2021
- Tata - Mistry Judgement

To calculate a company’s market cap, multiply the number of outstanding shares by the current market value of one share.

About Business Responsibility and Sustainability Report (BRSR):

- BRSR, which is from an Environmental, Social and Governance ("ESG") perspective, is intended to enable businesses to engage more meaningfully with their stakeholders.
- It will encourage businesses to go beyond regulatory financial compliance and report on their social and environmental impacts.
- The BRSR will be applicable to the top 1000 listed entities (by market capitalization), for reporting on a voluntary basis for FY 2021 – 22 and on a mandatory basis from FY 2022 – 23.

Sustainability Reporting:

- It is the disclosure and communication of environmental, social, and governance (ESG) goals—as well as a company’s progress towards them.
- The benefits of sustainability reporting include improved corporate reputation, building consumer confidence, increased innovation, and even improvement of risk management.

Environmental, Social, and Governance Goals:

- Environmental, social, and governance (ESG) goals are a set of standards for a company’s operations that force companies to follow better governance, ethical practices, environment-friendly measures and social responsibility.
- Environmental criteria consider how a company performs as a steward of nature.
Social criteria examine how it manages relationships with employees, suppliers, customers, and the communities where it operates.

Governance deals with a company’s leadership, executive pay, audits, internal controls, and shareholder rights.

### Responsible Business
- The philosophy of responsible business is based on the principle of business being accountable to all its stakeholders towards global developments which are increasingly seeking businesses to be responsible and sustainable towards their environment and society.
- In light of ever-increasing global challenges relating to climate change, environmental risks, growing inequality, etc., business leaders have been compelled, and have also found it to be in their interest, to reimagine the role of businesses in the society and not view them merely as economic units for generating wealth.
- The performance of a company must be measured not only on the return to shareholders, but also on how it achieves its environmental, social, and good governance objectives.

### Back Door Entry Closed for Defaulters: SC

#### Why in News
Recently, the Supreme Court (SC) has closed the back-door entry of defaulting promoters by using a special provision of compromise or arrangement during the liquidation phase of the insolvency proceeding.

The ruling reaffirms the spirit of the Insolvency and Bankruptcy Code (IBC).

#### Key Points
- **Background:**
  - In a case involving the liquidation of a Limited Company, the National Company Law Appellate Tribunal (NCLAT) in 2019 held that any person who was ineligible, under Section 29A of Insolvency and Bankruptcy Code (IBC), to bid for his company, was also barred from proposing a scheme of compromise and arrangement under Section 230 of the Companies Act 2013.

  - The Companies Act 2013 is an Indian company law which regulates incorporation of a company, responsibilities of a company, directors, dissolution of a company.

  - Company means a company incorporated under this Act or under any previous Company Law.

  - Section 230 of the Companies Act allows promoters or creditors of the company to propose a scheme of arrangement or compromise under which the debt of the company can be restructured.

- **Recent Ruling of the SC:**
  - SC upheld NCLAT’s decision and said that while Section 230 would be applicable for promoters and creditors in the normal course of the workings of the company, it would not be applicable if the company is facing liquidation under IBC.

- **Reason Given by SC:**
  - The company has to be protected from its management and a corporate death.
  - It would lead to a manifest absurdity if the very persons who are ineligible for submitting a resolution plan, participating in the sale of assets of the company in liquidation or participating in the sale of the corporate debtor as a ‘going concern’, are somehow permitted to propose a compromise or arrangement under Section 230 of Companies Act 2013.

- **Significance of the Judgement:**
  - Speed up the Resolution:
    - The clarification by the SC with respect to participation of promoters in the liquidation process of an insolvent company will speed up the corporate insolvency resolution process.

  - Maximisation of the Asset Value:
    - Since the objective of the IBC is to find a suitable buyer for the company and liquidation is ordered only in cases where there are no viable plans submitted, experts believe that a quick liquidation is of utmost importance to maximise the value of assets of the company.

  - Settled Conflicting Judgements:
    - It settles down the conflicting judgments given by different benches of the NCLT, wherein these forums had, in order to follow the IBC’s principle of value of asset maximisation, allowed some...
of the promoters to re-bid for the company or propose some arrangement when it was sent to liquidation.

**Insolvency and Bankruptcy Code, 2016**

- **About:**
  - It provides a *time-bound process* for resolving insolvency in companies and among individuals.
  - It covers all individuals, companies, Limited Liability Partnerships (LLPs) and partnership firms.

- **Objective:**
  - To *streamline and speed up the resolution process* of failed businesses.
  - To *consolidate provisions of the existing legislative framework* to form a common forum for debtors and creditors of all classes to resolve insolvency.
  - To *stipulate that the resolution process of a stressed company will have to be completed in a maximum of 270 days*.

- **Section 29A:**
  - It is a *restrictive provision*, it specifically lists down the persons who are not eligible to be resolution applicants.
  - It in its entirety not only restricts promoters but also the people related/connected with the promoters.
  - This section was introduced to *disqualify those who had contributed in the downfall of the corporate debtor* or were unsuitable to run the company.

- **Adjudicating Authority:**
  - National Company Law Tribunal (NCLT) for companies and LLPs.
  - Debt Recovery Tribunal (DRT) for individuals and partnership firms.

**National Company Law Appellate Tribunal**

- The NCLAT was *constituted under Section 410 of the Companies Act, 2013* to hear appeals against the orders of the National Company Law Tribunal (NCLT).
- NCLT is a *quasi-judicial body* that adjudicates issues relating to companies.

- **It is also the appellate tribunal for orders passed by the NCLT(s) under Section 61 of the IBC, 2016, and for orders passed by the Insolvency and Bankruptcy Board of India (IBBI) under Sections 202 and 211 of the IBC.**

- **Any person aggrieved by any order of the NCLAT may file an appeal to the SC.**

**MMDR Amendment Bill, 2021**

**Why in News**

Recently, the Coal and Mines Minister introduced the Mines and Minerals (Development and Regulation) (MMDR) Amendment Bill, 2021 in Lok Sabha.

- The Bill seeks to amend the Mines and Minerals (Development and Regulation) Act, 1957 which regulates the mining sector in India.

**Key Points**

- **Proposed Changes:**
  - **Removal of restriction on end-use of minerals:**
    - The Act empowers the central government to reserve any mine (other than coal, lignite, and atomic minerals) to be leased through an auction for a particular end-use (such as iron ore mine for a steel plant). Such mines are known as captive mines.
    - The Bill provides that no mine will be reserved for particular end-use.
  - **Sale of minerals by captive mines:**
    - The Bill provides that captive mines (other than atomic minerals) may sell up to 50% of their annual mineral production in the open market after meeting their own needs.
    - The central government may increase this threshold through a notification.
    - The lessee will have to pay additional charges for minerals sold in the open market.
  - **Auction by the central government in certain cases:**
    - The Bill empowers the central government to specify a time period for completion of the auction process in consultation with the state government.
    - If the state government is unable to complete the auction process within this period, the auctions may be conducted by the central government.
Transfer of statutory clearances:
- It provides that transferred statutory clearances will be valid throughout the lease period of the new lessee.
- Currently the new lessee has to apply for fresh clearances within two years of the transfer from the previous lessee.

Allocation of mines with expired leases:
- The Bill adds that mines whose lease has expired, may be allocated to a government company in certain cases.
- This will be applicable if the auction process for granting a new lease has not been completed, or the new lease has been terminated within a year of the auction.
- The state government may grant a lease for such a mine to a government company for a period of up to 10 years or until the selection of a new lessee, whichever is earlier.

Extension of leases to government companies:
- The Act provides that the period of mining leases granted to government companies will be prescribed by the central government and may be extended on payment of additional amounts prescribed in the Bill.

Conditions for lapse of mining lease:
- If the lessee is not able to start mining operations within two years of the grant of a lease.
- If the lessee has discontinued mining operations for a period of two years.
  - The lease will not lapse at the end of this period if a concession is provided by the state government upon an application by the lessee.
  - The Bill adds that the threshold period for lapse of the lease may be extended by the state government only once and up to one year.

Non-exclusive reconnaissance permit:
- The Act provides for a non-exclusive reconnaissance permit (for minerals other than coal, lignite, and atomic minerals).
  - Reconnaissance means preliminary prospecting of a mineral through certain surveys. The Bill removes the provision for this permit.

Significance:

Transparency:
- It would lead to greater transparency in the auction process as there is a perception that state governments may in some cases prefer some bidders, and try to delay or cancel mining rights if their preferred bidders do not win mining rights.

Maximization of Output:
- Increased flexibility would allow miners to maximise output from captive mines as they would be able to sell output in excess of their own requirements.

Ease of Doing Business:
- It will provide ease of doing business, simplification of procedure and benefit all the parties in areas where minerals are located.
- It will also speed up the process of implementation of projects.

Efficient Energy Market:
- It will create an efficient energy market and bring in more competition as well as reduce coal imports.

Access to High-End Technology:
- It would also help India gain access to high-end technology for underground mining used by miners across the globe.

Open Market Operations by RBI

Why in News

The Reserve Bank of India (RBI) has decided to conduct simultaneous purchase and sale of government securities (G-Sec) under Open Market Operations (OMOs) for an amount of Rs. 10,000 crore each.

Key Points

About:
- Simultaneous purchase and sale of government securities under OMOs, popularly known as operation twist, involves purchasing G-Sec of longer maturities and selling equal amounts of G-Sec of shorter maturities.
Open Market Operations:
- **Meaning:** Open Market Operations refers to buying and selling of bonds issued by the Government in the open market.
- **One of the Quantitative Tools:** OMO is one of the quantitative tools that RBI uses to smoothen the liquidity conditions through the year and minimise its impact on the interest rate and inflation rate levels.
  - Quantitative tools control the extent of money supply by changing the Cash Reserve Ratio (CRR), or bank rate or open market operations.
  - **Qualitative tools** include persuasion by the Central bank in order to make commercial banks discourage or encourage lending which is done through moral suasion, margin requirement, etc.
- **Impact on Money Supply:**
  - When RBI buys a **Government bond** in the open market, it pays for it by giving a cheque. This cheque increases the total amount of reserves in the economy and thus increases the money supply.
  - Selling of a **bond by RBI** (to private individuals or institutions) leads to reduction in quantity of reserves and hence the money supply.
- **Two Types of OMOs:** Outright and Repo.
  - Outright OMOs are permanent in nature: when the central bank buys these securities (thus injecting money into the system), it is **without any promise to sell them later**. Similarly, when the central bank sells these securities (thus withdrawing money from the system), it is without any promise to buy them.
  - **Repo:**
    - This is a type of operation in which when the central bank buys the security, the agreement of purchase also has specification about date and price of resale of this security. This type of agreement is called a **repurchase agreement or repo**. The interest rate at which the money is lent in this way is called the **repo rate**.
    - Similarly, instead of outright sale of securities the **central bank may sell the securities through an agreement** which has a specification about the date and price at which it will be repurchased. This type of agreement is called a **reverse repurchase agreement or reverse repo**. The rate at which the money is withdrawn in this manner is called the **reverse repo rate**.
- The Reserve Bank of India **conducts repo and reverse repo operations** at various maturities: overnight, 7-day, 14-day, etc. These types of operations have now become the **main tool of monetary policy of the Reserve Bank of India**.

**Government Securities**
- A **G-Sec** is a **tradable instrument** issued by the central government or state governments. It **acknowledges the Government’s debt obligation**.
- **Short term securities** (with original maturities of less than one year) are usually called *Treasury Bills*.
- **Long term securities** (with original maturities of more than one year or more) are usually called *Government Bonds or Dated Securities*.
- 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**.
  - Gilt-edged securities are high-grade investment bonds offered by governments and large corporations as a means of borrowing funds.
- Recently, the **Reserve Bank of India has proposed to allow retail investors to open gilt accounts** with the central bank to **invest in Government securities (G-secs) directly** and without the help of intermediaries.

**New Committee to Screen New Bank Licences**

**Why in News**

The Reserve Bank of India (RBI) has set up a five-member **Standing External Advisory Committee (SEAC)**, headed by former RBI Deputy Governor Shyamala Gopinath, for **evaluating applications for universal banks and Small Finance Banks (SFBs)**.

---

Note:
The Standing External Advisory Committee (SEAC) will be comprising eminent persons with experience in banking, financial sector and other relevant areas.

**Key Points**

About the Committee:
- **Tenure**: The committee will have a tenure of three years.
- **Secretariat of the Committee**: The secretarial support to the committee would be provided by RBI's Department of Regulation.
- **Functions**: The applications for universal banks and SFBs will first be evaluated by the RBI to ensure prima facie eligibility of the applicants, after which the SEAC will evaluate the applications.

Small Finance Banks (SFBs):
- Small Finance Banks are the financial institutions which provide financial services to the unserved and unbanked region of the country.
- They are registered as a public limited company under the Companies Act, 2013.
- **Scope of Activities**:
  - The small finance bank shall primarily undertake basic banking activities of acceptance of deposits and lending to small business units, small and marginal farmers, micro and small industries and unorganised sector entities.
  - It can also undertake other non-risk sharing simple financial services activities, not requiring any commitment of own funds, such as the distribution of mutual fund units, insurance products, pension products, etc.
  - The small finance bank can also become an Authorised Dealer in foreign exchange business for its clients’ requirements.
  - There will not be any restriction in the area of operations of SFBs; however, preference will be given to those applicants who, in the initial phase, set up the bank in a cluster of under-banked States/districts, such as in the North-East, East and Central regions of the country.

Universal Banks:
- Universal Banks are the financial entities like the commercial banks, Financial Institutions, Non-Banking Financial Companies (NBFCs), which undertake multiple financial activities under one roof, thereby creating a financial supermarket.
- The entities focus on leveraging their large branch network and offer a wide range of services under a single brand name/Bank's name.
- According to the guidelines on on-tap licensing of universal banks issued in August 2016, resident individuals and professionals having 10 years of experience in banking and finance at a senior level are eligible to promote universal banks.
  - However, large industrial houses are excluded as eligible entities but are permitted to invest in the banks up to 10%.
  - A non-operative financial holding company (NOFHC) has been made non-mandatory in case of promoters being individuals or standalone promoting/converting entities who/which do not have other group entities.

Related Development:
- Earlier, an internal working group of the RBI in 2020 had proposed an overhaul of licensing policy for private banks and suggested allowing large corporate and industrial houses to float banks in India after suitable amendments to the Banking Regulation Act, 1949.
  - However, former RBI Governor Raghuram Rajan has criticised the proposal saying it would lead to “connected lending (a situation in which the bank’s controlling owner extends loans of inferior quality at lower interest rates to himself or his connected parties)”.

**Non-Operative Financial Holding Company**
- Non-Operative Financial Holding Company (NOFHC) means a non-deposit taking NBFC.
- As per the Banking Guidelines, promoter or promoter group will be permitted to set up a new bank only through a wholly-owned Non-operative Financial Holding Company (NOFHC).
- Such NOFHC holds the Bank as well as all other financial services companies regulated by RBI or other financial sector regulators based on permissible regulatory prescriptions.

**On-tap Licensing of Universal Bank**
- An ‘on-tap’ facility means the RBI will accept applications and grant licenses for banks throughout the year.
- The policy allows aspirants to apply for universal bank license at any time, subject to the fulfillment of the set conditions.
Market Infrastructure Institutions

Why in News
The Securities & Exchange Board of India (SEBI) has asked Market Infrastructure Institutions (MIIs) to begin operations from disaster recovery sites within 45 minutes of a disruption to critical systems, including trading.

The directive comes against the backdrop of a technical glitch at the National Stock Exchange (NSE) on 24th February that halted trading for nearly four hours.

Key Points
- SEBI's Latest Directive:
  - New Framework for MIIs:
    - SEBI has come out with a new framework for Business Continuity Plan (BCP) and Disaster Recovery (DR) of Market Infrastructure Institutions (MIIs) - stock exchanges, clearing corporations and depositories.
    - Business Continuity (BC) and Disaster Recovery (DR) are closely related practices that support an organization's ability to remain operational after an adverse event.
  - Guidelines:
    - In the event of disruption of any one or more of the ‘critical systems’, the MII would, within 30 minutes of the incident, declare that incident as ‘disaster’.
    - Critical systems for an exchange or clearing corporation would include trading, risk management, collateral management, clearing and settlement and index computation.
    - Critical systems’ for a depository shall include systems supporting settlement process and inter-depository transfer systems.
    - MIIs have been directed to move to disaster recovery sites within 45 minutes of declaring an incident a ‘disaster’.
    - A disaster recovery site is a place that a company can temporarily relocate to following a security breach or natural disaster.
    - It ensures that a company can continue operations until it becomes safe to resume work at its usual location or a new permanent location.
    - Mobile- and cloud-based disaster recovery sites are becoming increasingly popular.
    - The new guidelines should be implemented within 90 days.

- Market Infrastructure Institutions (MIIs):
  - Stock exchanges, depositaries and clearing corporations are collectively referred to as securities Market Infrastructure Institutions (MIIs).
  - According to the Bimal Jalan Committee (2010), these institutions are systemically important for the country’s financial development and serve as the infrastructure necessary for the securities market.
  - The stock exchange in India serves as a market where financial instruments like stocks, bonds and commodities are traded.
  - Depositories may be organizations, banks, or institutions that hold securities and assist in the trading of securities.

SEBI
- The Securities and Exchange Board of India was established on 12th April, 1992 in accordance with the provisions of the Securities and Exchange Board of India Act, 1992.
- Major Function:
  - To protect the interests of investors in securities.
  - To regulate the securities market.

NSE
- The National Stock Exchange of India Limited (NSE) is India’s largest financial market.
- Incorporated in 1992, the NSE has developed into a sophisticated, electronic market, which ranked fourth in the world by equity trading volume.
  - NSE was the first exchange in India to provide modern, fully automated electronic trading.
  - The NSE is the largest private wide-area network in India.
- The NIFTY 50 is the flagship index on the National Stock Exchange of India Ltd. (NSE). The Index tracks the behavior of a portfolio of blue chip companies, the largest and most liquid Indian securities. It includes 50 of the approximately 1600 companies listed on the NSE.
A clearing corporation is an organisation/entity affiliated with a stock exchange whose primary objective is to oversee the handling of confirmation, settlement, and delivery of transactions.

Recommendations to Amend the Consumer Protection (E-Commerce) Rules, 2020

Why in News
Recently, a parliamentary panel on the Consumer Protection (E-Commerce) Rules, 2020 has recommended that the government should amend the rules to provide better protection to consumers rights and stop unfair practices.

Electronic commerce or e-commerce is a business model that lets firms and individuals buy and sell things over the Internet.

Key Points

- Issues:
  - Predatory Pricing:
    - Predatory pricing as a short-term strategy, adopted by some of the market giants, may lead to wiping out competition from the market and could be detrimental to the consumers in the long run.
    - Predatory Pricing: It is the pricing of goods or services at such a low level that other firms cannot compete and are forced to leave the market.
  - Unfair Practices:
    - While e-commerce enterprises offer many benefits, the development of the segmentation has rendered consumers vulnerable to new forms of unfair trade practices, violation of privacy and issues of unattended grievances.
    - There are increasing cases of fake reviews and unfair favouritism in the display of goods.

- Major Recommendations:
  - Clear Definition:
    - There should be a more clear-cut definition of what constitutes Unfair Trade Practice and practical legal remedy to tackle such circumventing practices by e-commerce entities specifically Multinational Companies (MNCs) and Kirana Small Vendors.
  - Fixing Delivery Charges:
    - The Ministry of Consumer Affairs, Food and Public Distribution should issue broad guidelines for the fixation of delivery charges charged by the e-commerce entities along with a cap on the highest limits of the delivery charges in peak hours of service.
    - It should clearly distinguish in the Rules itself the cases of misinformation, no information and the information which is otherwise correct but creates a false impression and provides for penal provision for each case in the Rules itself.

- Categorization of Personal Data:
  - For protection of privacy of users and security of their data, the panel has recommended that users' personal data may be categorised as per the level of sensitivity and appropriate protection may be assigned for each level.

- Payment Security:
  - A secured and robust system of payment gateway should be made available to the consumers so that the transaction-related data of the users is not compromised in any way.

- Local Data Centres:
  - All major e-marketplace entities should establish their data centre in India, so that consumer data are not hosted on a server outside the borders of the country, which may be misused by an enemy country.

- Customer Care:
  - E-commerce entities should provide a dedicated customer care number as well as a mechanism to monitor the time taken by customer care executives to resolve an issue.

- Protection to Small/Local Vendors:
  - There is a need to devise some regulatory mechanism to protect the local vendors/kirana, therefore, sufficient protection to such small/local vendors and ways in which such small retailers may also become part of e-commerce should be given by the Ministry.
Discourage Deceptive Techniques:
- Some corrective mechanisms to discourage deceptive tactics including manipulation of algorithms, fake product reviews & ratings must be created so that the consumer interest is not harmed in any way.

**Consumer Protection (E-Commerce) Rules, 2020**

**About:**
- The Consumer Protection (E-commerce) Rules, 2020 are mandatory and are not advisory.

**Applicability:**
- Apply to all e-commerce retailers, whether registered in India or abroad, offering goods and services to Indian consumers.

**Nodal Officer:**
- E-commerce entities need to appoint a nodal person, resident in India to ensure compliance with the provisions of the act or rules.

**Prices and Expiry Dates:**
- The sellers through the e-commerce entities will have to display the total price of goods and services offered for sale along with the break-up of other charges.
- Expiry date of the good needs to be separately displayed.

**Importer and Relevant Details:**
- All relevant details about the goods and services offered for sale by the Seller including country of origin and in case of imported goods the name and details of the importer, and guarantees related to the authenticity or genuineness of the imported products need to be provided to enable the consumer to make an informed decision at the pre-purchase stage.

**Grievance Redressal Mechanism:**
- Marketplaces, as well as sellers, need to appoint a grievance officer.
  - **Marketplace Model of E-commerce:** It means providing an information technology platform by an e-commerce entity on a digital and electronic network to act as a facilitator between buyer and seller.

**Restriction on Unfair Trade Practice, Manipulation and Discrimination:**
- No e-commerce entity shall manipulate the price of goods or services to gain unreasonable profit or discriminate between consumers of the same class or make any arbitrary classification of consumers affecting their rights.

**Should not Post Fake Reviews or Mislead:**
- No seller or inventory e-commerce entity shall falsely represent itself as a consumer and post reviews about goods or services or misrepresent the quality or the features of any goods or services.

**No Cancellation Charges:**
- No e-commerce entity shall impose cancellation charges on consumers.
- Sellers should not refuse to take back goods, or withdraw or discontinue services if such goods and services are defective, deficient or spurious.

**Record Information of Sellers Selling Counterfeit Products:**
- E-commerce entities need to maintain a record of information for the identification of all sellers who have repeatedly offered goods or services that have previously been removed or restricted under the Copyright Act, 1957, the Trade Marks Act, 1999 or the Information Technology Act, 2000.

**Penalty:**
- The violation of the rules will attract penal action under the Consumer Protection Act, 2019.

### Helium Crisis for India

**Why in News**

India imports helium for its needs, and with the USA appearing set to cut off exports of helium since 2021, Indian industry stands to lose out heavily.

- The **Federal Helium Reserve** which is the major helium reserve of the USA is set to close down production in 2021, and scientists are looking for new reserves to replace it.

**Key points**

**About Helium:**
- Helium is a chemical element with the symbol He and atomic number 2.
- It is a colourless, odourless, tasteless, non-toxic, inert, monatomic gas, the first in the noble gas group in the periodic table.
Its boiling point is the lowest among all the elements.

Discovery of Helium:

- Atmosphere Surrounding the Sun:
  - Helium was discovered in the gaseous atmosphere surrounding the Sun by the French astronomer Pierre Janssen, who detected a bright yellow line in the spectrum of the solar chromosphere during an eclipse in India in the year 1868.
  - Joseph Norman Lockyer recorded the same line by observing the sun through London smog and, assuming the new element to be a metal, he named it helium.

- On Earth:
  - The British chemist Sir William Ramsay discovered the existence of helium on Earth in 1895.

- In India:
  - In 1906 a young Englishman by the name of Morris Travers extracted helium in small quantities by heating up monazite sand abundantly available in Kerala beach, in a pioneering effort.
  - Monazite is a primarily reddish-brown phosphate mineral that contains rare-earth elements.

Indian Reserves:

- India’s Rajmahal volcanic basin in Jharkhand is the storehouse of helium trapped for billions of years, since the very birth of Earth from the Sun.
- At present, researchers are mapping the Rajmahal basin extensively for future exploration and harnessing of helium.

Need for India:

- To Reduce Import Burden:
  - Every year, India imports helium worth Rs. 55,000 crores from the USA to meet its needs.
- Vast Use:
  - Helium is used in medicine, scientific research, for blimp inflation, party balloons as well as for welding applications.
  - It finds many applications, mainly in magnetic resonance imaging (MRI) scans, in rockets and in nuclear reactors.

USA’s Monopoly:

- After discovering that helium was concentrated in large quantities under the American Great Plains.
- The USA became the most important exporter of helium across the world.
- It was soon realized that the USA was also the biggest storehouse of helium.

Other Option:

- Qatar is a possible exporter but acute political and diplomatic wrangles have made Qatar unreliable.

National Bank for Financing Infrastructure and Development Bill, 2021

Why in News

Recently, the Rajya Sabha cleared the National Bank for Financing Infrastructure and Development (NBFID) Bill, 2021.

- The Bill seeks to establish the National Bank for Financing Infrastructure and Development (NBFID) as the principal Development Financial Institution (DFIs) for infrastructure financing.
- NBFID was announced in the Budget 2021.
Development Financial Institution

- DFIs are set up for providing long-term finance for such segments of the economy where the risks involved are beyond the acceptable limits of commercial banks and other ordinary financial institutions.
  - Unlike banks, DFIs do not accept deposits from people.
  - They source funds from the market, government, as well as multilateral institutions, and are often supported through government guarantees.

Key Points

- **About:**
  - NBFID will be set up as a corporate body with authorised share capital of one lakh crore rupees.

- **Objective:**
  - **Financial Objective:**
    - To directly or indirectly lend, invest, or attract investments for infrastructure projects located entirely or partly in India.
  - **Developmental Objective:**
    - Includes facilitating the development of the market for bonds, loans, and derivatives for infrastructure financing.

- **Functions of NBFID:**
  - Extending loans and advances for infrastructure projects.
  - Taking over or refinancing such existing loans.
  - Attracting investment from private sector investors and institutional investors for infrastructure projects.
  - Organising and facilitating foreign participation in infrastructure projects.
  - Facilitating negotiations with various government authorities for dispute resolution in the field of infrastructure financing.
  - Providing consultancy services in infrastructure financing.

- **Source of Funds:**
  - It may raise money in the form of loans or otherwise both in Indian rupees and foreign currencies, or secure money by the issue and sale of various financial instruments including bonds and debentures.
  - It may borrow money from the central government, Reserve Bank of India (RBI), scheduled commercial banks, mutual funds, and multilateral institutions such as the World Bank and Asian Development Bank.

- Initially, the central government will own 100% shares of the institution which may subsequently be reduced up to 26%.

- **Management of NBFID:**
  - NBFID will be governed by a Board of Directors. The Chairperson will be appointed by the central government in consultation with RBI.
  - A body constituted by the central government will recommend candidates for the post of the Managing Director and Deputy Managing Directors.
  - The Board will appoint independent directors based on the recommendation of an internal committee.

- **Support from the Central Government:**
  - The central government will provide grants worth Rs. 5,000 crore to NBFID by the end of the first financial year.
  - The government will also provide guarantee at a concessional rate of up to 0.1% for borrowing from multilateral institutions, sovereign wealth funds, and other foreign funds.
  - Costs towards insulation from fluctuations in foreign exchange (in connection with borrowing in foreign currency) may be reimbursed by the government in part or full.
  - Upon request by NBFID, the government may guarantee the bonds, debentures, and loans issued by NBFID.

- **Prior Sanction For Investigation And Prosecution:**
  - No investigation can be initiated against employees of NBFID without the prior sanction of the central government in case of the chairperson or other directors, and the managing director in case of other employees.
  - Courts will also require prior sanction for taking cognisance of offences in matters involving employees of NBFID.

- **Other Development Financial Institutions:**
  - The Bill also provides for any person to set up a DFI by applying to RBI.
  - RBI may grant a licence for DFI in consultation with the central government.
  - RBI will also prescribe regulations for these DFIs.
Tata - Mistry Judgement

Why in News

Recently, the Supreme Court overturned the National Company Law Appellate Tribunal (NCLAT) decision and upheld Tata Group’s decision to remove Cyrus Pallonji Mistry as the Executive Chairman and Director of Tata Sons.

Key Points

- **Supreme Court Observations:**
  - Minority shareholders or their representatives are not automatically entitled to a seat on the private company’s board like a small shareholder’s representative.

**Minority Shareholders**

- They are the equity holders of a firm who do not enjoy the voting power of the firm by virtue of his or her below 50% ownership of the firm’s equity capital.

**Small Shareholders**

- According to the Companies Act, small shareholders is a shareholder or group of shareholders who hold shares of nominal value of not more than Rs. 20,000.

The **Companies Act 2013**

- It is an Indian company law which regulates incorporation of a company, responsibilities of a company, directors, dissolution of a company.

  - The provisions contained in the Companies Act 2013 only protects the rights of small shareholders of listed companies by asking such companies to have on their board at least one director elected by such small shareholders.

  - Since the Mistry family and the Shapoorji Pallonji (SP) Group are not small shareholders, but minority shareholders, there is no statutory provision which gives them the “right to claim proportionate representation,” on the board of Tata Sons.

  - Private companies, which have minority shareholders, are free to make an enabling provision but are under no statutory obligation to give minority shareholder seats on the board.

**Significance of the Judgement:**

- Though the judgment does not directly impact the right of minority shareholders, such shareholders will have to ensure that they have a contract with the majority shareholders or the promoters of the company to ensure they have adequate representation on the board.

**National Company Law Appellate Tribunal**

- It was constituted under Section 410 of the Companies Act, 2013 for hearing appeals against the orders of National Company Law Tribunal (NCLT).

- NCLAT is also the Appellate Tribunal for hearing appeals against the orders passed by NCLT(s) under the Insolvency and Bankruptcy Code, 2016 (IBC).

  - NCLAT also hears appeals against the orders passed by Insolvency and Bankruptcy Board of India.

- NCLAT is also the Appellate Tribunal to hear and dispose of appeals against any direction issued or decision made or order passed by the Competition Commission of India (CCI).
PM's Visit to Bangladesh

Why in News
The Prime Minister of India paid a State Visit to Bangladesh to join the celebrations of the Golden Jubilee of the Independence of Bangladesh, the Birth Centenary of the Father of the Nation Bangabandhu Sheikh Mujibur Rahman and 50 years of establishment of diplomatic relations between India and Bangladesh.

Key Points
- Joint Celebrations of Historical Links:
  - Bangladesh thanked India for conferring Gandhi Peace Prize for the year 2020 on Bangabandhu Sheikh Mujibur Rahman.
  - Jointly inaugurated the Bangabandhu - Bapu Digital Exhibition in Dhaka.
  - To mark the 50th anniversary of India-Bangladesh friendship:
    - Both sides released respective commemorative postage stamps.
    - Decided to commemorate 6th December as Maitri Diwas, the day when India recognized Bangladesh in the year 1971.
    - India announced the establishment of the Bangabandhu Chair at the University of Delhi.
  - Bangladesh thanked India for naming the historic road from Mujib Nagar to Nadia on the Bangladesh-India border as “Shadhinota Shorok” commemorating the historic significance of the road during Bangladesh’s Liberation War.
- Water Resources Cooperation:
  - Bangladesh reiterated its long-pending request for concluding the interim agreement on the sharing of the waters of the Teesta river.
    - The draft agreement has already been agreed upon by both Governments in January 2011.
  - India also requested for early finalization of the draft of the interim agreement for sharing of water of Feni River, pending with the Bangladesh side which had been agreed upon by both sides in 2011.
    - Also, requested working towards an early conclusion of the Framework of Interim Agreement on sharing of waters of six common rivers, namely, Manu, Muhuri, Khowai, Gumti, Dharla and Dudhkumar.
- Directed the Joint Technical Committee to expeditiously commence the feasibility study of the Ganges-Padma barrage for optimum utilization of the Ganges waters received by Bangladesh as per the Ganges Water Sharing Treaty, 1996.
- Trade for Growth:
  - Stressed the need for predictability of trade policies, regulations and procedures and the need for removal of non-tariff barriers.
  - Stressed the urgent need for up-gradation of infrastructure and facilities of the Land Customs
Reiterated the importance of **harmonization of standards and mutual recognition** of agreements and certificates for enhancing bilateral trade.

- **Bangladesh Standards and Testing Institute (BSTI)** and the **Bureau of Indian Standards (BIS)** would collaborate for the capacity building and development of testing and Lab facilities.

- India congratulated Bangladesh on its **upcoming graduation from the Least Developed Country (LDC) status**.

- Emphasized on expeditious conclusion of the ongoing joint study on the prospects of entering into a **Comprehensive Economic Partnership Agreement (CEPA)**.

- Bangladesh invited **Indian investment in the jute mills of Bangladesh** to revitalize and modernize the jute sector.

- India requested early finalization of modalities for implementation of the **Kathihar – Parbottapur – Bornagar cross border electricity interconnection**.

- Took stock of progress in the implementation of the **India Bangladesh Friendship Pipeline** and unit-1 of the **Maitree Super Thermal Power Project**.

### Connectivity for Prosperity:

- India expressed gratitude for Bangladesh's initiative of **revitalizing the pre-1965 rail connectivity**.

- Bangladesh reiterated its eagerness to partner in the ongoing initiative of the **India – Myanmar - Thailand trilateral highway project**.

- Also agreed to an early operationalization of the **BBIN Motor Vehicles Agreement** through expeditious signing of the Enabling MoU for Bangladesh, India, and Nepal to commence the movement of goods and passengers, with provision for Bhutan to join at a later date.

- India urged for **early operationalization of the trans-shipment Agreement** on the use of Chattogram and Mongla Ports for the Movement of Goods to and from India (**Kolkata to Agartala via Chattogram**).
  - India also requested for trans-shipment arrangement in Munshiganj and Pangaon as part of the **Protocol on Inland Water Transit and Trade**.
  - Recently, **Maitree Setu** (between India and Bangladesh) over River Feni in South Tripura has been inaugurated.

- Bangladesh offered the use of **Chattogram and Sylhet International Airport**, by the people of North East India, especially of Tripura.

### Cooperation in Public Health:

- Bangladesh thanked the Government of India for giving 3.2 million doses of **Oxford Astra Zeneca Covishield** vaccine made in India.

### Border Management and Security Cooperation:

- Bangladesh reiterated the request for 1.3 km **Innocent Passage** through river route along with **River Padma**, on humanitarian grounds.
  - India requested for completion of border fencing at all pending sectors at the international border at the earliest, beginning from the Tripura (India) - Bangladesh sector.

### Defence Cooperation:

- Emphasized on the frequent exchange of programs and enhancing cooperation in training and capacity building.
  - India has offered a USD 500 million line of credit for defence imports from India into Bangladesh and thus requested for early operationalization of this defense Line of Credit.

- Welcomed the signing of an MoU on **Disaster Management, Resilience and Mitigation**.

### New Areas of Cooperation:

- Acknowledged the potential of new and emerging areas of cooperation in cutting edge areas of science, **artificial intelligence**, peaceful uses of nuclear technology, **big data** and technology enabled services in health and education.

- **50 young entrepreneurs from Bangladesh** were invited to visit India and present their ideas to venture capitalists.

### Partners in the Region and the World:

- Agreed to continue working together for common objectives in the **United Nations** and other multilateral fora.

- Emphasized that the regional organizations, such as **SAARC** and **BIMSTEC** have an important role to play, particularly in the post-Covid-19 situation.

- Bangladesh thanked India for convening the **SAARC leaders Video Conference** in March 2020 and for proposing creation of the **SAARC Emergency Response Fund** to counter effects of the global pandemic in the South Asian region.

---

**Note:**

- **Stations (LCSs) / Land Ports** in a coordinated manner to facilitate trade between the two countries.
- **Border Management and Security Cooperation:**
  - Bangladesh invited Indian investment in the jute mills of Bangladesh to revitalize and modernize the jute sector.
  - India expressed gratitude for Bangladesh’s initiative of revitalizing the pre-1965 rail connectivity.
  - Bangladesh reiterated its eagerness to partner in the ongoing initiative of the India – Myanmar - Thailand trilateral highway project.
  - Also agreed to an early operationalization of the BBIN Motor Vehicles Agreement through expeditious signing of the Enabling MoU for Bangladesh, India, and Nepal to commence the movement of goods and passengers, with provision for Bhutan to join at a later date.
  - India urged for early operationalization of the trans-shipment Agreement on the use of Chattogram and Mongla Ports for the Movement of Goods to and from India (Kolkata to Agartala via Chattogram).
  - India also requested for trans-shipment arrangement in Munshiganj and Pangaon as part of the Protocol on Inland Water Transit and Trade.
  - Recently, Maitree Setu (between India and Bangladesh) over River Feni in South Tripura has been inaugurated.

- **Cooperation in Public Health:**
  - Bangladesh thanked the Government of India for giving 3.2 million doses of Oxford Astra Zeneca Covishield vaccine made in India.

- **Border Management and Security Cooperation:**
  - Bangladesh reiterated the request for 1.3 km Innocent Passage through river route along with River Padma, on humanitarian grounds.
  - India requested for completion of border fencing at all pending sectors at the international border at the earliest, beginning from the Tripura (India) - Bangladesh sector.

- **Defence Cooperation:** Emphasized on the frequent exchange of programs and enhancing cooperation in training and capacity building.
  - India has offered a USD 500 million line of credit for defence imports from India into Bangladesh and thus requested for early operationalization of this defense Line of Credit.

- Welcomed the signing of an MoU on Disaster Management, Resilience and Mitigation.

- **New Areas of Cooperation:**
  - Acknowledged the potential of new and emerging areas of cooperation in cutting edge areas of science, artificial intelligence, peaceful uses of nuclear technology, big data and technology enabled services in health and education.
  - 50 young entrepreneurs from Bangladesh were invited to visit India and present their ideas to venture capitalists.

- **Partners in the Region and the World:**
  - Agreed to continue working together for common objectives in the United Nations and other multilateral fora.
  - Emphasized that the regional organizations, such as SAARC and BIMSTEC have an important role to play, particularly in the post-Covid-19 situation.

- Bangladesh thanked India for convening the SAARC leaders Video Conference in March 2020 and for proposing creation of the SAARC Emergency Response Fund to counter effects of the global pandemic in the South Asian region.
Bangladesh highlighted that the country would assume chairmanship of the Indian Ocean Rim Association (IORA) for the first time in October 2021 and requested the support of India for working towards greater maritime safety and security in the Indian Ocean region.

India welcomed the decision of Bangladesh to join the New Development Bank (NDB).

The two Prime Ministers also announced/unveiled the following:

- Foundation stone laying ceremony for a memorial in the honour of the Martyrs of the Indian Armed Forces who sacrificed their lives during Liberation War of 1971 at Ashuganj, Brahmanbaria.
- Foundation stone for five packages out of total eight packages of Rooppur Power Evacuation Project.
- Inauguration of 3 border haats, Nalikata (India) - Saydabad (Bangladesh), Ryngku (India) - Bagan Bari (Bangladesh) and Bholagunj (India) – Bholagunj (Bangladesh).
- Border Haats aim at promoting the wellbeing of the people dwelling in remote areas across the borders of two countries, by establishing a traditional system of marketing the local produce through local markets.
- Inauguration of ‘Mitali Express’- passenger train connecting Dhaka on Bangladesh side and New Jalpaiguri on the Indian.

### Japan to Fund Projects in India

**Why in News**

Japan has finalised loans and a grant totalling around 233 billion yen for several key infrastructure projects in India, including for a project in the Andaman and Nicobar islands.

**Key Points**

- **Grant for Andaman and Nicobar Islands (ANI):**
  - **About the Grant:**
    - A grant of 4.01 billion yen for a project for the improvement of power supply in strategically located Andaman and Nicobar Islands.
    - The grant would be used to procure 15MWh batteries as well as power system stabilisers to allow better utilisation of solar power generated in South Andaman.
  - **This grant is Japan’s first ever Official Development Assistance (ODA) to a project in the A&N islands.**
- **About Official Development Assistance (ODA):**
  - ODA is defined as government aid designed to promote the economic development and welfare of developing countries.
  - Loans and credits for military purposes are excluded.
  - India has been the top recipient of the Japanese government’s financial aid under the ODA.
- **Japan’s Aid for Other Projects:**
  - For Delhi Metro’s fourth phase.
  - For Metro lines under Namma Metro’s second phase in Bengaluru.
  - For crop diversification in Himachal Pradesh.
  - For mitigating fluorosis in Rajasthan’s Jhunjhunu and Barmer districts.
- **Other Recent Developments Between India and Japan:**
  - Recently, the first summit of the leaders’ of the QUAD (Quadrilateral Framework) was held virtually.
  - QUAD is a four-nation alliance of India, Australia, USA and Japan.
  - In 2020, India and Japan signed a logistics agreement that will allow armed forces of both sides to coordinate closely in services and supplies. The agreement is known as the Acquisition and Cross-Servicing Agreement (ACSA).
  - In 2019, India and Japan held the first-ever ministerial-level 2+2 dialogue. This dialogue involved the Defence and Foreign Ministers on both
sides and is seen as an endorsement of the special strategic partnership between India and Japan.

- A “India-Japan Digital Partnership (I-JDP)” was launched during the visit of the Prime Minister of India to Japan in October 2018, furthering existing areas of cooperation as well as new initiatives within the scope of cooperation in S&T/ICT, focusing more on “Digital ICT Technologies”.
- In 2014, India and Japan upgraded their relationship to ‘Special Strategic and Global Partnership’.
- India and Japan defence forces organize a series of bilateral exercises namely, JIMEX (naval), SHINYUU Maitri (Air Force), and Dharma Guardian (Army). Both countries also participate in Malabar exercise (Naval Exercise) with the USA.

**Significance of Andaman and Nicobar Islands**

- The Andaman and Nicobar Islands (ANI) are located at the juncture of the Bay of Bengal and the Andaman Sea.
- It is a group of 572 islands, which straddles some of the busiest trade routes in the world.
- ANI spans 450 nautical miles in a roughly north-south configuration adjacent to the western entrance to the Malacca Strait, which is itself a major Indian Ocean chokepoint.
- Geopolitically, the ANI connects South Asia with South-East Asia. While the northernmost point of the archipelago is only 22 nautical miles from Myanmar, the southernmost point, Indira Point, is a mere 90 nautical miles from Indonesia.
- The islands dominate the Bay of Bengal, the Six Degree and the Ten Degree Channels that more than sixty thousand commercial vessels traverse each year.
- The Andaman and Nicobar Islands constitute just 0.2% of India’s landmass but provide near 30% of its Exclusive Economic Zone.
- Due to the presence of ANI in the Bay of Bengal, India has a better position to play a vital role in Indo-Pacific.

**Fluorosis**

- Fluorosis is a cosmetic condition that affects the teeth.
- It’s caused by overexposure to fluoride during the first eight years of life. This is the time when most permanent teeth are being formed.
- After the teeth come in, the teeth of those affected by fluorosis may appear mildly discolored.

**India-Brazil-South Africa (IBSA) Women’s Forum Meeting**

**Why in News**

Recently, the Sixth India-Brazil-South Africa (IBSA) Women’s Forum meeting was held virtually.

- **India is the current chair of IBSA Dialogue Forum.**

**Key Points**

- **Highlights from the Meeting:**
  - Recalled that the Year 2020 marked the 25th anniversary of Beijing Declaration and Platform for Action (BDFA): The 1995 Beijing Platform for Action flagged 12 key areas where urgent action was needed to ensure greater equality and opportunities for women and men, girls and boys. It also laid out concrete ways for countries to bring about change.
  - The 5th anniversary of adoption of 2030 Agenda for Sustainable development & Sustainable Development Goals (SDG): Goal 5 aims to eliminate all forms of discrimination and...
violence against women in the public and private sphere.

- The 20th anniversary of UNSC RESOLUTION 1325 on women, peace and security.
- A Decade since UN WOMEN was established: UN Women is the United Nations (UN) organization dedicated to gender equality and the empowerment of women. It was established in 2010.
- Lauded the efforts of Government of India in helping out other countries to overcome the challenges posed by Covid-19 pandemic by providing vaccines, masks, sanitizers, PPE Kits etc.

**India’s Effort for Women Empowerment:**

- Equal rights for men and women are enshrined under Articles 14 to 16 in the Indian constitution.
- It signed the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) in 1980 and ratified it in 1993 with some reservations.
- The Dowry Prohibition Act, 1961 and the Protection of Women from Domestic Violence Act, 2005 have been enacted to criminalise instances of dowry and domestic violence.
- The government also increased maternity leave from 12 weeks to 26 weeks under the Maternity Benefit Act in 2017 for the private sector.
- The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act 2013 has been enacted covering all the women, in spite of their age and employment status, and protects them from sexual harassment at workplaces, in both the public and private sectors of the industry where the women are employed.
- Another milestone was reached when the Supreme Court upended the government’s position on women serving as army commanders in 2020.
- Efforts to pass the Women’s Reservation Bill which gives 33% reservation for women seats in all levels of Indian politics.
- Flagship schemes to promote gender equality, including Beti Bachao Beti Padhao (Save the Daughter, Educate the Daughter), Pradhan Mantri Ujjwala Yojana (a scheme to provide gas connections to women from below the poverty line households) and Mahila-E-Haat (which uses technology to support female entrepreneurs).
- While India has taken some measures on human development, its global standing on gender equality remains low. India’s ranking in the Global Gender Gap Report, commissioned by the World Economic Forum, declined from 108th in 2018 to 112th in 2020.

**India-Brazil-South Africa Dialogue Forum**

- About: The IBSA Dialogue Forum is a tripartite grouping (India, Brazil, South Africa) for promoting cooperation among these countries.
- Formation: The grouping was formalized and named the IBSA Dialogue Forum when the Foreign Ministers of the three countries met in Brasilia (Brazil) on 6th June 2003 and issued the Brasilia Declaration.
- Headquarters: IBSA does not have a headquarters or a permanent executive secretariat. At the highest level, it counts on the Summits of Heads of State and Government.
- So far Five IBSA Leadership Summits have been held. The 5th IBSA Summit was held in Pretoria (South Africa) in 2011. The 6th IBSA Summit is to be hosted by India.
- IBSA Fund for Alleviation of Poverty and Hunger, established in 2004, is a unique Fund through which development projects are executed with IBSA funding in fellow developing countries.
- Till date IBSA has supported 31 projects in 20 partner developing countries in the areas of safe drinking water, agriculture and livestock, solar energy, waste management, health etc., with the aim of contributing to the achievement of the SDGs (earlier MDGs).
The IBSA Fund has been the recipient of several key recognitions including the UN South-South Partnership Award in 2006 (for projects in Haiti and Guinea-Bissau), an MDG Award for South-South Cooperation in 2010 and the South-South Champions Award in 2012 recognizing the work of the three countries in using innovative approaches to share development experiences in other parts of the world.

- Joint naval exercise IBSAMAR (IBSA Maritime Exercise) is an important part of IBSA trilateral defence cooperation. Six editions of IBSAMAR have been held so far, the latest one being off the coast of South Africa in October, 2018.

India’s Act East Policy

Why in News

Recently, the Union Minister of State Development of North Eastern Region (DoNER) said that connectivity is an important element of Act East Policy.

Key Points

- About:
  - The ‘Act East Policy’ announced in November, 2014 is the upgrade of the “Look East Policy”.
  - It is a diplomatic initiative to promote economic, strategic and cultural relations with the vast Asia-Pacific region at different levels.
  - It involves intensive and continuous engagement with Southeast Asian countries in the field of connectivity, trade, culture, defence and people-to-people-contact at bilateral, regional and multilateral levels.

- Aim:
  - To promote economic cooperation, cultural ties and developing a strategic relationship with countries in Indo-Pacific region with a proactive and pragmatic approach and thereby improving the economic development of the North Eastern Region (NER) which is a gateway to the South East Asia Region.

- Difference Between Look East and Act East:
  - Look East:
    - Look East policy focused on the Association of Southeast Asian Nations (ASEAN) countries + Economic Integration.

Look East Policy

- In order to recover from the loss of the strategic partner - USSR (end of the Cold war 1991), India sought to build up a relationship with the USA and allies of the USA in Southeast Asia.
- In this pursuit, former Prime minister of India P V Narasimha Rao launched Look East policy in 1992, to give a strategic push to India’s engagement with the South-East Asia region, to bolster its standing as a regional power and a counterweight to the strategic influence of the People’s Republic of China.

- India became a dialogue partner of ASEAN in 1996 and summit level partner in 2002.
- In 2012 the relationship got up-graded into a Strategic Partnership.
- The time when India launched the Look East Policy in 1992, India’s trade with ASEAN was USD 2 billion. After signing the Free Trade Agreement in 2010 with ASEAN, the trade has grown to USD 72 billion (2017-18).
- India is also an active participant in several regional forums like the East Asia Summit (EAS), ASEAN Regional Forum (ARF) etc.

- Act East:
  - Act East Policy focused on ASEAN countries + Economic Integration + East Asian countries + Security cooperation.
  - Prime minister of India highlighted 4C’s of Act East Policy.
    1. Culture
    2. Commerce
    3. Connectivity
    4. Capacity building
  - Security is an important dimension of India’s Act East Policy.
    - In the context of growing Chinese assertiveness in the South China Sea and the Indian Ocean, securing freedom of navigation and India’s own role in the Indian Ocean is a key feature of Act East Policy.
    - In pursuance of this, India has been engaged under the narrative of Indo-pacific and informal grouping called Quad.

- Initiatives to Enhance Connectivity:
  - Agartala-Akhaura Rail Link between India and Bangladesh.
Intermodal transport linkages and inland waterways through Bangladesh.

Kaladan Multimodal Transit Transport Project and the Triilateral Highway Project connecting the North East with Myanmar and Thailand.

Under India-Japan Act East Forum, projects such as Road and Bridges and modernization of Hydro-electric power projects have been undertaken.

- India-Japan Act East Forum was established in 2017 which aims to provide a platform for India-Japan collaboration under the rubric of India’s “Act East Policy” and Japan’s “Free and Open Indo-Pacific Strategy”.

- The Forum will identify specific projects for economic modernization of India’s North-East region including those pertaining to connectivity, developmental infrastructure, industrial linkages as well as people-to-people contacts through tourism, culture and sports-related activities.

Other Initiatives:

- Assistance extended in the form of medicines/medical supplies to ASEAN countries during the pandemic.

- Scholarships with offers of 1000 PhD fellowships have been offered at IITs for ASEAN countries participants.

- India is also implementing Quick Impact Projects in Cambodia, Laos, Myanmar and Vietnam to provide development assistance to grass-root level communities in the fields of education, water resources, health etc.

- Quick Impact Projects (QIPs) are small-scale, low cost projects that are planned and implemented within a short timeframe.

Permanent Indus Commission

Why in News

The 116th Meeting of Permanent Indus Commission (PIC) between India and Pakistan is underway in New Delhi.

- The first day of the Meeting coincided with the National Day of Pakistan (marks Lahore Resolution of 23rd March, 1940).

Key Points

- About the Latest Meeting:
  - The meeting is being held after a gap of more than two-and-a-half years, a period that witnessed:
    - Pulwama attack (14th February, 2019), Balakot air strike (26th February, 2019), and
    - Abrogation of special provisions under Article 370 that gave special status to J&K.
  - A discussion on Pakistan’s objections about two India Projects - Pakal Dul and Lower Kalnai - is expected to be held.
    - India is building Pakal Dul Hydro Electric Project (1,000 MW) on river Marusudar, a tributary of the Chenab. The project is located in Kishtwar district of J&K.
    - The second project – Lower Kalnai – is being developed on the Chenab.
  - Routine issues such as flood data exchange mechanisms are also expected to be discussed.
  - The meeting is being seen as a positive step after both countries agreed to “strict observance of all agreements, understanding and ceasefire along the Line of Control and all other sectors” last month.
About the Permanent Indus Commission:

- It is a bilateral commission of officials from India and Pakistan, created to implement and manage goals of the **Indus Waters Treaty, 1960**.
- The Commission, according to the treaty, shall meet regularly at least once a year, alternately in India and Pakistan.
- The functions of the Commission include:
  - To study and report to the two Governments on any problem relating to the development on the waters of the rivers.
  - To solve disputes arising over water sharing.
  - To arrange technical visits to projects’ sites and critical river head works.
  - To undertake, once in every five years, a general tour of inspection of the Rivers for ascertaining the facts.
  - To take necessary steps for the implementation of the provisions of the treaty.
- The 115th meeting of the PIC was held in Lahore in August, 2018.

**Indus Water Treaty, 1960:**

- It is a treaty brokered by the World Bank and signed by then Prime Minister Jawaharlal Nehru and Pakistan’s President Ayub Khan which administers how the waters of the Indus and its tributaries that flow in both the countries will be utilised.
- According to the treaty, waters of the eastern rivers — Sutlej, Beas and Ravi had been allocated to India, while the western rivers — the Indus, Jhelum and Chenab to Pakistan.
- Under the treaty, India has been given the right to generate hydroelectricity through a run of the river projects on the western rivers subject to specific criteria for design and operation.
  - India has cleared several hydropower projects in Ladakh: Darbuk Shyok (19 MW), Shankoo (18.5 MW), Nimu Chilling (24 MW), Rongdo (12 MW), Ratan Nag (10.5 MW) for Leh; and Mangdum Sangra (19 MW), Kargil Hunderman (25 MW) and Tamasha (12 MW) for Kargil.
- It also gives Pakistan the right to raise concerns on the design of Indian hydroelectric projects on western rivers.
- The Treaty also provides an arbitration mechanism to solve disputes amicably.

- There have been disagreements and differences between India and Pakistan over dams. For eg. In 2010, Pakistan instituted international arbitration proceedings over India’s 330-megawatt hydropower project on a small Indus tributary, the Kishenganga (known as Neelum in Pakistan).
- Though Indus originates from Tibet, China has been kept out of the Treaty. If China decides to stop or change the flow of the river, it will affect both India and Pakistan.
- Climate change is causing melting of ice in Tibetan plateau, which scientists believe will affect the river in future.

**Lahore Resolution**

- A historic session of the All-India Muslim League was held at Lahore in March 1940.
- Muhammad Ali Jinnah explained how Hindus and Muslims cannot co-exist peacefully.
- On 23rd March, an epoch-making resolution was moved at that session demanding that areas of the subcontinent of India in which the Muslims were numerically in a majority, as in the North-Western and Eastern Zones, should be grouped to constitute independent States.
- Having regard to the place of its adoption, the resolution was originally referred to as the Lahore Resolution. The Hindu Press, however, dubbed it as the Pakistan Resolution and eventually, in popular parlance, it came to be called as such.
- The Lahore Resolution was the beginning of the end of the administrative unity of the entire subcontinent, which had been created by the Muslim Emperors and continued by the British; within eight years of its adoption the subcontinent was partitioned and Pakistan appeared as an independent sovereign State on its map.

**India-South Korea:**

**Friendship Park**

**Why in News**

Recently, Indian Defence Minister and his South Korean counterpart inaugurated the **India - Korea Friendship Park** in a ceremony at the Delhi Cantonment.
Later on both the ministers concluded a bilateral meeting and explored different areas of cooperation.

Earlier in February 2019, the Prime Minister of India visited South Korea (Republic of Korea).

Key Points

About:
- Spread across a green area of six acres, the park includes an entrance gate made in Korean style, a jogging track, well landscaped garden and an amphitheatre.
- Has an imposing handshake artifact standing tall at the entrance bearing flags of India and South Korea.
- Has statue of General KS Thimayya, a celebrated soldier who led the Indian contingent in the Korean War as Chairman of Neutral Nations Repatriation Commission (NNRC) in Korea headed by India.
  - Neutral Nations Repatriation Commission:
    - One of the follow-up actions to the Armistice Agreement in the Korean War was the establishment of a NNRC which was to decide on the fate of over 20,000 prisoners of war from both sides.
    - India was chosen as the Chair of the NNRC, with Poland and Czechoslovakia representing the Communist bloc and Sweden and Switzerland representing the Western world.
- The five pillars raised in the backdrop of General Thimayya’s statue are embossed with details of operations carried out by 60 Parachute Field Ambulance (deployed by India) during the Korean war where they had treated about 1,95,000 cases, and performed about 2,300 field surgeries.

- One pillar also encompasses Nobel Laureate Gurudev Rabindranath Tagore’s narration of Korea as “The Lamp of the East” which was published in Korean daily “Dong-A-ilbo” in 1929.

Developed By:
- The park has been developed in joint consultation with the Ministry of Defence, Government of India, Indian Army, Delhi Cantonment Board, Embassy of Korea and Korean War Veterans Association of India.

Significance:
- The park’s significance is not only because of it being a symbol of strong India-South Korea friendly relations, but also as a monument to India’s contributions as part of 21 countries which participated in Korean war 1950-53, under the aegis of the United Nations.

Issues Discussed at the Meet:
- Discussed maritime cooperation as part of the Indo-Pacific strategy and also cooperation in the defense industry and future technologies.
- The two countries have a logistics agreement helping the Indian navy while operating in the Indo-Pacific region.

India-South Korea Relations

Political:
- During the Korean War (1950-53), India played a major role in a cease-fire agreement signed between both the warring sides (North Korea and South Korea) and the ceasefire was declared on 27th July 1953.
- In May 2015, the bilateral relationship was upgraded to ‘special strategic partnership’.
- India has a major role to play in South Korea’s Southern Policy under which Korea is looking at expanding relations beyond its immediate region.
- Similarly, South Korea is a major player in India’s Act East Policy under which India aims to promote economic cooperation, cultural ties and develop strategic relationships with countries in the Asia-Pacific.

Economic:
- The current bilateral trade between India and South Korea is at USD 21 billion and the target that has been set is USD 50 billion by the year 2030.
India and South Korea have signed the Comprehensive Economic Partnership Agreement (CEPA), 2010 which has facilitated the growth of trade relations.

To facilitate investment from Korea, India has launched a “Korea Plus” facilitation cell under ‘Invest India’ to guide, assist and handhold investors.

India’s share in Korea’s global trade was 1.72% in 2020 and India’s contribution in Korea’s global imports increased from 0.78% in 2001 to 1.05% in 2020.

- Cultural:
  - Korean Buddhist Monk Hyecho or Hong Jiao visited India from 723 to 729 AD and wrote the travelogue “Pilgrimage to the five kingdoms of India” which gives a vivid account of Indian culture, politics & society.
  - Nobel Laureate Rabindranath Tagore had composed a short but evocative poem – ‘Lamp of the East’ - in 1929 about Korea’s glorious past and its promising bright future.
  - To further enhance cultural exchanges between India and Korea, Indian Cultural Centres (ICC) were established in Seoul in April 2011 and in Busan in December 2013.

- Multilateral Platforms Shared by Both the Countries:
  - United Nations.
  - World Trade Organization.
  - ASEAN Plus.
  - East Asia Summit (EAS).
  - G-20.

The Heart of Asia-Istanbul Process

Why in News

External Affairs Minister of India attended the 9th Heart of Asia-Istanbul Process held in Dushanbe, Tajikistan.

He called for a “double peace” which means peace within Afghanistan and peace around Afghanistan and also said India supports the Intra-Afghan Negotiations (IAN).

Key Points

- The Heart of Asia-Istanbul Process (HoA-IP):
  - It was founded in November, 2011 in Istanbul, Turkey.

- It provides a platform for sincere and results-oriented regional cooperation by placing Afghanistan at its center, in recognition of the fact that a secure and stable Afghanistan is vital to the prosperity of the Heart of Asia region.

- This platform was established to address the shared challenges and interests of Afghanistan and its neighbors and regional partners.

- The Heart of Asia comprises 15 participating countries, 17 supporting countries, and 12 supporting regional and international organizations.
  - India is a participating country.

- Since its inception the process has become a cardinal element in regional cooperation and has created a platform for Afghanistan’s near and extended neighbors, international supporters and organizations to engage in constructive dialogue and to address the existing and emerging regional challenges through regional cooperation with Afghanistan at its core.

- Intra-Afghan Negotiations (IAN):
  - It refers to the talks between the Afghan government and Taliban insurgents with the goal of bringing an end to nearly two decades of a conflict that has laid waste to the country and killed tens of thousands of combatants and civilians.

  - The participants of intra-Afghan negotiations will discuss the date and modalities of a permanent and comprehensive ceasefire, including agreement over the future political roadmap of Afghanistan.

  - The negotiations will cover a variety of issues, including the rights of women, free speech, and changes to the country’s constitution.

  - The talks would also lay out the fate of tens of thousands of Taliban fighters as well as the heavily armed militias belonging to Afghanistan’s warlords who have amassed wealth and power since the Taliban were ousted from power in 2001.

- Regional Connectivity Initiatives:
  - During the conference, the Afghanistan President appreciated the number of regional connectivity initiatives including the Chabahar port project, as well as the Turkmenistan-Afghanistan-Pakistan-India (TAPI) pipeline.

- India’s Stand:
  - India believes any peace process must be Afghan-
led, Afghan-owned and Afghan-controlled, has to respect the national sovereignty and territorial integrity of Afghanistan and preserve the progress made in the establishment of a democratic Islamic Republic in Afghanistan.

- The interests of minorities, women and vulnerable sections of society must be preserved and the issue of violence across the country and its neighbourhood has to be effectively addressed.

**TAPI Pipeline**

- TAPI Pipeline, also called Peace pipeline, is a 1,814km natural gas pipeline that originates from Turkmenistan and passes through Afghanistan and Pakistan to reach India.
- It aims to monetise Turkmenistan’s gas reserves and supply them to neighbouring countries to promote the use of natural gas and improve energy security.
- The project is being developed by TAPI Pipeline Company (TPCL), a consortium established by four individual state-owned gas companies Turkmengaz (Turkmenistan), Afghan Gas (Afghanistan), Interstate Gas Service (Pakistan), and Gas Authority of India and Indian Oil (India).
- The four countries signed an Inter Government Agreement (IGA) and Gas Pipeline Framework Agreements (GPFA) in December 2010 for the development of the pipeline.
Double Mutant Coronavirus Variant

Why in News
A unique “double mutant” coronavirus variant with a combination of mutations, not seen anywhere else in the world, has been found in India.

Key Points
- **Meaning of Mutation:**
  - **Mutation** is an alteration in the genetic material (the genome) of a cell of a living organism or of a virus that is more or less permanent and that can be transmitted to the cell’s or the virus’s descendants.
  - The genomes of organisms are all composed of **Deoxyribonucleic Acid (DNA)**, whereas viral genomes can be of **DNA** or **Ribonucleic Acid (RNA)**.
- **Double Mutant:**
  - **Genome sequencing** of a section of virus samples by the Indian SARS-CoV-2 Consortium on Genomics (INSACOG), revealed the presence of two mutations, E484Q and L452R together, in virus samples from states such as Maharashtra, Delhi, Punjab and Gujarat.
  - The INSACOG will submit details of this variant to a global repository called **Global Initiative on Sharing Avian Influenza Data (GISAID)** and, if it merits, classify it as a **Variant of Concern (VOC)**.
  - So far, only three global VOCs have been identified: the **U.K. variant** (B.1.1.7), the **South African** (B.1.351) and the Brazilian (P.1) lineage.
- **Challenges of Double Mutant:**
  - The double mutation in key areas of the virus’ **spike protein** may increase the risks and allow the virus to escape the immune system.
  - The spike protein is the part of the virus that it uses to penetrate human cells.
  - Presence of a VOC or suspected VOC does not automatically mean that they are causing the outbreak, but rather suggests challenges to **public health measures for containment**.
  - While the double mutants have been associated with a **reduction in vaccine efficacy as well as infectivity**, their combined effect and biological implication has not yet been understood.

Variant of Concern
- These are variants for which there is evidence of an increase in transmissibility, more severe disease (increased hospitalizations or deaths), significant reduction in neutralization by antibodies generated during previous infection or vaccination, reduced effectiveness of treatments or vaccines, or diagnostic detection failures.
  - The double mutation in key areas of the virus’ **spike protein** may increase the risks and allow the virus to escape the immune system.
  - The spike protein is the part of the virus that it uses to penetrate human cells.
  - Presence of a VOC or suspected VOC does not automatically mean that they are causing the outbreak, but rather suggests challenges to **public health measures for containment**.
  - While the double mutants have been associated with a **reduction in vaccine efficacy as well as infectivity**, their combined effect and biological implication has not yet been understood.
- **Other Variant:**
  - Also genome variation studies from Kerala have revealed the presence of other mutations.
    - It is associated with the ability to help the **coronavirus evade antibodies**.
  - The **N440K mutation** that is associated with immune escape has also been reported from 16 other countries, including the UK, Denmark, Singapore, Japan and Australia.
- **Solution:**
  - It would require the same epidemiological and public health response of increased testing, comprehensive tracking of close contacts, prompt
isolation of positive cases & contacts as well as treatment as per “National Treatment Protocol” by the States/UTs.

- **Indian SARS-CoV-2 Consortium on Genomics (INSACOG):**
  - INSACOG is a multi-laboratory, multi-agency, pan-India network to monitor genomic variations in the SARS-CoV-2.
  - It helps in the understanding of how the virus spreads and evolves.
  - Genomic surveillance can generate a rich source of information for tracking pathogen transmission and evolution on both national and international levels.

**Genomic Sequencing**

- It is a testing process to map the entire genetic code of an organism, in this case, the virus.
- The genetic code of the virus works like its instruction manual.
- Mutations in viruses are common but most of them are insignificant and do not cause any change in their ability to transmit or cause serious infection.
- But some mutations, like the ones in the UK or South Africa variant lineages, can make the virus more infectious and in some cases even deadlier.

**Global Initiative on Sharing Avian Influenza Data**

- The Global Initiative on Sharing Avian Influenza Data (GISAID) Initiative promotes the rapid sharing of data from all influenza viruses and the coronavirus causing Covid-19.
- The fast and open sharing of genetic sequences has allowed researchers to continuously track the spread of the virus.
- GISAID has also catalysed the development of diagnostic kits, prototype viruses for research, and medical countermeasures like vaccines and antibodies.
- The GISAID platform was launched on the occasion of the Sixty-first World Health Assembly in May 2008.
- Since its launch, GISAID has played an essential role in the sharing of data among the World Health Organization (WHO) Collaborating Centers and National Influenza Centers for the bi-annual influenza vaccine virus recommendations by the WHO Global Influenza Surveillance and Response System (GISRS).

---

**Moving Black Hole**

**Why in News**

Scientists have discovered the first moving supermassive black hole whose mass is about three million times that of our Sun.

- The black hole was travelling within its own galaxy (J0437+2456) which is around 228 million light years away from Earth.

**Key Points**

- **Study Conducted by the Scientists:**
  - Scientists studied 10 faraway galaxies with supermassive black holes in the centre, expecting them to have the same velocity as that of the galaxies they reside in.
  - Focus of their study was the water in the accretion disk (the spiralling mass around a supermassive black hole made of matter that is eventually ingested by the black hole).
  - As the water circles around the black hole before falling into it like liquid in a sink, it produces a laser-like beam of radio light known as a maser. These masers can tell the velocity of black holes very accurately.

- **About the Moving Supermassive Black Hole:**
  - Of the 10 black holes they studied, only the one at the center of J0437+2456 was unusual. It was not moving at the same velocity as its home galaxy.
  - Besides the empirical evidence, the enormous size of these black holes had led people to imagine them to be stationary objects planted in the middle of galaxies as opposed to objects floating around in space.
  - It is moving with a speed of about 1,10,000 miles per hour inside its galaxy.

- **Possible Causes for the Motion:**
  - **Two Supermassive Black Holes Merging:** Scientists might have spotted the resulting black hole moving in a rearward motion after the merger before settling down in a position.
  - **One in a Binary System of Black Holes,** where not one but two supermassive black holes might exist within the host galaxy held together by a shared centre of gravity, which they might be orbiting.
The twin of the newly-discovered wandering black hole might not be emitting masers, keeping it from being detected by the radio antenna network.

**Black Hole**

- It refers to a point in space where the matter is so compressed as to create a gravity field from which even light cannot escape.
- The concept was theorized by Albert Einstein in 1915 and the term ‘black hole’ was coined in the mid-1960s by American physicist John Archibald Wheeler.
- Usually, the black holes belong to two categories:
  - One category ranges between a few solar masses and tens of solar masses. These are thought to form when massive stars die.
  - The other category is of supermassive black holes. These range from hundreds of thousands to billions of times that of the sun from the Solar system to which Earth belongs.
- In April 2019, the scientists at the Event Horizon Telescope Project released the first-ever image of a Black Hole (more precisely, of its shadow).
- The Event Horizon Telescope is a group of 8 radio telescopes (used to detect radio waves from space) located in different parts of the world.
- Gravitational waves are created when two black holes orbit each other and merge.

**Refrigeration System Pusa-FSF**

**Why in News**

Scientists from the ICAR-Indian Agricultural Research Institute (IARI) have developed an on-farm green energy refrigeration system (Pusa-FSF) and a technology for extraction of gluten from wheat dough and its regeneration in bajra (pearl-millet) and makka (maize) flour.

**Key Points**

- **Pusa-FSF:**
  - Pusa Farm Sun Fridge (Pusa-FSF) is a 100% solar-powered battery-less cold store that can preserve around 2 tonnes of freshly-harvested produce at 3-4°C during the day and 8-12°C at nighttime.
    - It has rooftop solar panels that generate 5 kilowatt (KW) power, which helps in running air conditioning.
  - The panels also power a 105-watt submersible pump circulating about 1,000 litres of water from a tank through overhead PVC pipes.
  - At night, there is only passive evaporative cooling, with the water chilled during the day acting as a natural heat sink.
  - All farmers with solar pumps are a potential market for the Pusa-FSF. India has an estimated four lakh-plus installed solar water pumps.
    - An average 5-horsepower pump costing Rs. 2.5 lakh attracts 70-90% subsidy.

- **Benefits:**
  - Farmers can store and preserve their own produce. It can avoid distress sales and help improve prices.
  - It will help minimise post harvest losses.
  - More room to grow perishable items such as tomatoes, fruits, other than Paddy and Maize.

- **Technology for Extraction of Gluten from Wheat Dough:**
  - Need: Bajra, maize, jowar (sorghum), ragi and other millets contain comparable levels of protein and more vitamins, minerals, crude fibre and other nutrients than wheat. But they don’t have any gluten proteins, which results in poor dough quality.
  - About the Technology: The technology imparts elasticity and structural strength to bajra and maize dough, making their chapattis as soft as from regular wheat atta flour.
    - The proteins extracted and dried into powder have the capacity for regeneration or forming gluten networks in non-wheat dough.
Scientists have developed gluten based ‘Hallur’ soft bajra flour, with the help of technology.

Other Technological Developments in the Field of Agriculture:
- Happy Seeder - machine for in-situ management of paddy stubble (straw).
- Precision Agriculture Technologies - Precision Agriculture (PA) is an approach to farm management that uses information technology to ensure that crops and soil receive exactly what they need for optimum health and productivity.

Gluten
- Gluten is a family of storage proteins — formally known as prolamins — that are naturally found in certain cereal grains, such as wheat, barley etc.
- The two main proteins in gluten are glutenin and gliadin.
- Gluten offers a variety of functional culinary benefits and is responsible for the soft, chewy texture that is characteristic of many gluten-containing, grain based foods.
- When heated, gluten proteins form an elastic network that can stretch and trap gas, allowing for optimal leavening or rising and maintenance of moisture in breads, pasta, and other similar products.
- Celiac disease, also spelled as coeliac disease, is the most severe form of gluten intolerance.

US India Artificial Intelligence Initiative

Why in News
Recently, US India Artificial Intelligence (USIAI) initiative has been launched to scale up the science and technology relationship between India and the United States.

Key Points
- US India Artificial Intelligence (USIAI) is an initiative of Indo-US Science and Technology Forum (IUSSTF) which was established in March 2000.
- The Department of Science & Technology (DST), Government of India, and the U.S. Department of State are respective nodal departments for IUSSTF.
- The USIAI will focus on AI cooperation in critical areas that are priorities for both countries.

Example: Healthcare, smart cities, materials, agriculture, energy, and manufacturing.
- It will bring together key stakeholders from India and the United States to create synergies that address challenges and opportunities at the interface of science, technology, and society.
- This will provide an opportunity to discuss the emerging AI landscape, and address the challenges of developing an AI workforce.

Related Recent Initiative:
- India has launched National AI Strategy (NITI Aayog) and National AI Portal (Ministry of Electronics and Information Technology) and has also started leveraging AI across various sectors such as education, agriculture, healthcare, e-commerce, finance, telecommunications, etc.
- Recently MyGov Corona Helpdesk Chatbot bagged two awards under categories (1) “Best Innovation for Covid-19 — Society” and (2) “People’s Choice Covid-19 Overall Winner” at the recently held CogX 2020. CogX is a prestigious Global Leadership Summit and Festival of Artificial Intelligence & Emerging Technology held annually in London.
- Recently, India joined the ‘Global Partnership on Artificial Intelligence (GPAI)” as a founding member to support the responsible and human-centric development and use of AI.
- As per a recent report, India reported a 45% increase in the use of Artificial Intelligence, the highest among all countries, because of shift in buying behaviour and new business challenges (owing to Covid-19 pandemic).
- RAISE 2020 – ‘Responsible AI for Social Empowerment 2020’ was jointly organised by the NITI Aayog and the Ministry of Electronics and Information Technology (MeitY).
- Vaishwik Bhartiya Vaigyanik (VAIBHAV) Summit was organised in 2020 to discuss key areas like quantum technologies, artificial intelligence among others.

Artificial Intelligence
- It describes the action of machines accomplishing tasks that have historically required human intelligence.
- It includes technologies like machine learning, pattern recognition, big data, neural networks, self algorithms etc.
AI is different from hardware driven robotic automation. Instead of automating manual tasks, AI performs frequent high volume computerised tasks reliably.

AI is often misunderstood for machine learning. AI is a broader concept with a bunch of technologies that include machine learning and other technologies like natural language processing, inference algorithms, neutron networks etc.

AI techniques now have become an essential part of the technology industry helping to solve many challenging problems in computer-science. From Apple Siri to self driving cars, AI is progressing rapidly.

NISAR: Joint Earth Observing Mission of NASA and ISRO

**Why in News**

NASA and ISRO are collaborating on developing an SUV-sized satellite called NISAR, which will detect movements of the planet's surface as small as 0.4 inches over areas about half the size of a tennis court.

The satellite will be launched in 2022 from the Satish Dhawan Space Center in Sriharikota (Andhra Pradesh) into a near-polar orbit.

**Key Points**

- The Name ‘NISAR’: The name NISAR is short for NASA-ISRO-SAR.
  - SAR here refers to the Synthetic Aperture Radar that NASA will use to measure changes in the surface of the Earth.
  - It refers to a technique for producing high-resolution images. Because of the precision, the radar can penetrate clouds and darkness, which means that it can collect data day and night in any weather.

- Function: It will scan the globe every 12 days over the course of its three-year mission of imaging the Earth's land, ice sheets and sea ice to give an unprecedented view of the planet.

- Role of NASA:
  - National Aeronautics and Space Administration (NASA - space agency of the USA) will provide one of the radars for the satellite, a high-rate communication subsystem for science data, GPS receivers and a payload data subsystem.

- Role of ISRO:
  - Indian Space and Research Organisation (ISRO) will provide the spacecraft bus, the second type of radar (called the S-band radar), the launch vehicle and associated launch services.

- Primary Goals:
  - Tracking subtle changes in the Earth’s surface,
  - Spotting warning signs of imminent volcanic eruptions,
  - Helping to monitor groundwater supplies, and
  - Tracking the rate at which ice sheets are melting.

- Expected Benefits:
  - NISAR's data can help people worldwide better manage natural resources and hazards, as well as providing information for scientists to better understand the effects and pace of climate change.
  - The images will be detailed enough to show local changes and broad enough to measure regional trends.
  - As the mission continues for years, the data will allow for better understanding of the causes and consequences of land surface changes.
  - It will also add to our understanding of our planet's hard outer layer, called its crust.

**S-Band Radar**

- S band radars operate on a wavelength of 8-15 cm and a frequency of 2-4 GHz.
- Because of the wavelength and frequency, S-band radars are not easily attenuated. This makes them useful for near and far range weather observation.
- The drawback to this band of radar is that it requires a large antenna dish and a large motor to power it. It is not uncommon for a S-band dish to exceed 25 feet in size.

Asteroid Apophis

**Why in News**

Recently, the National Aeronautics and Space Administration (NASA) has ruled out the possibility of the dreaded asteroid Apophis causing any damage to the Earth for the next 100 years.
Key Points

- **Size:**
  - Apophis is a near-Earth asteroid with a relatively large size (about 335 meters wide).

- **Name & Discovery:**
  - Named after the ancient Egyptian god of chaos and darkness, it was discovered in 2004, after which NASA had said that it was one of the asteroids that posed the greatest threat to Earth.
  - Apophis was predicted to come threateningly close to us in the years 2029 and 2036, but NASA later ruled these events out.
  - However, there were still fears about a possible collision in 2068.

- **Near Earth Flight:**
  - Recently, the asteroid flew past Earth on 5th March 2021, coming within 17 million km of our planet. During this approach, scientists used radar observations to study in detail the asteroid’s orbit around the sun.

- **Impact if it Hits Earth:**

Asteroids

- **About:**
  - Asteroids are rocky objects that orbit the Sun, much smaller than planets.
    - They are also called minor planets.
  - According to NASA, 9,94,383 is the count of known asteroids, the remnants from the formation of the solar system over 4.6 billion years ago.

- **Categorization:** Asteroids are divided into three classes:
  - **First Group:**
    - Those found in the main asteroid belt between Mars and Jupiter, which is estimated to contain somewhere between 1.1-1.9 million asteroids.
  - **Second Group:**
    - It is that of trojans, which are asteroids that share an orbit with a larger planet. NASA reports the presence of Jupiter, Neptune and Mars trojans. In 2011, they reported an Earth trojan as well.
  - **Third Group:**
    - It is Near-Earth Asteroids (NEA), which have orbits that pass close by the Earth. Those that cross the Earth’s orbit are called Earth-crossers. More than 10,000 such asteroids are known, out of which over 1,400 are classified as Potentially Hazardous Asteroids (PHAs).
    - NASA’s Center for Near-Earth Object Study (CNEOS) determines the times and distances of these objects, when their approach to the Earth is close, through the Asteroid Watch Widget.

Potentially Hazardous Asteroids

- It means that an asteroid has the potential to make threatening close approaches to the Earth.
- Specifically, all asteroids with a Minimum Orbit Intersection Distance (MOID) of 0.05 AU (which is about 7,480,000 Km) or less and an Absolute Magnitude (H) of 22.0 (about 150 mt in diameter) or less are considered PHAs.
  - Minimum Orbit Intersection Distance is a method for calculating the minimum distance between two almost overlapping elliptical orbits.
  - The Astronomical Unit (AU) is the distance between the Earth and the Sun and is roughly 150 million km.
  - The absolute magnitude is a measure of the star’s luminosity i.e. the total amount of energy radiated by the star every second.
- Apophis is categorised as a PHA.
World Air Quality Report 2020

Why in News

The World Air Quality Report, prepared by Swiss organisation IQAir, mentions that 22 of the top 30 most polluted cities globally are in India.

- The Report aggregated PM2.5 data from 106 countries.

PM 2.5

- It is an atmospheric particulate matter of diameter of fewer than 2.5 micrometres, which is around 3% the diameter of a human hair.
- It causes respiratory problems and also reduces visibility. It is an endocrine disruptor that can affect insulin secretion and insulin sensitivity, thus contributing to diabetes.
- It is very small and can only be detected with the help of an electron microscope.
- Some are emitted directly from a source, such as construction sites, unpaved roads, fields, smokestacks or fires.
- Most particles form in the atmosphere as a result of complex reactions of chemicals such as sulfur dioxide and nitrogen oxides, which are pollutants emitted from power plants, industries and automobiles.

Key Points

- **World Capital City Ranking:**
  - Delhi has been ranked as the world’s most polluted capital city followed by Dhaka (Bangladesh), Ulaanbaatar, (Mongolia), Kabul (Afghanistan), and Doha (Qatar) respectively.

World Country Ranking:

- Bangladesh has been ranked as the most polluted country followed by Pakistan and India.
- The least polluted country is Puerto Rico, followed by New Caledonia, US Virgin Islands respectively.

World City Ranking:

- Hotan in China is the most polluted city with an average concentration of 110.2 µg/m³ followed by Ghaziabad in Uttar Pradesh at 106.
- Ghaziabad is the second most polluted city in the world followed by Bulandshahr, Bisrakh Jalalpur, Bhiwadi, Noida, Greater Noida, Kanpur and Lucknow.

Indian Scenario:

- Shows a boost in Delhi’s air quality by approximately 15% from 2019 to 2020.
- Delhi has been listed as the 10th most polluted city and the top polluted capital city in the world.
- Ghaziabad is the second most polluted city in the world followed by Bulandshahr, Bisrakh Jalalpur, Bhiwadi, Noida, Greater Noida, Kanpur and Lucknow.
- Compared to north Indian cities, the cities in the Deccan recorded relatively better air quality, remaining above the daily WHO limits of 25 µg/m³ for most part of 2020.
- However, every city in India observed air quality improvements compared to 2018 and earlier, while 63% saw direct improvements against 2019.
- Major sources of India’s air pollution include transportation, biomass burning for cooking, electricity generation, industry, construction, waste burning, and episodic agricultural burning.
- 2020 was a particularly severe year for agricultural burning in which farmers set fire to crop residue after a harvest. Farm fires in Punjab increased 46.5% over 2019.
Covid and Its Impact:
- In 2020, the spread of Covid-19 raised new concerns as exposure to particle pollution was found to increase vulnerability to the virus and its impact on health.
- Early reports suggest that the proportion of Covid-19 deaths attributed to air pollution exposure ranges from 7% to 33%.

Air Pollution in Delhi
- Air pollution in Delhi-NCR and the Indo Gangetic Plains is a complex phenomenon that is dependent on a variety of factors.
- Change in Wind Direction:
  - October usually marks the withdrawal of monsoons in Northwest India and during this time, the predominant direction of winds is northwesterly.
  - The direction of the wind is northwesterly in summers as well, which brings the dust from northern Pakistan and Afghanistan.
- Reduced Wind Speed:
  - High-speed winds are very effective at dispersing pollutants, but winters bring a dip in wind speed overall as compared to in summers which makes the region prone to pollution.
  - Also, Delhi lies in a landlocked region which does not have a geographical advantage that eastern, western or southern parts of the country enjoy where the sea breeze disperses the concentrated pollutants.
- Stubble Burning:
  - Stubble burning in Punjab, Rajasthan and Haryana is blamed for causing a thick blanket of smog in Delhi during winters.
    - It emits large amounts of toxic pollutants in the atmosphere which contain harmful gases like methane (CH4), carbon monoxide (CO), volatile organic compounds (VOC) and carcinogenic polycyclic aromatic hydrocarbons.
  - Farm fires have been an easy way to get rid of paddy stubble quickly and at low cost for several years.
- Vehicular Pollution:
  - It is one of the biggest causes of dipping air quality in Delhi in winters and around 20% of PM2.5 in winters comes from it.

Dust Storms:
- Dust storms from Gulf countries enhance the already worse condition. Dry cold weather means dust is prevalent in the entire region, which does not see many rainy days between October and June.
- Dust pollution contributes to around 56% of PM10 and the PM2.5 load.

Dip in Temperatures:
- As temperature dips, the inversion height is lowered and the concentration of pollutants in the air increases when this happens.
  - Inversion height is the layer beyond which pollutants cannot disperse into the upper layer of the atmosphere.

Firecrackers:
- Despite the ban on cracker sales, firecrackers are a common sight on Diwali. It may not be the top reason for air pollution, but it definitely contributed to its build-up.

Construction Activities and Open Waste Burning:
- Large-scale construction in Delhi-NCR is another culprit that is increasing dust and pollution in the air. Delhi also has landfill sites for the dumping of waste and burning of waste in these sites also contributes to air pollution.

Major Measures Taken
- Subsidy to farmers for buying Turbo Happy Seeder (THS) which is a machine mounted on a tractor that cuts and uproots the stubble, in order to reduce stubble burning.
- The introduction of BS-VI vehicles, push for electric vehicles (EVs), Odd-Even as an emergency measure and construction of the Eastern and Western Peripheral Expressways to reduce vehicular pollution.
- Implementation of the Graded Response Action Plan (GRAP) to tackle the rising pollution in the Capital. It includes measures like shutting down thermal power plants and a ban on construction activities.
- Development of the National AQI for public information under the aegis of the Central Pollution Control Board (CPCB). AQI has been developed for eight pollutants viz. PM2.5, PM10, Ammonia, Lead, nitrogen oxides, sulfur dioxide, ozone, and carbon monoxide.
**Pilibhit Tiger Reserve: Uttar Pradesh**

**Why in News**
A carcass of a five-year-old tigress was found in the Pilibhit Tiger Reserve (Uttar Pradesh).

**Key Points**
- **About:**
  - It is located in Pilibhit and Shahjahanpur district of Uttar Pradesh.
  - It was notified as Tiger Reserve in 2014.
    - In 2020, it bagged international award TX2 for doubling up the number of tigers in the past four years.
  - It forms the part of Terai Arc Landscape in the upper Gangetic Plain.
  - The northern edge of the reserve lies along the Indo-Nepal border while the southern boundary is marked by the river Sharada and Khakra.
- **Flora and Fauna:**
  - It is home to a habitat for over 127 animals, 326 bird species and 2,100 flowering plants.
  - Wild animals include tiger, swamp deer, bengal florican, leopard, etc.
  - It has high sal forests, plantation and grasslands with several water bodies.
- **Other Protected Areas in Uttar Pradesh:**
  - Dudhwa National Park
  - National Chambal Sanctuary
  - Chandraprabha Wildlife Sanctuary
  - Hastinapur Wildlife Sanctuary

**Terai Arc Landscape**
- The Terai Arc Landscape (TAL) is an 810 km stretch between the river Yamuna in the west and the river Bhagmati in the east.
- **Bhagmati River** is a river in south-central Nepal and northern Bihar state.
- Comprises the Shivalik hills, the adjoining bhabhar areas and the Terai flood plains.
- The bhabhar is that part of the Indian Northern Plains where the rivers, after descending from the mountains, deposit pebbles. It is a narrow belt, having a width of about 8 to 16 km and lying parallel to the slopes of the Shiwaliks.
  - All the streams disappear in this bhabhar belt. South of this belt, the streams and rivers re-emerge and create a wet, swampy and marshy region known as terai.
- It is spread across the Indian states of Uttar Pradesh, Bihar, and the low lying hills of Nepal.
- It boasts of some of India’s most well-known Tiger Reserves and Protected Areas such as Corbett Tiger Reserve (Uttarakhand), Rajaji National Park (Uttarakhand), Dudhwa Tiger Reserve (Uttar Pradesh), Valmiki Tiger Reserve (Bihar).
- In total, the landscape has 13 Protected Areas, 9 in India and 4 in Nepal, covering a total area of 49,500 km², of which 30,000 km² lies in India.
- The forests are home to three flagship species, the Bengal tiger (Panthera tigris), the greater one horned rhino (Rhinoceros unicornis) and the Asian elephant (Elephas maximus).

---

**Ranthambore Tiger Sanctuary: Rajasthan**

**Why in News**
Six tigers are missing in Ranthambore Tiger Sanctuary (Rajasthan).

**Key Points**
- **About:**
  - Ranthambore Tiger Reserve lies in the eastern part of Rajasthan state in Karauli and Sawai Madhopur districts, at the junction of the Aravali and Vindhya hill ranges.
  - It comprises the Ranthambore National Park as well as Sawai Mansingh and Kailadevi Sanctuaries.
  - The Ranthambore fort, from which the forests derive their name, is said to have a rich history of over 1000 years. It is strategically located atop a 700 feet tall hill within the park and is believed to have been built in 944 AD by a Chauhan ruler.
  - This isolated area with tigers in it represents the north-western limit of the Bengal tiger’s distribution range and is an outstanding example of Project Tiger’s efforts for conservation in the country.
India has 2,967 tigers, a third more than in 2014, according to results of a census made public in July 2020. Ranthambore, according to this exercise, had 55 tigers.

Features:
- The reserve consists of highly fragmented forest patches, ravines, river streams and agricultural land.
- It is connected to Kuno-Palpur Landscape in Madhya Pradesh, through parts of Kailadevi Wildlife Sanctuary, the ravine habitats of Chambal and the forest patches of Sheopur.
- Tributaries of River Chambal provide easy passage for tigers to move towards the Kuno National Park.

Vegetation and Wildlife:
- The vegetation includes grasslands on plateaus and dense forests along the seasonal streams.
- The forest type is mainly tropical dry deciduous with ‘dhak’ (Butea monosperma), a species of tree capable of withstanding long periods of drought, being the commonest.
- This tree is also called as ‘Flame of forest’ and is one of the many flowering plants that add colour to the dry summers here.
- The park is rich in wildlife with tigers at the apex of the food chain in mammals.
- Other animals found here are leopards, striped hyenas, common or hanuman langurs, rhesus macaques, jackals, jungle cats, caracals, blackbuck, Blacknaped hare and chinkara, etc.
- The park is rich in birds with about 272 species recorded so far.

Other Protected Areas in Rajasthan:
- Sariska National Park, Alwar
- Desert National Park, Jaisalmer
- Keoladeo National Park, Bharatpur
- Sajjangarh wildlife sanctuary, Udaipur
- National Chambal Sanctuary (on tri-junction of Rajasthan, Madhya Pradesh and Uttar Pradesh)

Removal of Heavy Metals from Water

Why in News
Recently, a research team at the Indian Institute of Technology (IIT) Mandi has developed a new method for efficient removal of heavy metals from water.

Key Points

Background:
- Several methods like chemical precipitation, ion exchange, adsorption, membrane filtration, reverse osmosis, solvent extraction, and electrochemical treatment have been used to remove heavy metals from contaminated water.
- Many of these methods suffer from high capital and operational costs.
- Therefore, adsorption is one of the best-suited methods, due to its high efficiency, low-cost, and ease of operation.

About the Research:
- A research team has developed a fibrous membrane filter using a biopolymer-based material that helps to separate out the heavy metals from water samples.
- These membranes contain adsorbents materials that attract and hold the metals.
- These adsorbents contain a large amount of a biopolymer, Chitosan, derived from crab shells that is mixed with a well-known polymer, Nylon.

Funding of Research: The study was funded by the Ministry of Mines, Government of India.

Process Used:
- The researchers have used a process called “solution blowing”, while regular fibre-based adsorbents are produced through a method called “melt blowing”.

Melt Blowing:
- It is a special technique for manufacturing material with very fine fibers, down to 0.5 μm (in range of micrometers).
- The fibers are elongated by blowing hot air at high speed concentrically along the fibers.

Solution Blowing:
- It starts from dissolving the polymer in solvent, e.g. cellulose in ionic liquid.
- The solution is pumped through a spin nozzle where air is blown at high speed concentrically.
- Solution blowing produces fibres that are nanometres in diameter, a hundred thousand times thinner than a single human hair. Finer than those produced through the process of
Melt Blowing. This increases the surface area of fibers tremendously, resulting in better adsorption of heavy metals.

- This method also enables blending of higher concentration of natural polymers like chitosan and lignin with synthetic polymers like Nylon.

**Advantages:**

- **Higher Metal Removal Efficiency:** The normal absorbent fibres bind to the target metal only at their surface, in their nanofiber membranes.
- The biopolymer-based material adsorption was seen to happen at the sub-surface scale as well, which translates to higher metal removal efficiency.

- **Reuse of Membrane:** The membranes could be reused at least eight times before there was considerable reduction in the efficiency of metal adsorption.

- **Recovery of Adsorbed Metal:** The adsorbed metal in a metal-hydroxyl nitrate form can be easily recovered. It is a value-addition to the membrane filter.

- **Industrial Production:** The researchers have provided a method to produce fibre-based adsorbents at large scale for handling larger volumes of metal-contaminated water.

- **Environmentally Efficient:** Using the solution blowing technique could replace the synthetic polymers with natural polymers.
- It will be a welcome move in this era of environmental consciousness.

**Heavy Metals**

- **About:**
  - The term heavy metal refers to any metallic chemical element that has a relatively high density (> 5 g/cm³) and is toxic or poisonous at low concentrations.
  - Examples of heavy metals include mercury (Hg), cadmium (Cd), arsenic (As), chromium (Cr), thallium (Tl), and lead (Pb).

- **Source of Heavy Metals:**
  - Heavy metals are introduced into the environment either by natural means or by human activities.

- **Natural Sources:**
  - Geographical phenomena like volcanic eruptions, weathering of rocks, leaching into rivers, lakes and oceans due to action of water.

- **Anthropogenic Sources:**
  - Such as mining, manufacturing, electroplating, electronics, discharge from auto exhaust, domestic waste, agricultural waste and fertilizer production.
  - The Central Water Commission (CWC) has reported that the samples from two-thirds of the water quality stations spanning India’s major rivers are contaminated by one or more heavy metals, exceeding safe limits set by the Bureau of Indian Standards.
  - Several villagers in West Bengal are suffering from sores and ulcers due to arsenic poisoning from drinking water. According to a recent report, the number of arsenic-affected habitations in India has increased by 145% in the last five years (2015-20).

- **Effect of Heavy Metals on Human:**
  - There are some essential heavy metals which the human body requires in trace amounts such as Cobalt, copper, zinc, and manganese but in the excessive amount, it can be detrimental to health.
  - The heavy metals found in drinking water such as lead, mercury, arsenic, and cadmium have no beneficial effects on your body.
  - In fact, their accumulation inside the body can cause severe health problems.

<table>
<thead>
<tr>
<th>Metals</th>
<th>Disease</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mercury</td>
<td>Minamata disease</td>
</tr>
<tr>
<td>Cadmium</td>
<td>Hidrosis</td>
</tr>
<tr>
<td>Lead</td>
<td>Arsenias</td>
</tr>
<tr>
<td>Arsenic</td>
<td>Black foot disease</td>
</tr>
<tr>
<td>Nitrates</td>
<td>Blue Baby Syndrome</td>
</tr>
</tbody>
</table>

**Sundarbans**

**Why in News**

Promises related to development of Sundarbans are being made by different political parties, ahead of West Bengal assembly elections.

- Sunderbans region was badly damaged by Cyclone Amphan in 2020.

**Key Points**

- It is a vast contiguous mangrove forest ecosystem in the coastal region of Bay of Bengal spread over India.
and Bangladesh on the delta (world’s largest) of the Ganges, Brahmaputra and Meghna rivers.
- It contains the world’s largest mangrove forests.
- Much of the area has long had the status of a forest reserve, but conservation efforts in India were stepped up with the creation of the Sundarbans Tiger Reserve in 1973.
- **Sundarbans National Park**, established in 1984, constitutes a core region within the tiger reserve; it was designated a UNESCO World Heritage site in 1987.
- Sunderbans was designated as a Biosphere Reserve by UNESCO in 2001.
- **Sundarban Wetland**, India was recognised as the ‘Wetland of International Importance’ under the Ramsar Convention in January 1999.
- **Sunderban National Park** is known for its wide range of fauna, including 260 bird species and is home to many rare and globally threatened wildlife species such as the Estuarine Crocodile, Royal Bengal Tiger, Water Monitor Lizard, Gangetic Dolphin and Olive Ridley Turtles.
- The Sundarbans Delta is the only mangrove forest in the world inhabited by tigers.
  - For its preservation, Discovery India and World Wide Fund (WWF) India partnered with the Government of West Bengal and local communities in the Sundarbans in 2019.

**Mangroves**
- Mangroves are the plant communities occurring in inter-tidal zones along the coasts of tropical and subtropical countries.
- Mangrove forests perform multiple ecological functions such as production of woody trees, provision of habitat, food and spawning grounds for fin-fish and shellfish, provision of habitat for birds and other valuable fauna; protection of coastlines and accretion of sediment to form new land.
- Among the states and Union Territories, **West Bengal has the highest percentage of area under total Mangrove cover** followed by Gujarat and Andaman and Nicobar Islands.
- The **India State of Forest Report** gives the data about mangroves and their conditions in the country.

---

**India: Transforming to a Net-Zero Emissions Energy System**

**Why In News**
- Recently, The Energy and Resources Institute (TERI) and Shell have released a report titled “India: Transforming to a Net-Zero Emissions Energy System”.
  - It illustrates a pathway to steer the domestic energy system towards net-zero emissions by 2050, while achieving India’s sustainable economic development ambitions.

**Key Points**
- **Possible yet Challenging**: India needs a suitable policy and innovation-driven context to deploy clean energy technologies on a massive scale.
- **Increase Renewables**: The share of renewables in the power mix needs to **increase to 90% for India to meet its net-zero goal**. This is around 11% in 2019-2020.
- **Coal-fired Power Plants**: India must phase out its coal-fired power plants and remove it altogether by 2050.
- **Technology Access**: The availability, or absence, of Carbon Capture and Storage (CCS) would define the shape of India’s energy systems. If CCS technology were commercially unviable:
  - Biofuels would have to account for 98% of India’s oil, compared to a negligible share currently.
  - Over two-thirds of India’s industrial and transport energy use would have to be electrified, compared to less than 20% share of electricity in industrial energy use and negligible share in transport energy use as of now.

**Suggestion by TERI:**
Focus on Energy Efficiency:
- Will need energy efficient buildings, lighting, appliances and industrial practices to meet the net-zero goal.

Use of Biofuels:
- Can help reduce emissions from light commercial vehicles, tractors in agriculture.
- In aviation, the only practical solution for reducing emissions is greater use of biofuels, until hydrogen technology gains scale.

Carbon Sequestration:
- India will still be left with emissions of 1.3 billion tons by 2050. It will have to rely on natural and man-made carbon sinks to soak up those emissions.
- Trees can capture 0.9 billion tons, the country will need carbon capture technologies to sequester the rest.

Carbon Pricing:
- India, which already taxes coal and petroleum fuels, should consider putting a tax on emissions to drive change.

Deploying lower-carbon Energy:
- There are four main types of low-carbon energy: wind, solar, hydro or nuclear power. The first three are renewable, which means these are good for the environment — as natural resources are used (such as wind or sun) to produce electricity.
- Deploying lower carbon energy would help address both domestic and international climate challenges while simultaneously improving the economic well-being of India’s citizens.

Net-Zero Emissions

About:
- ‘Net zero emissions’ refers to achieving an overall balance between greenhouse gas emissions produced and greenhouse gas emissions taken out of the atmosphere.

First, human-caused emissions (like those from fossil-fueled vehicles and factories) should be reduced as close to zero as possible. Second, any remaining GHGs should be balanced with an equivalent amount of carbon removal, for example by restoring forests.

Time-Frame:
- The time frame for reaching net-zero emissions differs significantly if one is referring to CO₂ alone, or referring to all major GHGs (including methane, nitrous oxide, and HFCs).
- For non-CO₂ emissions, the net-zero date is later because some of these emissions — such as methane from agricultural sources — are somewhat more difficult to phase out.
- In scenarios that limit warming to 1.5 degrees C, carbon dioxide (CO₂) reaches net-zero on average by 2050. Total GHG emissions reach net-zero between 2063 and 2068.

Global Scenario:
- As of June 2020, twenty countries and regions have adopted net-zero targets. This list only includes countries that adopted a net-zero target in law or another policy document.
- The Kingdom of Bhutan is already carbon-negative, i.e. absorbs more CO₂ than it emits.

Indian Scenario:
- Emissions: India’s per capita CO₂ emissions – at 1.8 tonnes per person in 2015 – are around a ninth of those in the USA and around a third of the global average of 4.8 tonnes per person.
- However, overall, India is now the planet’s third-largest emitter of CO₂, behind China and the USA.
- Debate around Commitment: There is global pressure on India to commit net-zero emissions by 2050.
- On one hand, few argue that India should pledge to reduce its “net” emissions (emissions minus uptake of emissions) to zero by 2050,
backed by a climate law. This will make India “hypercompetitive”, attract investment and create jobs. For example, more ambitious policies to promote electric vehicles along with cleaner electricity and hydrogen electrolysis can create jobs in the auto manufacturing industry and in the electricity and construction sectors.

- While, on the other hand, there is a long-standing principle of “common but differentiated responsibility” that requires richer countries to lead and argue against any pledge that risks prematurely limiting Indian energy use for development.

- **Sectors that are the largest emitters:**
  - Energy > Industry > Forestry > Transport > Agriculture > Building.

### The Energy and Resources Institute (TERI)

- TERI is a non-profit research institution in New Delhi that conducts research work in the fields of energy, environment and sustainable development.
- Established in 1974 as Tata Energy Research Institute and was renamed The Energy and Resources Institute in 2003.
- It aims to focus on formulating local and national level strategies for shaping global solutions to critical issues.
- It conducts research work in the fields of energy, environment and sustainable development.
- Its key focus lies in promoting clean energy, water management, pollution management, sustainable agriculture and climate resilience.

### Climate Finance

**Why in News**

The Finance Minister of India urged the advanced economies to scale up their commitments to climate finance and transfer of technologies - which are important for achieving climate-related commitments and goals.

- The Minister was addressing the International Conference on Disaster Resilient Infrastructure (ICDRI).

**Key Points**

- **Climate Finance (Meaning):**
  - Climate finance refers to local, national or transnational financing—drawn from public, private and alternative sources of financing.
  - It seeks to support mitigation and adaptation actions that will address climate change.
  - The UNFCCC, the Kyoto Protocol and the Paris Agreement call for financial assistance from countries with more financial resources to those that are less endowed and more vulnerable.
  - It is in accordance with the principle of “common but differentiated responsibility and respective capabilities”.
  - Climate finance is critical to tackle the issues posed by climate change and achieve the goal of limiting the rise in earth’s average temperature to below 2 degree Celsius over pre-industrial levels, something the [2018 IPCC report](#) has predicted.

- **Commitment of Advanced Economies:**
  - Through the [Cancun Agreements in 2010](#) developed countries committed to a goal of mobilizing jointly USD 100 billion per year by 2020 to address the needs of developing countries.
  - The Green Climate Fund (GCF) was established in the Cancun Agreement and in 2011, it was designated as an operating entity of the financial mechanism.
  - Under the [Paris Agreement in 2015](#), developed countries confirmed this goal and agreed that prior to 2025, a new collective quantified goal from a floor of USD 100 billion per year shall be set.
  - The Paris Agreement reaffirms the obligations of developed countries, while for the first time also encourages voluntary contributions by other Parties.

- **Challenges:**
  - Almost 75% of the funds raised by the developed countries for climate finance are used domestically, despite developing countries bearing a significant burden of the emissions and loss of natural ecosystems as a result of the industrialisation-drive in the developed world.
  - The total pledges to GCF was only USD 10.3 billion till July 2019, which is highly inadequate considering the estimated cost for developing countries to implement their Nationally Determined Contributions (NDCs) is USD 4 trillion.
  - Most climate funds have flown into mitigation,
rather than adaptation (mitigation refers to devising new solutions and way of doing things, while adaptation refers to managing the current issues).

- Climate finance has mostly concentrated on renewable energy, green buildings and urban transport, because it is easier to estimate their cash-flow cycles. Other sectors which hold implications of equal magnitude to our natural and social ecosystems, like agriculture, degradation of land, water, etc. have seen a muted interest.

**Climate Financing in India:**
- The largest source of climate financing in India is public funding, which is routed through budgetary allocation and several funds and schemes related to climate change established by the Government of India such as National Clean Energy Fund (NCEF) and National Adaptation Fund (NAF).
- The Government of India also provides funding through eight missions established under the National Action Plan for Climate Change.
- It has established a Climate Change Finance Unit (CCFU) in the Ministry of Finance, which is the nodal agency for all climate change financing matters.
  - However, public funding in India is inadequate and misused. For example, NCEF funds have been used to meet budgetary shortfalls in the Ministry of New and Renewable Energy (MoNRE).
  - Additionally, there is no assessment of climate relevance of publicly funded projects in India, making it difficult to evaluate financial allocation towards climate action.

### Coalition for Disaster Resilient Infrastructure

**Why in News**
Recently, the Prime Minister addressed the opening ceremony of International Conference on Disaster Resilient Infrastructure (ICDRI) through video conference.

- **ICDRI is the annual international conference of the Coalition for Disaster Resilient Infrastructure (CDRI)** in partnership with member countries, organizations and institutions to strengthen the global discourse on disaster and climate resilient infrastructure.

**Key Points**

- **About:**
  - The Coalition for Disaster Resilient Infrastructure (CDRI) is a multi-stakeholder global partnership of national governments, UN agencies and programmes, multilateral development banks and financing mechanisms, the private sector, and knowledge institutions.
  - The Prime Minister of India launched CDRI during his speech at the UN Climate Action Summit on 23rd September 2019.
  - It aims to promote the resilience of new and existing infrastructure systems to climate and disaster risks in support of sustainable development.
  - **Members:** 22 countries and 7 organisations.
  - **Thematic Areas:** Governance and Policy, Risk Identification and Estimation, Standards and Certification, Capacity building, Innovation & Emerging Technology, Recovery and Reconstruction, Finance and Community based approaches.
  - The CDRI Secretariat is based in New Delhi, India.

- **Need:**
  - The Sendai Framework for Disaster Risk Reduction (SFDRR) highlights the role of improved disaster resilience of infrastructure as a cornerstone for sustainable development.
  - The SFDRR includes four specific targets related to loss reduction:
    1. Reduce global disaster mortality;
    2. Reduce the number of affected people;
    3. Reduce direct disaster economic loss; and
    4. Reduce disaster damage to critical infrastructure.
  - Target (4) on infrastructure is an important prerequisite to achieving the other loss reduction targets set out in the framework.
  - Between 2016 and 2040, the global annual infrastructure investment needs are estimated at USD 3.7 trillion per year. Thus, there is a clear case for ensuring that all future infrastructure systems are resilient in the face of disasters in order to protect our investments.

- **Significance for India:**
  - Provide a platform for India to emerge as a global leader on climate Action and Disaster Resilience.

Note:
CDRI boosts India’s soft power, but more importantly it has wider connotation than just economics, as synergy between disaster risk reduction, Sustainable Development Goals (SDGs) and Climate Accord provides for sustainable and inclusive growth.

- Complement the International Solar Alliance (ISA).

- Facilitate India’s support to resilient infrastructure in Africa, Asia, etc.
- Provide access to knowledge, technology and capacity development for infra developers.
- Create opportunities for Indian infrastructure & technology firms to expand services abroad.
**Dr. Ram Manohar Lohia**

**Why in News**

The Prime Minister of India paid tribute to Dr. Ram Manohar Lohia on his birth anniversary (23rd March).

**Key Points**

- **Birth:** 23rd March, 1910 in Akbarpur, Uttar Pradesh.
- **Brief Profile:**
  - Indian politician and activist who was a prominent figure in socialist politics and in the movement towards Indian independence.
  - Much of his career was devoted to combating injustice through the development of a distinctly Indian version of socialism.
  - Socialism refers to a set of political ideas that emerged as a response to the inequalities present in, and reproduced by, the industrial capitalist economy.
- **Lohia’s Idea of Socialism:**
  - Lohia identified five kinds of inequalities that need to be fought against simultaneously:
    - Inequality between man and woman,
    - Inequality based on skin colour,
    - Caste-based inequality,
    - Colonial rule of some countries over others, and
    - Economic inequality.
  - For him struggle against these five inequalities constituted five revolutions. He added two more revolutions to this list:
    - Revolution for civil liberties against unjust encroachments on private life and
    - Revolution for non-violence, for renunciation of weapons in favour of Satyagraha.
  - These were the seven revolutions or Sapta Kranti which for Lohia was the ideal of socialism.
- **Education:**
  - Bachelor’s degree (1929) from the University of Calcutta and a doctorate (1932) from the University of Berlin, where he studied economics and politics.
- **Pre-Independence Role:**
  - In 1934, he became actively involved in the Congress Socialist Party (CSP), founded that year as a left-wing group within the Indian National Congress.
  - A vehement opponent of Indian participation on the side of Great Britain in World War II (1939-45), he was arrested for anti-British remarks in 1939 and again in 1940.
  - With the emergence in 1942 of the Quit India movement—a campaign initiated by Mahatma Gandhi to urge the withdrawal of British authorities from India—Lohia and other CSP leaders (such as Jaya Prakash Narayan) mobilized support from the underground. For such resistance activities, he was jailed again in 1944–46.
- **Post-Independence Role:**
  - Lohia and other CSP members left the Congress in 1948.
  - He became a member of the Praja Socialist Party upon its formation in 1952 and served as general secretary for a brief period, but internal conflicts led to his resignation in 1955.
  - He established a new Socialist Party (1955), for which he became chairman as well as the editor of its journal, Mankind.
He advocated for various socio-political reforms in his capacity as party leader, including the abolition of the caste system, stronger protection of civil liberties, etc.

In 1963, Lohia was elected to the Lok Sabha, where he was noted for his sharp criticism of government policies.

Some of his works include: ‘Wheel of History’, ‘Marx, Gandhi and Socialism’, ‘Guilty Men of India’s Partition’, etc.

Death: 12th October, 1967.

Anangpal II: Tomar Dynasty

Why in News
Recently, a seminar highlighted the legacy of the long-forgotten Tomar king - Anangpal II.

Key Points

About Anangpal II:
- Anangpal II, popularly known as Anangpal Tomar, belonged to the Tomar dynasty.
- He was the founder of Dhillika Puri, which eventually became Delhi.
- Evidence about the early history of Delhi is inscribed on the iron pillar of Masjid Quwaatul Islam, adjacent to Qutub Minar.
- Multiple inscriptions and coins suggest Anangpal Tomar was the ruler of present-day Delhi and Haryana in between the 8th-12th centuries.
- He had built the city from ruins and under his supervision, Anang Tal Baoli and Lal Kot were constructed.
- Anangpal Tomar II was succeeded by his grandson Prithviraj Chauhan.
- Delhi Sultanate was established in 1192 after Prithviraj Chauhan’s defeat in the Battle of Tarain (present-day Haryana) by the Ghurid forces.

About Tomar Dynasty:
- Tomara dynasty is one of the minor early medieval ruling houses of northern India.
- Puranic evidence (writings of the Puranas) gives its early location in the Himalayan region. According to bardic tradition, the dynasty was one of the 36 Rajput tribes.

General Lachit Borphukan of Ahom Kingdom

Why in News
Recently, the Prime Minister called 17th century Ahom general Lachit Borphukan a symbol of India’s “Atma Nirbhar military might”.

Key Points

Lachit Borphukan:
- Born on 24th November, 1622, Borphukan was known for his leadership in the Battle of Saraighat, 1671 in which an attempt by Mughal forces to capture Assam was thwarted.
- He was the inspiration behind strengthening India’s naval force and revitalising inland water transport and creating infrastructure associated with it due to his great naval strategies.
- The Lachit Borphukan gold medal is awarded to the best cadet from the National Defence Academy.
- The medal was instituted in 1999 to inspire defence personnel to emulate Borphukan’s heroism and sacrifices.
- He died on 25th April, 1672.

Ahom Kingdom:
- Founder:
  - Chaolung Sukapha was a 13th century ruler who founded the Ahom kingdom that ruled Assam for six centuries. The Ahoms ruled the land till the province was annexed to British India in 1826 with the signing of the Treaty of Yandaboo.
- Political Setup:
Ahoms created a new state by suppressing the older political system of the bhuiyans (landlords).

- The Ahom state depended upon forced labour. Those forced to work for the state were called paiks.

**Society:**
- Ahom society was divided into clans or khels. A khel often controlled several villages.
- Ahoms worshipped their own tribal gods, yet they accepted the Hindu religion and the Assamese language.
  - However, the Ahom kings did not completely give up their traditional beliefs after adopting Hinduism.
- Intermarriage with local also increased assimilation processes of Ahoms in Assamese culture.

**Art and Culture:**
- Poets and scholars were given land grants and theatre was encouraged.
- Important works of Sanskrit were translated into the local language.
- Historical works, known as buranjis, were also written, first in the Ahom language and then in Assamese.

**Military Strategy:**
- The Ahom king was the supreme commander of the state as well as the Military. The Ahom king himself led the state forces in the time of wars. The Paiks were the main army of the state.
  - There were two types of Paiks i.e. serving and nonserving. The non-serving Paiks constituted a standing militia which could be mobilized at a short notice by the kheldar (an expert military organizer).
- The full contingent of the Ahom Army consisted of infantry, navy, artillery, elephantry, cavalry and spies. The main war weapons consisted of bows and arrows, swords, Javelins discus, guns, match-locks and cannons.
- The Ahoms sent spies to the enemy's camp to study the strength and the war strategies of the enemies before leading an expedition.
- The Ahom soldiers were experts in guerilla fighting. Sometimes they allowed the enemies to enter the country, then cut off their communications and attack them in front and rear.

**Few important forts:** Chamdhara, Saraighat, Simlagarh, Kaliabar, Kajali and Pandu.
- They also learnt the technique of constructing boatbridges in the Brahmaputra.
- Above all, the mutual understanding among the civil and military wings, unity among the nobles always worked as strong weapons of the Ahoms.

**Battle of Saraighat**
- The battle of Saraighat was fought on the banks of the Brahmaputra in Guwahati in 1671.
- It is considered as one of the greatest naval battles on a river which resulted in the victory of Ahoms over the Mughals.

**Maharaja Chhatrasal**

**Why in News**
- The Maharaja Chhatrasal Convention Centre has been inaugurated at Khajuraho, Madhya Pradesh.
- The Convention Centre, named after the legendary Bundelkhand King Maharaja Chhatrasal, was built under the Swadesh Darshan scheme of the Ministry of Tourism.

**Khajuraho**
- It is one of the nineteen identified iconic destinations in the country.
  - The Ministry of Tourism has framed ‘Development of Iconic Tourist Destinations Scheme’, a Central Sector Scheme for development of nineteen identified iconic destinations in the country following a holistic approach.
The Khajuraho Group of Monuments is listed as a UNESCO world heritage site.
- The temples are famous for their nagara-style architectural symbolism and their erotic sculptures.
- Most Khajuraho temples were built between 885 AD and 1050 AD by the Chandela dynasty.

Swadesh Darshan Scheme
- Swadesh Darshan, a Central Sector Scheme, was launched in 2014-15 for integrated development of theme-based tourist circuits in the country.
- Currently, there are 15 theme-based circuits - Buddhist, Coastal, Desert, Eco, Heritage, Himalayan, Krishna, North-east, Ramayana, Rural, Spiritual, Sufi, Tirthankara, Tribal and Wildlife.
- Theme-based tourist circuits are developed on the principles of high tourist value, competitiveness and sustainability in an integrated manner to enrich tourist experience and enhance employment opportunities.
- Under the scheme, the Ministry of Tourism provides Central Financial Assistance (CFA) to State Governments/Union Territory Administrations for infrastructure development of circuits.
- This scheme is envisioned to synergise with other schemes like Swachh Bharat Abhiyan, Skill India, Make in India etc. with the idea of positioning the tourism sector as a major engine for job creation, driving force for economic growth and building synergy with various sectors to enable tourism to realise its potential.

Key Points
- Brief Profile:
  - Birth: Born on 4th May 1649, to Champat Rai and Lal Kunwar, into the Bundela Rajput clan.
  - Medieval Indian warrior, fought against the Mughal Empire, and established his own kingdom in Bundelkhand.
  - Descendant of Rudra Pratap Singh of Orchha.
  - Ancestors were vassals of the Mughal emperor.
  - Death: 20th December, 1731.
- Power Struggle Against the Mughal:
  - He started his struggle in 1671, and first captured Naugaon region of Chhatarpur district.
  - He fought for 50 years against Mughals and captured a large part of Bundelkhand with his seat of power at Panna.
- Relation with Baji Rao I:
  - Baji Rao I helped Chhatrasal against the Mughals. He sent military aid against the Mughal force led by Muhammad Khan Bangash in 1728.
  - The Maratha Peshwa Baji Rao I’s second wife Mastani was Chhatrasal’s daughter.
  - Before his death, Chhatrasal transferred Mahoba and the surrounding area to Baji Rao I in return for his assistance against the Mughals.
- Patron of Literature:
  - His court housed several noted poets. His eulogies written by Kavi Bhushan, Lal Kavi, Bakhshi Hansaraj and other court poets helped him gain lasting fame.
- Religious View:
  - Disciple of Mahamati Prannathji.
  - Swami Prannathji also guided him in political, social, and economic matters.
  - Swami Prannathji told Chhatrasal regarding Diamond mines of Panna and thus helped him in strengthening his financial position.
- Legacy:
  - The Chhatarpur town and its district in Madhya Pradesh are named after Chhatrasal.
  - Maharaja Chhatrasal Museum in Madhya Pradesh and the Chhatrasal Stadium in Delhi are also named after the Maharaja Chhatrasal.

Shaheed Diwas

Why in News
- Prime Minister of India paid tributes to Bhagat Singh, Sukhdev, Rajguru on Shaheed Diwas (23rd March).
- The Day is also known as Martyrs’ Day or Sarvodaya Day.
- This Day should not be confused with the Martyrs’ Day observed on 30th January, the day Mahatma Gandhi was assassinated.

Key Points
- About:
Every year on 23rd March, Shaheed Diwas is observed.

It was on this day that Bhagat Singh, Sukhdev and Rajguru were executed by the British government in 1931.

- They were hanged to death for assassinating John Saunders, a British police officer in 1928. They had mistook him for British police superintendent James Scott.
  - It was Scott who had ordered lathi charge, which eventually led to the death of Lala Lajpat Rai.
- While Singh, who had publicly announced avenging Rai’s death, went into hiding for many months after this shootout, he resurfaced along with an associate Batukeshwar Dutt, and the two, in April 1929, set off two explosive devices inside the Central Legislative Assembly in Delhi.
  - Allowed themselves to be arrested, while shouting the famous slogan: "Inquilab Zindabad", or “Long live the revolution”.
- Their lives inspired countless youth and in their death, they set an example. They carved out their own path for independence, where individual heroism and their aggressive need to do something for the nation stood out, departing from the path followed by the Congress leaders then.

Bhagat Singh:
- Born as Bhaganwala on the 26th September, 1907, Bhagat Singh grew up in a petty-bourgeois family of Sandhu Jats settled in the Jullundur Doab district of the Punjab.
  - He belonged to a generation that was to intervene between two decisive phases of the Indian national movement - the phase of the ‘Extremism’ of Lal-Bal-Pal and the Gandhian phase of nonviolent mass action.
- In 1923, Bhagat Singh joined the National College, Lahore which was founded and managed by Lala Lajpat Rai and Bhai Parmanand.
  - The College was set up as an alternative to the institutions run by the Government, bringing to the field of education the idea of Swadeshi.
- In 1924 in Kanpur, he became a member of the Hindustan Republican Association, started by Sachindranath Sanyal a year earlier. The main organiser of the Association was Chandra Shekhar Azad and Bhagat Singh became very close to him.
  - It was as a member of the HRA that Bhagat Singh began to take seriously the philosophy of the Bomb.
  - Armed revolution was understood to be the only weapon with which to fight British imperialism.
- In 1925, Bhagat Singh returned to Lahore and within the next year he and his colleagues started a militant youth organisation called the Naujawan Bharat Sabha.
- In April 1926, Bhagat Singh established contact with Sohan Singh Josh and through him the ‘Workers and Peasants Party’ which brought out the monthly magazine Kirti in Punjabi.
  - For the next year Bhagat Singh worked with Josh and joined the editorial board of Kirti.
- In 1927, he was first arrested on charges of association with the Kakori Case, accused for an article written under the pseudonym Vidrohi (Rebel). He was also accused of being responsible for a bomb explosion at Lahore during the Dussehra fair.
- In 1928, Bhagat Singh changed the name of Hindustan Republican Association to Hindustan Socialist Republic Association (HSRA). In 1930, when Azad was shot, the HSRA collapsed.
  - Naujawan Bharat Sabha replaced HSRA in Punjab.
- His time in the prison was spent protesting, seeking better living conditions for inmates. During this time, he gained the sympathy of the public, especially when he joined fellow defendant Jatin Das in a hunger strike.
  - The strike ended with Das’ death from starvation in September 1929. Two years later, Singh was convicted and hanged at the age of 23.
**Art & Culture**

**Highlight s**
- Haridwar Kumbh Mela
- Shigmotsav: Goa

**Haridwar Kumbh Mela**

**Why in News**

The Centre has written to the Uttarakhand government about the need for stringent measures to control the spread of Covid-19 during the ongoing Kumbh Mela in the state (at Haridwar).

**Key Points**

- Kumbh Mela comes under **UNESCO’s Representative List of Intangible Cultural Heritage of Humanity**.
  - Kumbh Mela is the largest peaceful congregation of pilgrims on earth, during which participants bathe or take a dip in a sacred river.
- It takes place on the banks of the Godavari river in Nashik, the Shipra river in Ujjain, the Ganges in Haridwar, and the confluence of the Ganges, Yamuna, and the mythical Saraswati river in Prayag. The confluence is referred to as the ‘Sangam’.
  - As it is held in four different cities in India, it involves different social and cultural activities, making this a culturally diverse festival.
- While technically, it is to be held in each of the aforementioned locations once every 12 years, sometimes, the mela can happen only a year apart at the sites.
- It should also be known that in between, around the sixth year, the Ardh Kumbh Mela (also known as the half mela) is held. In addition to that, in Allahabad, every year the Maagh Mela is celebrated in the month of Maagh (mid-January to February, as per the Hindu calendar) at the Sangam.
  - This Maagh Mela is also referred to as the Ardh Kumbh Mela and Kumbh Mela when it happens in the sixth and twelfth years, respectively.
- Kumbh Mela in Haridwar is being held after 11 years — not the usual 12 — because of specific auspicious dates. In fact, this is the first time in 80 years that such a phenomenon has happened.
  - The event encapsulates the science of astronomy, astrology, spirituality, ritualistic traditions, and social and cultural customs and practices, making it extremely rich in knowledge.
  - The teacher-student relationship of the sadhus in the ashrams and akhadas remains the most important method of imparting and safeguarding knowledge and skills relating to Kumbh Mela.

**UNESCO List of Intangible Cultural Heritage of Humanity**

- This coveted list is made up of those intangible heritage elements that help demonstrate diversity of cultural heritage and raise awareness about its importance.
- The list was established in 2008 when the Convention for Safeguarding of the Intangible Cultural Heritage came into effect.
- **Intangible Cultural Heritage of India, recognized by UNESCO:**
  
| 2. | Bandita, the traditional performance of the Kanniyakumari Chola era, 2008 |
| 3. | Kathakali, the traditional performing arts of Kerala, 2008 |
| 4. | Karnam, traditional festival and ritual theatre of the Garhwal Himalayas, 2009 |
| 5. | Mushatto, the technique of dance drama of Konkan, 2009 |
| 6. | Kabaddi, folk songs and dances of Rajasthali, 2010 |
| 7. | Chhau dance, 2010 |

**Shigmotsav: Goa**

**Why in News**

The **Goa government** has limited the **Shigmotsav (Shigmo festivities)** parades to three locations only (Panaji, Ponda and Mapusa), owing to rising cases of **Covid-19** in the state.
Key Points

About:
- Shigmo is the celebration of a ‘rich, golden harvest of paddy’ by the tribal communities of Goa.
- Agricultural communities including the Kunbis, Gawdas and Velips celebrate the festival that also marks the onset of spring.

Two Variants of the Festival:
- Dhakto Shigmo: It is celebrated by the rural population, farmers and the labour class.
- Vhadlo Shigmo: It is of greater importance and is celebrated by everyone.

Celebrations:
- Time:
  - Shigmo celebrations last over a fortnight in the months of Phalgun-Chaitra months of the Hindu calendar that correspond with March-April every year.
- Invocation of Deities:
  - The festival begins with ‘Naman’ that is the invocation of the local folk deities on the village ‘maand’ or the village stage to the beats of percussion instruments like the Ghumat, Dhol, Mhadle and Tashe by the male folk.
- It is called the ‘romta mell’ that moves from one village to another.

Dances:
- Folk dances like Ghode Modni (a dance of equestrian warriors), Gophia and Phugadi.

Shigmo Street Parade:
- Shigmo street parade floats as the highlight. It is held as an annual affair in the state capital, Panjim and other major cities like Margao, Mapusa, Vasco, and Ponda.
- These colour-parties usually see people dressed in vibrant clothing performing traditional folk dances to depict the historical legacy of the Maratha War that backs this festival.
- The float parades have, over the years, been a draw for tourists both domestic and international.

Other Names:
- Shigmo is celebrated all over India but in different names:
  - North India - Holi.
  - Assam and Bengal - Dolyatra.
  - South India - Kamadahan.
  - Maharashtra - Shimga.
Eastern Rajasthan Canal Project

Why in News
The Chief Minister of Rajasthan has demanded the national project status for the Eastern Rajasthan Canal Project (ERCP).

- The main advantage of a project which has received national project status is that 90% of the funding for the project will be given by the central government.
- The estimated cost of the ERCP is around Rs. 40,000 crore.

Key Points
- Background:
  - According to the state Water Resources Department, Rajasthan, the largest state of India with a geographical area of 342.52 lakh hectares which amount to 10.4% of the entire country, holds only 1.16% of India’s surface water and 1.72% of groundwater.
  - Among the state’s water bodies, only the Chambal river basin has surplus water but this water cannot be tapped directly because the area around the Kota barrage is designated as a crocodile sanctuary.
  - Through the help of diversion structures, interbasin water transfers, linking channels and construction of pumping main feeder channels, the ERCP aims to create a network of water channels which will cover 23.67% area of Rajasthan along with 41.13% population of the state.
- About the Eastern Rajasthan Canal Project:
  - It aims to harvest surplus water available during rainy season in rivers in Southern Rajasthan.
  - Such as Chambal and its tributaries, including Kunnu, Parvati, Kalisindh, and
  - Use this water in south-eastern districts of the state, where there is scarcity of water for drinking and irrigation.
  - ERCP is planned to meet drinking and industrial water needs of the southern and south eastern Rajasthan, for humans and Livestock till the year 2051.
  - It proposes to provide drinking water to 13 districts of Rajasthan and provide irrigation water for 2.8 lakh hectares of land through 26 different large and medium projects.
  - 13 districts: Jhalawar, Baran, Kota, Bundi, Sawai Madhopur, Ajmer, Tonk, Jaipur, Karauli, Alwar, Bharatpur, Dausa and Dholpur.

Benefits:
- A significant area of land will get irrigation facilities.
- It intends to improve the ground water table in the rural areas of the state.
- Positively influencing the socio-economic conditions of the people.
- It adds special emphasis on the Delhi Mumbai Industrial Corridor (DMIC) and envisages that sustainable water sources will enhance and help industries grow in these areas.
- Resulting in investment and revenue.

Chambal River
- It is one of the most pollution-free rivers of India.
- It originates at the Singar Chouri peak in the northern slopes of the Vindhyar mountains (Indore, Madhya Pradesh). From there, it flows in the North direction in Madhya Pradesh for a length of about 346 km and then follows a north-easterly direction for a length of 225 km through Rajasthan.
It enters U.P. and flows for about 32 km before joining the Yamuna River in Etawah District.

It is a rainfed river and its basin is bounded by the Vindhyan mountain ranges and the Aravallis. The Chambal and its tributaries drain the Malwa region of northwestern Madhya Pradesh.

The Hadauti plateau in Rajasthan occurs in the upper catchment of the Chambal River to the southeast of the Mewar Plains.

Tributaries: Banas, Kali Sindh, Sipra, Parbati, etc.

Main Power Projects/ Dam: Gandhi Sagar Dam, Rana Pratap Sagar Dam, Jawahar Sagar Dam, and Kota Barrage.

The National Chambal Sanctuary is located along river Chambal on the tri-junction of Rajasthan, Madhya Pradesh and Uttar Pradesh. It is known for critically endangered gharial, the red-crowned roof turtle, and the endangered Ganges river dolphin.

**Mullaperiyar Dam**

**Why in News**

Recently, the Supreme Court (SC) has ordered the Mullaperiyar Dam Supervisory Committee to issue directions on issues concerning the dam’s safety.

The SC constituted a permanent Supervisory Committee in 2014 to oversee all the issues concerning Mullaperiyar dam. The dam is a source of friction between Tamil Nadu and Kerala.

**Key Points**

- **Background:**
  - A petition was filed by a resident of Idukki district of Kerala to lower the water level of Mullaperiyar dam to 130 feet saying there is a danger of earthquakes and floods in the area as monsoon progresses in the State.
  - The petitioner contended that the Supervisory Committee had become “lethargical” about the safety inspection and survey of the dam.
    - It had delegated its duties to a sub-committee of local officials.
    - The instrumentation scheme, safety mechanism, etc, have not been finalised for the past six years.

- **Tamil Nadu’s Stand:**
  - Blamed Kerala for delaying the finalisation of the rule curve for the dam.
    - Rule curve in a dam decides the fluctuating storage levels in a reservoir. The gate opening schedule of a dam is based on the rule curve.
    - It is part of the “core safety” mechanism in a dam.
    - The rule curve level is fixed to avoid emergency opening of dam shutters in case of a flood-like situation. It helps in controlling the water level in the dam during peak monsoon.
  - Kerala has made consistent efforts to obstruct Tamil Nadu from operating the dam.
  - Kerala has made consistent efforts to obstruct Tamil Nadu from operating the dam.
  - Tamil Nadu is not able to access data which is in Kerala’s terrain. There is no road built, the power supply has not been restored although Tamil Nadu has paid for it.

- **Kerala’s Stand:**
  - Accused Tamil Nadu of adopting an “obsolete” gate operation schedule dating back to 1939.

- **SC’s Ruling:**
  - Tamil Nadu’s Chief Secretary shall be “personally responsible” and “appropriate action” will be taken on failure to give information on the rule curve for Mullaperiyar dam to the SC-appointed Supervisory Committee.
  - Directed the Supervisory Committee to issue directions or take steps to address the three core safety issues and submit a compliance report in four weeks.
    - Core Issues:
      - Monitoring and performance of the instrumentation of the dam.
      - Finalising the rule curve.
      - Fixing the gate operating schedule.
Reason:
- The three core issues are **directly concerned with the safety of the dam** and will have a cascading effect on persons residing in the nearby areas.

**Mullaperiyar Dam**
- The Mullaperiyar, a **123-year-old** dam, is located on the confluence of the Mullayar and Periyar rivers in Kerala’s Idukki district.
  - The dam stands at the height of **53.66 metres** and **365.85 metres** in length.
- It is **operated and maintained** by the Tamil Nadu for meeting the drinking water and irrigation requirements of five of its southern districts.
  - According to a **999-year lease agreement** made during the British rule the operational rights were handed over to Tamil Nadu.
- The dam intends to divert the waters of the west-flowing river Periyar eastward to the arid rain shadow regions of the Tamil Nadu.

**Periyar River**
- The Periyar River is the longest river in the state of Kerala with a length of **244 km**.
  - It is also known as ‘**Lifeline of Kerala**’ as it is one of the few perennial rivers in the state.
    - A **perennial river** is a channel that has continuous flow in parts of its stream bed all year round.
- Periyar River originates from Sivagiri hills of Western Ghats and flows through the Periyar National Park.
- The main tributaries of Periyar are Muthirapuzha, Mullayar, Cheruthoni, Perinjankutti.

---

**Ken-Betwa Link Project**

*Why in News*

Chief Ministers of **Madhya Pradesh** and **Uttar Pradesh** signed a memorandum of agreement to implement the Ken Betwa Link Project (KBLP), the first project of the National Perspective Plan for interlinking of rivers.
- The two states signed a tripartite agreement with the Centre on **World Water Day** (22nd March) to finally implement this ambitious project.

*Key Points*
- Ken Betwa Link Project (KBLP):
  - The Ken-Betwa Link Project (KBLP) is the River interlinking project that **aims to transfer surplus water from the Ken river in MP to Betwa in UP to irrigate the drought-prone Bundelkhand region**.
  - The region spread across the districts of two states mainly Jhansi, Banda, Lalitpur and Mahoba districts of UP and Tikamgarh, Panna and Chhatarpur districts of MP.
  - The project involves building a 77-metre tall and a 2-km wide Dhaudhan dam and a **230-km canal**.
  - Ken-Betwa is one of the **30 river interlinking projects** conceived across the country.
  - The project has been delayed due to political and environmental issues.

- Advantage of Interlinking of Rivers:
  - **Reducing Drought**: River linking will be a solution to recurring droughts in Bundelkhand region.
  - **Farmers’ Benefit**: It will curb the rate of farmers suicide and will ensure them stable livelihood by providing sustainable means of irrigation and reducing excessive dependence on groundwater.
  - **Electricity Production**: It will not only accelerate the water conservation by construction of a multipurpose dam but will also produce **103 MW of hydropower** and will supply drinking water to 62 lakh people.
  - **Rejuvenate Biodiversity**: Few are of the view that the introduction of dams inside the water scarce regions of panna tiger reserve (MP), will rejuvenate the forests of the reserve that in turn will pave the way for rich biodiversity in the region.

---
Issues:

- **Environmental**: Because of certain environmental and wildlife conservation concerns like passing of the project though critical tiger habitat of Panna tiger reserve, the project is stuck in for the approval from National Green Tribunal (NGT), and other higher authorities.

- **Economic**: There is a huge economic cost attached with the project implementation and maintenance, which has been rising due to delays in project implementation.

- **Social**: Reconstruction and rehabilitation caused due to displacement resulting from the implementation of the project will involve social cost as well.

Ken and Betwa Rivers

- Ken and Betwa rivers originate in MP and are the tributaries of Yamuna.
- Ken meets with Yamuna in Banda district of UP and with Betwa in Hamirpur district of UP.
- Rajghat, Paricha and Matatila dams are over Betwa river.
- Ken River passes through Panna tiger reserve.

National Perspective Plan for interlinking of rivers:

- The National River Linking Project (NRLP) formally known as the National Perspective Plan, envisages the transfer of water from water ‘surplus’ basins where there is flooding, to water ‘deficit’ basins where there is drought/scarcity, through inter-basin water transfer projects.
- Under the National Perspective Plan (NPP), the National Water Development Agency (NWDA), has identified 30 links (16 under the Peninsular Component and 14 under the Himalayan Component) for the preparation of feasibility reports (FRs).
- The NPP for transferring water from water-surplus basins to water-deficit basins was prepared in August 1980.

Suez Canal

Why in News

A large cargo ship named ‘Ever Given’ got stuck near the southern end of the Suez Canal due to a mishap caused by bad weather.

- This is causing a huge jam of vessels at either end of the vital international trade artery.

Key Points

- **About**:
  - The Suez Canal is an artificial sea-level waterway running north to south across the Isthmus of Suez in Egypt, to connect the Mediterranean Sea and the Red Sea.
  - The canal separates the African continent from Asia.
  - It provides the shortest maritime route between Europe and the lands lying around the Indian and western Pacific oceans.
  - It is one of the world’s most heavily used shipping lanes, carrying over 12% of world trade by volume.
    - It provides a crucial link for oil, natural gas and cargo being shipped from East to West.
    - As per Suez Canal Authority (SCA) data, in 2020, nearly 19,000 ships, or an average of 51.5 ships per day, with a net tonnage of 1.17 billion tonnes passed through the canal.
  - The canal is a major source of income for Egypt’s economy, with the African country earning USD 5.61 billion in revenues from it last year.
    - In 2015, Egypt announced plans to further expand the Suez Canal, aiming to reduce waiting times and double the number of ships that can use the canal daily by 2023.

- **History**:
  - The Suez Canal is actually the first canal that directly links the Mediterranean Sea to the Red Sea. It was opened for navigation in November 1869.
The 150-year-old canal was controlled by British and French interests in its initial years, but was nationalised in 1956 by Egypt.

- **Suez Crisis**, international crisis in the Middle East, precipitated in July 1956, when the Egyptian president, Gamal Abdel Nasser, nationalized the Suez Canal. The canal had been owned by the Suez Canal Company, which was controlled by French and British interests.

- The Canal was closed five times; the last time was the most serious one since it lasted for 8 years. The Canal was then reopened for navigation in June 1975.

---

**Cape of Good Hope**

**Why in News**

Due to the recent blockage of the **Suez Canal**, the option of **re-routing ships via the Cape of Good Hope** was explored.

**Key Points**

- **About:**
  - The Cape of Good Hope is a rocky headland on the Atlantic coast of the Cape Peninsula in South Africa.

- **A headland is a narrow piece of land which sticks out from the coast into the sea.**

- **The Cape of Good Hope route joins Eastern Asia and Europe to southern parts of Africa.**

- **The opening of the Suez Canal in 1869 provided a much shorter route from the Mediterranean Sea to the Indian Ocean, making the long trip around Africa inefficient.**

- **The Cape of Good Hope route is 8900 km longer than the Suez canal route and can take additional two weeks.**

- A common misconception is that the Cape of Good Hope is the southern tip of Africa.

- Contemporary geographic knowledge instead states the **southernmost point of Africa is Cape Agulhas about 150 km to the east-southeast.**

- The warm-water Agulhas current (Indian Ocean) meets the cold-water Benguela current (Atlantic ocean) between Cape Agulhas and Cape Point (about 1.2 km east of the Cape of Good Hope).

**History:**

- The Cape was originally named the **Cape of Storms in 1488** by the Portuguese explorer Bartolomeu Dias.

- It was later renamed to Cape Good Hope to attract more people to the Cape Sea Route that passed the southern coast of Africa.

- The Cape eventually became a significant port and waypoint for sailors traveling from Europe to Asia.
Reservation Quota Limit of States

Why in News

Tamil Nadu told a Constitution Bench of the Supreme Court that the percentage of reservation should be left to the “subjective satisfaction” of individual States.

- Subjective satisfaction refers to the State’s discretion to identify its socially and educationally backward classes and fix the percentage of reservation for them in State government jobs and educational admissions.

- A nine-judge bench in the Indra Sawhney case (famously known as the Mandal Commission case) imposed the ceiling of 50% on total reservation.

Key Points

- Indra Sawhney & Others vs Union of India, 1992:
  - The Supreme Court while upholding the 27% quota for backward classes, struck down the government notification reserving 10% government jobs for economically backward classes among the higher castes.
  - SC in the same case also upheld the principle that the combined reservation beneficiaries should not exceed 50% of India’s population.
  - The concept of ‘creamy layer’ also gained currency through this judgment and provision that reservation for backward classes should be confined to initial appointments only and not extend to promotions.

- Breach of the Limit by the States:
  - Notwithstanding the judgement passed by the Supreme Court, since Indira Sawhney judgment 1992, many states have passed laws breaching the limit of 50% such as Maharashtra, Telangana, Tamil Nadu, Haryana, Chhattisgarh, Rajasthan and Madhya Pradesh.
  - Tamil Nadu Reservation Act, 1993 provides 69% reservation in State government jobs and educational institutions.
  - In January 2000, the Governor of the erstwhile state of Andhra Pradesh declared 100% reservation to Scheduled Tribes (ST) candidates in posts of school teachers in Scheduled Areas.
    - However, it was ruled as unconstitutional by the apex court.
  - The Maharashtra State Reservation for Socially and Educationally Backward Classes (SEBC) Act of 2018, which provides 12% to 13% quota benefits for the Maratha community, takes the reservation percentage in the State across the 50% mark, was enacted.

- States’ Concern:
  - Tamil Nadu and Karnataka agreed with Maharashtra that the 50% ceiling limit on reservation introduced in the Indira Sawhney judgment was not “cast in stone” (Permanently fixed or firmly established). The Indira Sawhney judgment required a re-look. The ground situation had changed a lot since that judgment in 1992.
  - Also, there is contention regarding the Constitution (One Hundred and Second Amendment) Act of 2018, which introduces the National Commission for Backward Classes, that it interferes with the authority of State Legislatures to provide benefit to the social and educationally backward communities (SEBCs) in their own jurisdiction.
However, in an affidavit, the Ministry of Social justice and Empowerment has said the power to identify SEBCs lies with Parliament only with reference to the central list and states can have a separate list of SEBCs for reservation.

Constitution and Reservation

- **77th Constitutional Amendment Act, 1995**: The Indra Sawhney verdict had held there would be reservation only in initial appointments and not promotions.
  - However, addition of the article 16(4A) to the Constitution, empowered the state to make provisions for reservation in matters of promotion to SC/ST employees, if the state feels they are not adequately represented.

- **81st Constitutional Amendment Act, 2000**: It introduced Article 16(4B), which says unfilled SC/ST quota of a particular year, when carried forward to the next year, will be treated separately and not clubbed with the regular vacancies of that year.

- **85th Constitutional Amendment Act, 2001**: It provided for the reservation in promotion can be applied with ‘consequential seniority’ for the government servants belonging to the SCs and STs with retrospective effect from June 1995.

- **103rd amendment to the Constitution (2019): 10% reservation for EWS (Economically Weaker Section).**

- **Article 335**: It says that the claims of SCs and STs shall be taken into consideration constitutively with the maintenance of efficiency of administration, in the making of appointments to services and posts in connection with the affairs of the Union or of a State.

### Key Points

- **Background:**
  - A writ petition was filed in 2020 by a student opposing her exclusion from the NCC unit at the college on the basis of her gender (Transgender).
  - The petition challenged Section 6 of the NCC Act, 1948 which only allows either ‘male’ or ‘female’ cadets.
  - Central government argued that transgender persons cannot be allowed into the NCC as there is no provision for the same.

- **High Court’s Order:**
  - The court took exception to the position and stressed that it goes contrary to Kerala’s Transgender Policy and other applicable statutes.
  - The provisions of the NCC Act, 1948 cannot preclude the operation of the Transgender Rights Act, 2019.
  - Observed that a transgender person is entitled to enroll in the NCC in accordance with her self-perceived gender equality.
  - Ordered the central government to amend Section 6 of the NCC Act 1948 within six months so that the law offers equal opportunities for everyone.

- **Kerala’s Transgender Policy:**
  - **About:**
    - Kerala was one of the first states in the country to formulate and implement a welfare policy for transgender persons in 2015.
    - The move followed the Supreme Court verdict in National Legal Services Authority v Union of India 2014 in which the right to equality and equal protection for transgender persons under articles 14, 15, 16 was upheld and the bracket of a ‘third gender’ allotted to transgender persons.
  - **Justice Board:**
    - A Transgender Justice Board, aimed to monitor and address concerns where necessary in the implementation of the policy, was formed.
  - **No Discrimination:**
    - The policy asked for all government offices and public functionaries to extend non-

---

**Amend the NCC Act: Kerala High Court**

**Why in News**

Recently, the Kerala High Court ordered the Central government to amend the National Cadet Corps Act (NCC Act) 1948 which excludes transgender persons from joining the National Cadet Corps (NCC).
discriminatory treatment to transgender and help provide them with easy access to education, health, transport and social security.

- **Social Benefits:**
  - Providing free legal aid to those fighting discrimination, recording statistics at the local police station level for crimes against transgenders, a 24×7 helpline and crisis management centre, a monthly pension scheme for destitutes and those above the age of 55 and establishing shelter homes were some of the policy promises.

- **Educational Programs:**
  - In 2018, the government decided to set aside two additional seats for all transgender applicants for courses in universities and arts and science colleges under it.
  - There is also a literacy aid programme for transgender under which a monthly scholarship of up to Rs. 1,250 and shelter home accommodation is provided.

### National Cadet Corps

- **The National Cadet Corps Act, 1948:**
  - **About:**
    - It is an Act to provide for the constitution of a National Cadet Corps.
    - It extends to the whole of India and applies to all persons enrolled or appointed under this Act, wherever they may be.
  - **Section 6:**
    - Any student of the male sex of any university may offer himself for enrolment as a cadet in the Senior Division, and any student of the male sex of any school may offer himself for enrolment as a cadet in the Junior Division if he is of the prescribed age or over.
    - Any student of the female sex of any university or school may offer herself for enrolment as a cadet in the Girls Division:
      - Provided that in the latter case she is of the prescribed age or over.
  - **About NCC:**
    - The NCC was formed in 1948 (on the recommendation of H. N. Kunzru Committee-1946), and has its roots to British era uniformed youth entities like University Corps or University Officer Training Corps.

### Stop TB Partnership Board

**Why in News**

Dr. Harsh Vardhan, Union Minister for Health and Family Welfare, has been appointed Chairman of the Stop TB Partnership Board.

- **Key Points**
  - **About the Stop TB Partnership Board:**
    - It was established in 2000 and is mandated to eliminate Tuberculosis as a public health problem.
    - The organization was conceived following the meeting of the First Session of the Ad Hoc Committee on the Tuberculosis Epidemic held in London in March 1998.
    - In its inaugural year itself, the Stop TB Partnership through the Amsterdam Declaration gave a call for collaborative action from ministerial delegations from 20 countries that bear the highest burden of TB.

---

- Currently, it has a strength of around 14 lakh cadets from Army, Navy and Air Force wings.
- The NCC falls under the purview of the Ministry of Defence and is headed by a Director General of three-star military rank.
- It enrolls cadets at high school and college level and also awards certificates on completion of various phases.
  - The NCC cadets receive basic military training at various levels and also have academic curriculum basics related to Armed forces and their functioning.
  - Various training camps, adventure activities and military training camps are an important aspect of NCC training.

**Significance:**

- NCC cadets have played an important role over the years in relief efforts during various emergency situations.
- During the ongoing pandemic, over 60,000 NCC cadets have been deployed for voluntary relief work in coordination with district and state authorities across the country.
In 2019, it launched the updated **Global Plan to End TB 2018-2022**.

The **Kochon Prize** is awarded annually by Stop TB Partnership to individuals and/or organizations that have made a significant contribution to combating TB.

- The **Kochon Prize**, which is endowed by the Kochon Foundation, a non-profit foundation registered in the Republic of Korea, consists of a USD 65,000 award.

- Its secretariat is based at **Geneva, Switzerland**.

**High TB Burden Countries:**

- In 2019, the **30 high TB burden countries** accounted for 87% of new TB cases.

- Eight countries account for two thirds of the total, with **India leading the count**, followed by Indonesia, China, the Philippines, Pakistan, Nigeria, Bangladesh and South Africa (Global Tuberculosis Report: WHO)

**Scenario in India:**

- With an estimated 2.64 million TB patients, India has the largest burden of TB globally in terms of absolute numbers.

- Recently, the **“Step Up for TB 2020”** report by the Stop TB Partnership and Médecins Sans Frontières/Doctors Without Borders (MSF) has highlighted India’s conservative approach regarding the new medicines for Drug Resistant TB, putting lives of patients including children in danger.

**Steps Taken by India:**

- India has committed to eliminating TB in the country by 2025.
  - Five years ahead of the global deadline of 2030.

- **National Strategy Plan for TB Elimination 2017-2025:**
  - The requirements for moving towards TB elimination in India have been arranged in four strategic areas of Detect, Treat, Prevent & Build.
  - There is also across all four areas, an overarching theme of the **Private Sector**. Another overarching theme is that of **Key Populations**.

- **TB Harega Desh Jeetega Campaign, Nikshay Poshan Yojana**, etc.

**Global Efforts:**

- The **End TB Strategy of WHO**.

---

**Medical Termination of Pregnancy (Amendment) Bill, 2020**

**Why in News**

Recently, the Rajya Sabha passed the **Medical Termination of Pregnancy (Amendment) Bill, 2020**. The Bill was passed in the Lok Sabha in March 2020.

- The Bill seeks to amend the **Medical Termination of Pregnancy Act, 1971**.

**Key Points**

- **Provisions:**
  - Termination due to Failure of Contraceptive Method or Device:
The “name and other particulars of a woman whose pregnancy has been terminated shall not be revealed”, except to a person authorised in any law that is currently in force.

Note:
- Before 1971, abortion was criminalized under Section 312 of the Indian Penal Code, 1860, describing it as intentionally ‘causing miscarriage’.

Benefits:
- Termination in Case of Anomaly:
  - A number of foetus abnormalities are detected after the 20th week, often turning a wanted pregnancy into an unwanted one.
- Helps Special Category Women:
  - The law will help the rape victims, ill and under-age women to terminate the unwanted pregnancy lawfully.
- Beneficial for Unmarried Women:
  - The Bill also applies to unmarried women and therefore, relaxes one of the regressive clauses of the 1971 Act, i.e., single women couldn’t cite contraceptive failure as a reason for seeking an abortion.
  - Allowing unmarried women to medically terminate pregnancies and a provision to protect the privacy of the person seeking an abortion will bestow reproductive rights to the women.

Challenges:
- Viability of the Foetus:
  - A key aspect of the legality governing abortions has always been the ‘viability’ of the foetus.
  - Viability implies the period from which a foetus is capable of living outside the womb.
  - As technology improves, with infrastructure up-gradation, and with skilful professionals driving medical care, this ‘viability’ naturally improves.
  - Currently, viability is usually placed at about seven months (28 weeks) but may occur earlier, even at 24 weeks.
  - Thus, late termination of pregnancy may get in conflict with the viability of the foetus.
- Preference for a Male Child:
  - The preference for a male child keeps sex determination centres in business in spite of
their illegal status. There are concerns that a more liberal abortion law can aggravate this state-of-affairs.

- **Change of Choice:**
  - The current Bill does not consider factors such as personal choice, a sudden change in circumstances (due to separation from or death of a partner), and domestic violence.

- **Medical Boards:**
  - The present healthcare budgetary allocation makes setting up a board across the country, both financially and practically impossible.
  - Access to the board by pregnant women in remote areas of the state is a matter of concern.
  - No time limit set to respond to the requests.
  - The board will subject women to multiple examinations before allowing her to terminate her pregnancy. This is a violation of right to privacy and right to live with dignity.

### Covid Increased Poverty: Pew Report

**Why in News**

Recently, a new research conducted by Pew Research Center has found that the coronavirus pandemic has pushed about 32 million Indians out of the middle class and increased poverty in the country.

- The report is based on an analysis of World Bank data.
- Pew Research Center is a nonpartisan fact tank that informs the public about the issues, attitudes and trends shaping the world.

**Key Points**

- **Indian Scenario:**
  - **Poverty Rate:**
    - The number of poor in India likely rose to 9.7% in 2020, up sharply from the January 2020 forecast of 4.3%.
  - **Increased Poverty:**
    - From 2011 to 2019, the number of poor in India was estimated to have reduced to 78 million from 340 million.
    - In 2020, the number increased by 75 million.
      - Poor: People with incomes of USD 2 or less a day.
      - Increase in India accounts for nearly 60% of the global increase in poverty.
      - Record increase in Mahatma Gandhi National Rural Employment Guarantee Scheme (MGN-REGS) participants as proof that the poor were struggling to find work.
  - **Reduced Middle Class:**
    - The middle class in India is estimated to have shrunk by 3.2 crore in 2020.
      - Middle Class: Includes people with incomes of approximately Rs. 700-1,500 or USD 10-20 per day.
    - The middle income group is likely to have decreased from almost 10 crore to just 6.6 crore.
  - **Shrunk Low Income Group:**
    - The vast majority of India’s population fall into the low income group.
    - This group shrank from 119.7 crore to 116.2 crore per day, with about 3.5 crore dropping below the poverty line.
  - **Rich Population:**
    - The richer population also fell almost 30% to 1.8 crore people.
      - Rich: Includes the people who earn more than Rs.1,500 a day.
  - **Comparison with China:**
    - Like India, China has a large population of around 1.4 billion people. But the pandemic’s effect on poverty was much smaller in China.
    - It was the only major economy to grow in 2020 and that has helped poverty levels to remain “virtually unchanged”.

Note:
In January 2021, the International Monetary Fund in its World Economic Outlook Report, estimated India’s economy to contract 8% in the Financial Year (FY) 2020 while China’s economy was expected to expand by 2.3% in 2020.

China’s middle class is likely to see a miniscule dip of just one crore, while the number of poor people may have gone up by 10 lakh.

**Global Scenario:**
- **Poverty Rate:**
  - The global poverty rate also increased to 10.4% last year after witnessing a steady decline over the years.
  - It was previously expected that the poverty rate would decrease to 8.7% in 2020.
- **Poor Class:**
  - The number of ‘global poor’ are estimated to have increased to 803 million in 2020, which is a significant increase from 672 million, the pre-pandemic prediction.
- **Middle Class:**
  - From 2011 to 2019, the middle class population globally had increased to 1.34 billion from 899 million. Further, it was expected to increase by 54 million annually on average.
- **South Asia:**
  - South Asia saw the greatest reduction in the number of middle class and the largest ‘expansion’ in poverty in 2020.
  - This could be attributed to South Asia experiencing sharp decrease in economic growth during the pandemic.

**Reason:**
- The lockdown triggered by the pandemic resulted in shut businesses, lost jobs and falling incomes, plunging the Indian economy into a deep recession.
- Sharp rise in global poverty was owing to the fact that many under the low income tier prior to the pandemic were living on the margin of poverty.

**Effect:**
- India and China also account for more than a third of the global population, with about 1.4 billion people each, the course of the pandemic in these two countries and how each recovers will have a substantial effect on changes in the distribution of income at the global level.

It claws back several years of progress on the economic front.

- At least **271 million people were lifted out of multi-dimensional poverty** between 2005-06 and 2016-17, claimed India’s Voluntary National Review (VNR) of Sustainable Development Goals (SDG).

**Indian Initiatives to Mitigate the Effects of Covid:**
- Pradhan Mantri Garib Kalyan Yojana.
- Reserve Bank of India’s Covid-19 Economic Relief Package.
- Atmanirbhar Bharat Abhiyan (self-reliant India).

### World Happiness Report 2021

**Why in News**


- This year it focuses on the effects of Covid-19 and how people all over the world have fared.

**International Happiness Day**

**About:**
- It is celebrated every year on 20th March to highlight the importance of happiness in the diurnal lives of people.
- The United Nations started to celebrate the International Day of Happiness in 2013 but a resolution for the same was passed in July, 2012.
  - This resolution was first initiated by Bhutan which emphasised on the importance of national happiness over national income since the early 1970s, thereby adopting the Gross National Happiness (GNH) over Gross National Product (GNP).

**Gross National Happiness:** The phrase ‘gross national happiness' was first coined by the 4th King of Bhutan, King Jigme Singye Wangchuck, in 1972.

1. The concept implies that sustainable development should take a holistic approach towards notions of progress and give equal importance to non-economic aspects of wellbeing.
GNP is the total value of all finished goods and services produced by a country’s citizens in a given financial year, irrespective of their location.

Theme of 2021: “Happiness For All, Forever”.

Key Points

About:
- The World Happiness Report ranks 149 countries by how happy their citizens perceive themselves to be.
- The rankings are based on polling (Gallup World Poll) which looks at six variables:
  - Gross Domestic Product Per Capita (Purchasing Power Parity).
  - Social Support.
  - Healthy life expectancy at birth.
  - Freedom to make life choices.
  - Generosity.
  - Perceptions of corruption.
- Respondents are asked to rate their own current lives on a 0-10 scale.

Top Performers:
- Finland has been ranked as the happiest country in the world for the fourth consecutive year.
- Followed by Iceland, Denmark, Switzerland, The Netherlands, Sweden, Germany and Norway.

Worst Performers:
- Afghanistan (149) is the most unhappy country.
- Followed by Zimbabwe (148), Rwanda (147), Botswana (146) and Lesotho (145).

India’s Neighbours:
- Pakistan-105.
- Bangladesh-101.

Right to Health

Why in News
Recently, the Chief Minister of Rajasthan announced the implementation of the Rajasthan Model of Public Health that would include a Right to Health as well as measures for preventive, primary and curative care as envisioned by the World Health Organisation (WHO).

Key Points

Rajasthan Model of Public Health:
- The Mukhya Mantri Chiranjeevi Yojana will also be launched as a Universal Health Care scheme as part of measures to reinforce health infrastructure and ensure accessibility to all citizens.
  - The scheme stipulates cashless health services up to Rs. 5 lakh to every family in the State.
- The Indian Institute of Health Management Research (IIHMR) has recommended setting of standards in accordance with the resources available in the State to match with the rights of patients as well as the service providers.
  - The Indian Public Health Standards (IPHS) set by the Union government, have also been revised keeping in view the changing protocols of the existing programmes.

Right to Health: The right to health, as with other rights, includes both freedoms and entitlements:
- Freedoms include the right to control one’s health and body (for example, sexual and reproductive rights) and to be free from interference (for example, free from torture and non-consensual medical treatment and experimentation).
- Entitlements include the right to a system of health protection that gives everyone an equal opportunity to enjoy the highest attainable level of health.

Provisions Related to Right to Health in India:
Indian Public Health Standards

- **IPHS** are a set of uniform standards envisaged to improve the quality of health care delivery in the country.
- The IPHS documents have been revised keeping in view the changing protocols of the existing programmes and introduction of new programmes especially for Non-Communicable Diseases.
- Flexibility is allowed to suit the diverse needs of the States and regions.
- The IPHS guidelines act as the main driver for continuous improvement in quality and serve as the benchmark for assessing the functional status of health facilities.
- States and UTs adopt these IPHS guidelines for strengthening the Public Health Care Institutions.

- **International Conventions**: India is a signatory of the Article 25 of the Universal Declaration of Human Rights (1948) by the United Nations that grants the **right to a standard of living** adequate for the **health** and well-being to humans including food, clothing, housing and medical care and necessary social services.

- **Fundamental Rights**: Article 21 of the Constitution of India guarantees a fundamental right to life & personal liberty. The right to health is inherent to a life with dignity.

- **Directive Principles of State Policy (DPSP)**: Articles 38, 39, 42, 43, & 47 put the obligation on the state in order to ensure the effective realization of right to health.

- **Judicial Pronouncements**: Supreme Court in *Paschim Bangal Khet Mazdoor Samity case* (1996) held that in a welfare state, primary duty of the government is to secure the welfare of the people and moreover it is the obligation of the government to provide adequate medical facilities for its people.
  - Also in its landmark judgment in *Parmanand Katara Vs Union Of India* (1989), Supreme Court had ruled that every doctor whether at a government hospital or otherwise has the professional obligation to extend his services with due expertise for protecting life.

- **Significance of Right to Health for India**:
  - **Right Based Healthcare Services**: The people are entitled to the right to health and it puts a compulsion for the government to take steps toward this.
  - **Wide Access to Health Services**: Enables **everyone to access the services** and ensures that the quality of those services is good enough to **improve the health of the people** who receive them.
  - **Reduce Out of Pocket Expenditure**: Protects people from the **financial consequences** of paying for health services out of their own pockets and reduces the risk of people getting pushed into poverty.

- **Challenges**:
  - **Lack of Primary Healthcare Services**: The existing public primary health care model in the country is limited in scope.
    - Even where there is a well-functioning public primary health centre, only services related to pregnancy care, limited childcare and certain services related to national health programmes are provided.
  - **Inadequate Funding**: Expenditure on public health funding has been consistently low in India (approximately 1.3% of GDP).
    - As per OECD, India’s total out-of-pocket expenditure is around 2.3 % of GDP.
  - **Sub-optimal Public Health System**: Due to this, it is challenging to tackle **Non-communicable Diseases**, which is all about prevention and early detection.
    - It diminishes preparedness and effective management for new and emerging threats such as pandemic like Covid-19.

**Global Water Crisis: UNICEF**

**Why in News**

According to a new report released by the United Nations Children’s Fund (UNICEF), one in five children worldwide reside in areas of high or extremely high water vulnerability.

- The Report was released ahead of World Water Day (22nd March).

**Key Points**

- **About the Report**:
  - The new report is **part of UNICEF’s ‘Water security for all’ initiative** that identifies areas where

**Note:**
The initiative aims to mobilise resources, partnerships, innovation and global response to identified hot spots.

UNICEF identified 37 hot-spot countries where children faced especially distressing circumstances in terms of absolute numbers, where global resources, support and urgent action had to be mobilised.

Afghanistan, Burkina Faso, Ethiopia, Haiti, Kenya, Niger, Nigeria, Pakistan, Papua New Guinea, Sudan, Tanzania and Yemen were especially vulnerable.

Findings:

- Children in more than 80 countries live in areas with high or extremely high water vulnerability.
- Eastern and Southern Africa has the highest proportion of children living in such areas, with more than half of children – 58% – facing difficulty accessing sufficient water every day.
- It is followed by West and Central Africa (31%), South Asia (25%), and the Middle East (23%).
- More than 155 million children in South Asia lived in areas with high or even extremely high water vulnerability.

Water Crisis in India:

- India has 4% of the world’s freshwater which has to cater to 17% of the world’s population.
- As per NITI Aayog report released in June 2018, India is facing the worst-ever water crisis in history. Approximately 600 million people or roughly around 45% of the population in India is facing high to severe water stress.
- The report says that nearly 40% of the population will have absolutely no access to drinking water by 2030 and 6% of India’s GDP will be lost by 2050 due to the water crisis.

Causes of Water Crisis in India:

- The Central Groundwater Board’s estimates show that the groundwater table in most parts of the country has been declining every year because of over-exploitation.
  - If the groundwater continues to decline unabated, meeting the country’s agricultural and drinking water requirements will become a big challenge.
  - 85% of rural water supply, 45% of urban water supply and over 64% of irrigation now rely on groundwater.
- Due to accumulation of sediments in the water storage area of major and medium irrigation dams that are currently in use, the total storage capacity has fallen significantly.
  - This is clearly underlined in the report ‘Compendium of Silting of Reservoirs in India’, released by the Central Water Commission in 2020.
- Climate change is causing major changes in rainfall levels.

Measures Taken by the Central Government:

- “Jal Shakti Abhiyan: Catch the Rain” Campaign:
  - The campaign will be implemented during the period 22nd March, 2021 to 30th November, 2021 - the pre-monsoon and monsoon period in the country.
  - The campaign is intended to nudge the State and all stakeholders to create Rain Water Harvesting Structures (RWHS) suitable to the climatic conditions and subsoil strata to ensure storage of rainwater.
  - Rains falling in the four/five months of monsoon are the only source of water for most parts of the country.
- Jal Jeevan Mission (JJM):
  - In the Budget 2021-22, Jal Jeevan Mission (Urban) has been announced under the Housing and Urban Affairs Ministry to provide universal coverage of water supply to all households through functional taps in all statutory towns in accordance with Sustainable Development Goal- 6.
  - It complements the Jal Jeevan Mission (Rural) which envisages supply of 55 litres of water per person per day to every rural household through Functional Household Tap Connections (FHTC) by 2024.
- Ministry of Jal Shakti:
  - The Government of India established the Ministry of Jal Shakti in 2019 to consolidate interrelated functions pertaining to water management.
  - The Ministry launched Jal Shakti Abhiyan – a campaign for water conservation and water security.

Measures Taken by State Governments:

- Uttar Pradesh – Jakhni Village (water village), Bundelkhand.
CURRENT AFFAIRS MARCH 2021

- Punjab – Pani Bachao Paise Kamao
- Madhya Pradesh – Kapil Dhara Yojana
- Gujarat – Sujalam Sufalam Yojana
- Telangana – Mission Kakatiya Program
- Maharashtra – Jalyukt Shivar Abhiyan
- Andhra Pradesh – Neeru Chettu Programme
- Rajasthan – Mukhya Mantri Jal Swalambhan Abhiyan (MJSA)

World Water Day
- **About:**
  - It is observed annually across the globe on 22nd March, with the purpose of highlighting the importance of water, and raising awareness about the water crisis that the world faces.
  - According to the United Nations (UN) website, the main focus of the day is to support the achievement of sustainable development goals (SDG) 6: water and sanitation for all by 2030.
- **History:**
  - The resolution to observe World Water Day was first adopted by the UN General Assembly on 22nd December 1992.
  - After which 22nd March was declared as World Water Day and is being celebrated around the world since 1993.
- **Theme of World Water Day 2021:**
  - “Valuing Water” - To highlight the value of water in our daily lives.
- A new World Water Development Report is released each year on or near World Water Day, to provide decision-makers with tools to formulate and implement sustainable water policies. This report is coordinated by UNESCO’s World Water Development Programme (WWAP) on behalf of UN-Water.

UNICEF
- United Nations Children’s Fund (UNICEF) is a special program of the United Nations (UN) devoted to aiding national efforts to improve the health, nutrition, education, and general welfare of children.
- UNICEF was created in 1946 as the International Children’s Emergency Fund (ICEF) by the UN relief Rehabilitation Administration to help children affected by World War II.

Commitment to Reducing Inequality Index 2020: Oxfam

**Why in News**
Recently, the Labour and Employment Minister has informed the Lok Sabha that Oxfam Commitment to Reducing Inequality (CRI) Index 2020 lacked clarity and did not take into account provisions of the four new labour codes.

**Key Points**
- **About:**
  - The Index ranked countries measuring their policies and actions in three areas that it said are proven to be directly related to reducing inequality:

**HOW THE SAARC NATIONS FARE**

- **Country**
- Public services
  - Ranking
- *Tax ranking*
- Labour ranking
- Overall rating

<table>
<thead>
<tr>
<th>Country</th>
<th>Public services ranking*</th>
<th>Tax ranking</th>
<th>Labour ranking</th>
<th>Overall rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>141</td>
<td>19</td>
<td>151</td>
<td>129</td>
</tr>
<tr>
<td>Pakistan</td>
<td>148</td>
<td>71</td>
<td>116</td>
<td>128</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>142</td>
<td>32</td>
<td>109</td>
<td>113</td>
</tr>
<tr>
<td>Nepal</td>
<td>120</td>
<td>16</td>
<td>130</td>
<td>112</td>
</tr>
<tr>
<td>Bhutan</td>
<td>124</td>
<td>130</td>
<td>141</td>
<td>146</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>153</td>
<td>6</td>
<td>113</td>
<td>102</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>106</td>
<td>91</td>
<td>86</td>
<td>94</td>
</tr>
</tbody>
</table>

*Health + education + social protection

Note:
Public services (health, education and social protection)
- Taxation
- Workers’ rights

Nigeria, Bahrain and India, which experienced the world’s fastest-growing outbreak of Covid-19, were among the world’s worst-performing countries in tackling inequality going into the pandemic.

India’s Position on the Index:
- Overall, India ranked 129 in the CRI index out of 158 countries on government policies, and actions in areas of public services of education, health, social protection, taxation, and workers’ rights.
- India slipped from rank 141 in the year 2018 to 151 in the year 2020 with weak labour rights and high incidence of vulnerable employment.
- Highest presence of the informal sector for men was in Uttar Pradesh at 86.9% and for women was in Andhra Pradesh at 73.6%.
- In terms of its public services, it ranked 141.
- India has been ranked 19 on the taxation pillar.

Reasons for India’s Poor Performance:
- Exploiting Labours in Covid:
  - Several state governments in India have used Covid-19 as a pretext to increase daily working hours from 8 to 12 hours a day and suspend minimum pay legislation, devastating the livelihoods of millions of poor workers now battling hunger.
- Low Health Budget:
  - India’s health budget was the fourth lowest with half of its population having access to most essential health services, and more than 70% of health spending being met by people themselves.
- Informal Jobs:
  - Most workers earn less than half of the minimum wage, 71% don’t have any written job contract while 54% do not get paid leave.
  - Only around 10% of the workforce in India is formal.

Recommendation:
- In response to the coronavirus pandemic, governments must dramatically improve their efforts on progressive spending, taxation and workers’ pay and protection as part of National Inequality Reduction Plans under Sustainable Development Goal (SDG) 10.
  - SDG 10:
    - It calls for reducing inequalities in income as well as those based on age, sex, disability, race, ethnicity, origin, religion or economic or other status within a country.
    - It also addresses inequalities among countries, including those related to representation, migration and development assistance.

Some Recent Indian Initiatives to Reduce Inequality:
- Increased allocation for health in Budget 2021-22 by 137%.
- Direct Tax Vivad se Vishwas Act, 2020 to provide for resolution of pending tax disputes.
- Transparent Taxation - Honoring The Honest’ platform to honour the honest taxpayers of the country.
- E-PG Pathshala: An initiative of the Ministry of Education to provide e-content for studies.
- SWAYAM: it provides for an integrated platform for online courses.

Oxfam International

About:
- Oxfam International is a group of independent non-governmental organisations formed in 1995.
- The name “Oxfam” comes from the Oxford Committee for Famine Relief, founded in Britain in 1942.
  - The group campaigned for food supplies to starving women and children in enemy-occupied Greece during the Second World War.
- It aims to maximize efficiency and achieve greater impact to reduce global poverty and injustice.
- The Oxfam International Secretariat is based in Nairobi, Kenya.

Other Reports:
- The Global Inequality Crisis Report by Oxfam in January 2021 claimed that India’s richest 1% hold more than four-times the wealth held by the bottom 70% of the country’s population.
The Inequality Virus Report in January 2021 also found that the Covid pandemic deeply increased the existing inequalities in India and around the world.

The Juvenile Justice Amendment Bill, 2021

Why in News

Recently, the Lok Sabha passed the Juvenile Justice (Care and Protection of Children) Amendment Bill, 2021 that seeks to strengthen and streamline the provisions for protection and adoption of children.

- The Bill amends the Juvenile Justice (Care and Protection of Children) Act, 2015 and contains provisions related to children in conflict with law and children in need of care and protection.

Key Points

- Need of the Amendment:
  - The National Commission for Protection of Child Rights (NCPCR) audit of Child Care Institutions (CCIs) in 2020, 90% of which are run by NGOs, found that 39% CCIs were not registered, even after the 2015 amendment was brought in.
  - It also found that less than 20% CCIs, especially for girls, had not been set up in some states, 26% child welfare officers were not there.
  - Moreover, three-fifths have no toilets, one-tenth have no drinking water and 15% homes don’t have provisions of separate beds, no diet plans.
  - Rehabilitation of children is not a priority for childcare homes and children are reportedly kept in such institutions to get funds.

- Key Amendments Proposed by the Bill:
  - Serious offences: Serious offences will also include offences for which maximum punishment is imprisonment of more than seven years, and minimum punishment is not prescribed or is of less than seven years.
    - Serious offences are those for which the punishment under the Indian Penal Code or any other law for the time being is imprisonment between three and seven years.
  - Juvenile Justice Board inquires about a child who is accused of a serious offence.
  - Non-cognizable Offences:
    - The present Act provides that an offence which is punishable with imprisonment between three to seven years to be cognizable (where arrest is allowed without warrant) and non-bailable.
    - The Bill amends this to provide that such offences will be non-cognizable.
  - Adoption: Presently, the adoption order issued by the court establishes that the child belongs to the adoptive parents. The Bill provides that instead of the court, the District Magistrate (including Additional District Magistrate) will issue such adoption orders.
  - Appeals: The Bill provides that any person aggrieved by an adoption order passed by the District Magistrate may file an appeal before the Divisional Commissioner, within 30 days from the date of passage of such order.
    - Such appeals should be disposed within four weeks from the date of filing of the appeal.
  - Additional Functions of the District Magistrate: These include: (i) supervising the District Child Protection Unit, and (ii) conducting a quarterly review of the functioning of the Child Welfare Committee.
  - Designated Court: The Bill proposes that all offences under the earlier Act be tried in children’s court.
  - Child Welfare Committees (CWCs): It provides that a person will not eligible to be a member of the CWC if he/she
    - has any record of violation of human rights or child rights, 
    - has been convicted of an offence involving moral turpitude, 
    - has been removed or dismissed from service of the central government, or any state government, or a government undertaking, 
    - is part of the management of a child care institution in a district.
  - Removal of Members: The appointment of any member of the committee shall be terminated by the state government after an inquiry if they fail to attend the proceedings of the CWCs consecutively for three months without any valid reason or if
they fail to attend less than three-fourths of the sittings in a year.

**Juvenile Justice (Care and Protection of Children) Act, 2015**


- **Change in Nomenclature:**
  - The Act changes the nomenclature from ‘juvenile’ to ‘child’ or ‘child in conflict with law’. Also, it removes the negative connotation associated with the word “juvenile”.
  - It also includes several new and clear definitions such as orphaned, abandoned and surrendered children; and petty, serious and heinous offences committed by children.

- **Special Provisions for Age 16-18 years:**
  - Included special provisions to tackle child offenders committing heinous offences in the age group of 16-18 years.

- **Mandatory Constitution of the JJ Board:**
  - It mandates setting up Juvenile Justice Boards and Child Welfare Committees in every district. Both must have at least one woman member each.

- **Adoption Related Clauses:**
  - A separate new chapter on Adoption to streamline adoption procedures for an orphan, abandoned and surrendered children.
  - Also, the **Central Adoption Resource Authority (CARA)** was granted the status of a statutory body to enable it to perform its function more effectively.
  - The Act states that the adoption of a child is final on the issuance of an adoption order by the court. Currently, there are 629 adoption cases pending in various courts.

- **Child Care Institutions (CCI):**
  - All Child Care Institutions, whether run by State Government or by voluntary or non-governmental organisations are to be mandatorily registered under the Act within 6 months from the date of commencement of the Act.
Exercise VAJRA PRAHAR

Why in News
Recently, Special Forces of India and the USA conducted the joint military exercise ‘VAJRA PRAHAR 2021’ in Himachal Pradesh.

- Earlier, India and the US navy had carried out a two-day Passage Exercise (PASSEX) in the eastern Indian Ocean Region.

Key Points
- About the Exercise:
  - The joint exercise by the Special Forces of both the countries is conducted alternatively between India and the United States.
  - Special Forces are the units of a country’s armed forces that undertake covert, counterterrorist, and other specialized operations.
  - This is the 11th edition of the exercise conducted at Special Forces Training School located at Bakloh, Himachal Pradesh.
  - The 10th edition of VAJRA PRAHAR was held in 2019 at Seattle, USA.

- Aim:
  - To share the best practices and experiences in areas such as joint mission planning and operational tactics as also to improve interoperability between the Special Forces of both nations.

- Other Exercises of India with the USA:
  - Exercise Yudh Abhyas (Army).
  - Cope India (Air Force).
  - Red Flag (USA’s multilateral air exercise).
  - Malabar Exercise (trilateral naval exercise of India, USA and Japan).
<table>
<thead>
<tr>
<th>Key Points</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary