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1.Polity & Governance

1.1. National cooperation policy

Why In News?

- A parliamentary standing committee has advised the newly created Cooperation Ministry to exercise utmost prudence in chalking out activities and programmes at the national level so that federal features of the country are not impinged upon.

Proposed Actions

- **'Cooperative Societies' is a State subject** in the Seventh Schedule of the Constitution.
- **The ministry has prepared the Multi State Cooperative Societies (Amendment) Bill, 2022**, to amend the Multi State Cooperative Societies Act, 2002, and it is expected to be cleared soon.
- **Multiple Governance**: There are many societies such as those for sugar and milk, banks, milk unions etc whose members and areas of operation are spread across more than one state. **The Act was passed to govern such cooperatives.**
    - For example, most sugar mills along the districts on the Karnataka-Maharashtra border procure cane from both states.
    - They draw their membership from both states, and they are thus registered under the MSCS Act.
    - Their **board of directors has representation from all states they operate in.**
- **Administrative and financial control** of these societies is with the central registrar, with the law making it clear that no state government official **can wield any control on them.**
- The Cooperative Societies registered under the State Cooperation Societies Acts are governed by the **concerned Registrars of Cooperative Societies**.
- Many Cooperative Institutions have also been set up under the State Cooperative Laws for the promotion of Cooperative Societies.

Challenges Associated

- **The exclusive control of the central registrar, who is also the Central Cooperative Commissioner, was meant to allow smooth functioning of these societies.**
    - The central Act cushions them from the interference of state authorities so that these societies are able to function in multiple states.
    - What was supposed to facilitate smooth functioning, however, has created obstacles.
- **For state-registered societies, financial and administrative control rests with state registrars who exercise it through district- and tehsil-level officers.**
    - Thus if a sugar mill wishes to buy new machinery or go for expansion, they would first have to take permission from the sugar commissioner for both.
    - Post this, the proposal would go to the state-level committee that would float tenders and carry out the process.
- **While the system for state-registered societies includes checks and balances at multiple layers** to ensure transparency in the process, these layers do not exist in the case of multi state societies.
    - Instead, the board of directors has control of all finances and administration.
- **For expenditure above a certain level, the annual general body meeting of the society has to be called**: The annual report of these societies has to be submitted either online or offline to the central registrar.
- **There is an apparent lack of day-to-day government control on such societies**: Unlike state cooperatives, which have to submit multiple reports to the state registrar, multistate cooperatives need not.

- **Inspection**: The central registrar can only allow inspection of the societies under special conditions; a written request has to be sent to the office of the registrar by not less than one-third of the members of the board, or not less than one-fifth of the number of members of the society.
    - Inspections can happen only after prior intimation to societies.
- **The on-ground infrastructure for central registrar is thin**: there are no officers or offices at state level, with most work being carried out either online or through correspondence.
    - For members of the societies, the only office where they can seek justice is in Delhi, with state authorities expressing their inability to do anything more than forwarding their complaints to the central registrar.
- **There have been instances across the country when credit societies have launched ponzi schemes taking advantage of these loopholes**: Such schemes mostly target small and medium holders with the lure of high returns. Fly-by-night operators get people to invest and, after a few installments, wind up their operations.

Implications

- It will ensure better governance of the societies.
- **Technology** will be used to bring in transparency.
- It has been suggested that **administrative control** of such societies should be vested in the state commissioners.
    - This way, day-to-day **control can be wielded to ward off cases of fraud.**

1.2. National Commission for Scheduled Tribes is Dysfunctional

Why In News?

- The National Commission for Scheduled Tribes has been dysfunctional for the last four years and has not delivered a single report to Parliament, a parliamentary committee has said in a recent report.

National Commission for Scheduled Tribes (NCST)

- **Introduction:**
    - The National Commission for Scheduled Tribes (NCST) was established by a**mending Article 338** and inserting a new **Article 338A** in the Constitution through the **Constitution (89th Amendment) Act, 2003**.
    - By this amendment, the erstwhile National Commission for Scheduled Castes and Scheduled Tribes was replaced by **two separate Commissions namely:**
        - The National Commission for Scheduled Castes (NCSC)
        - The National Commission for Scheduled Tribes (NCST)
- **Composition:**
    - The term of office of Chairperson, Vice-Chairperson and each member is three years from the date of assumption of charge.
    - The **Chairperson** has been given the rank of **Union Cabinet Minister** and the Vice-Chairperson that of a Minister of State and other Members have the ranks of a Secretary to the Government of India.
    - They are appointed by the **President by warrant under his hand and seal**.
    - At least one member should be a woman.
    - The Chairperson, the Vice-Chairperson and the other Members hold office for a term of 3 years.
    - The members are **not eligible for appointments for more than two terms**.
- **Duties and Functions of the NCST:**
    - To **investigate & monitor** matters relating to **Safeguards provided for STs** under the Constitution or under other laws or under Govt. Order, to evaluate the working of such Safeguards.
    - To **inquire into specific complaints** relating to Rights & Safeguards of STs;
    - To participate and a**dvise in the Planning Process** relating to Socio-economic development of STs, and to evaluate the progress of their development under the Union and any State;

- To **submit the report to the President annually** and at such other times as the Commission may deem fit, upon/ working of Safeguards, Measures required for effective implementation of Programmers/ Schemes relating to Welfare and Socio-economic development of STs;
- To **discharge such other functions in relation to STs as the President may**, subject to the provisions of any law made by Parliament, by rule specify;
- The Commission would also discharge the following other functions in relation to the protection, welfare and development & advancement of the Scheduled Tribes, namely:
  - Measures that need to be taken over conferring ownership rights in respect of minor forest produce to the Scheduled Tribes living in forest areas.
  - Measures to be taken to safeguard rights to the Tribal Communities over mineral resources, water resources etc. as per law.
  - Measures to be taken to ensure full implementation of the Provisions of Panchayats (Extension to the Scheduled Areas) Act, 1996 (40 of 1996).
  - Measures to be taken to reduce and ultimately eliminate the practice of shifting cultivation by Tribals that lead to their continuous disempowerment and degradation of land and the environment.

- **Powers**
  - The Commission is vested with all the **powers of a civil court** while investigating any matter on the inquiry into any complaint relating to deprivation of rights and safeguards for Scheduled Tribes.

Issues with the National Commission for Scheduled Tribes

- **Lack of applicants**: The Ministry claimed that the recruitment in the Commission was constrained because of lack of applicants as the eligibility bar was set too high and the rules being tweaked to enable many more candidates to apply.
- **Pending Reports:** In the financial year 2021-22, it has met only four times. Its rate of pendency of resolution of complaints and cases that it receives is also close to 50%.

1.3. All about Languages of India

What is the issue?

- Home Minister's suggestion that states should communicate with each other in Hindi rather than English has again stirred the debates over imposition of Hindi.

What does the Constitution say on official language?

- Article 343- Official language of the Union- The official language of the Union shall be Hindi in Devanagari script and the form of numerals shall be the international form of Indian numerals.
- It also stipulated that English would be used for the Union's official business for a period of 15 years and after the completion of 15 years Parliament by law may provide for its continual.
- Article 344- Commission- The President shall constitute a Commission at the expiration of 5 years from the commencement of the Constitution and 10 years from such commencement.
- The Commission shall make recommendations to the President for the progressive use of Hindi and to restrict the use of English for any of the official purposes of the Union.
- Committee - There shall be constituted a Committee consisting of 30 members to examine the recommendations of the Commission and to report to the President their opinion.

- Article 345- Official language or languages of a State- The State legislature may adopt any one or more of the languages i or Hindi as the official language of that State.
- Until the State Legislature otherwise provides by law, English language shall continue to be used as official language of the State.
- Article 346- Official language for communication between States and between a State and the Union- It shall be communicated in the official language.
- If two or more States agree that the Hindi language should be the official language for communication between such States, that language may be used for such communication.
- Article 347- Special provision- If the President is satisfied that a substantial proportion of the population of a State desire the use of any language spoken by them to be recognised by that state, he may direct that such language to be officially recognised throughout that State or any part thereof.

What is the language to be used in Parliament and judiciary?

- Article 120- Business in Parliament shall be transacted in Hindi or in English
- However, the presiding officer may permit any member who cannot adequately express himself in Hindi or in English to address the House in his mother-tongue.
- Article 348- It talks about the language to be used in the Supreme Court and in the High Courts and for Acts, Bills.
- Until Parliament by law otherwise provides, all proceedings in the Supreme Court and High Court, authoritative texts, Bills, acts, amendments, ordinances, orders, rules, regulations and by-laws issued under this Constitution shall be in English.
- However, the Governor may, with the previous consent of the President, authorise the use of the Hindi or any other language used for any official purposes of the State, in proceedings in the High Court having its principal seat in that State.
- For States that has prescribed any language other than English for use in Bills, Acts, Ordinances, order, rule, regulation or by-law, a translation of the same in English has to be accompanied.

What are the special directives provided in the constitution regarding languages?

- Article 350- It talks about the language to be used in representations for redress of grievances.
- Grievance to any officer/ authority of the Union or a State can be redressed in any of the languages used in the Union or in the State.
- Article 350A- It facilities for instruction in mother-tongue at primary stage.
- It shall be the endeavour of every State and local authority to provide adequate facilities for instruction in mother-tongue at the primary stage of education to children belonging to linguistic minority groups.
- The President may issue such directions to any State as he considers necessary or proper for securing the provision of such facilities.
- Article 350B- It talks about Special Officer for linguistic minorities.
- A Special Officer for linguistic minorities has to be appointed by the President to investigate all matters relating to the safeguards provided for linguistic minorities and report to the President.
- Article 351- It provides for the directive for development of the Hindi language.
- It shall be the duty of the Union to promote the spread of Hindi as a medium of expression for all the elements of the composite culture of India.

What are the Eighth schedule languages?

- The Eighth Schedule to the Constitution consists of the following 22 languages.
- Of these languages, 14 were initially included in the Constitution.
- Sindhi language was added in 1967 while Konkani, Manipuri and Nepali were included in 1992.
- Subsequently Bodo, Dogri, Maithili and Santhali were added in 2004.

- English is not among the 22 languages in the 8th Schedule; it is one of the 99 non-scheduled languages.

What are Classical languages in India?

- Currently, six languages enjoy the Classical status
    - Tamil (declared in 2004)
    - Sanskrit (2005)
    - Kannada (2008)
    - Telugu (2008)
    - Malayalam (2013)
    - Odia (2014)
- Guidelines for declaring a language as 'Classical' are
    - High antiquity of its early texts/recorded history over a period of 1500-2000 years
    - A body of ancient literature/texts, which is considered a valuable heritage by generations of speakers
    - The literary tradition be original and not borrowed from another speech community
    - The classical language and literature being distinct from modern, there may also be a discontinuity between the classical language and its later forms or its offshoots

Benefits of being notified as a Classical language are

- Two major annual international awards for scholars of eminence in classical Indian languages
- A Centre of Excellence for studies in Classical Languages is set up
- The University Grants Commission is requested to create, to start with at least in the Central Universities, a certain number of Professional Chairs for the Classical Languages so declared

What languages are spoken widely in India?

- The 2011 linguistic census accounts for 121 mother tongues, including 22 languages listed in the 8th Schedule of the Constitution.
- Hindi is the most widely spoken, with 43.6% of the population declaring it as their mother tongue.
- The next highest is Bengali, mother tongue for 8% of the population.
- The share of Hindi in the population is rising in every succeeding census.

Reasons

- Hindi is the predominant language in some of India's most populous states, including Uttar Pradesh, Madhya Pradesh and Bihar.
- A number of languages are bracketed under Hindi by census enumerators (the census has decided that Bhojpuri is Hindi)
- In terms of mother tongue, India had just 2.6 lakh English speakers in 2011.
- However, English was the second language of 8.3 crore respondents in 2011, next to Hindi's 13.9 crore.
- As second language, English is preferred over Hindi in parts of the Northeast.

1.4. The Imperative of Collective Reforms in a Federal System

Why in News?

- Rajasthan government's recent announcement of implementing the old pension scheme for state employees appointed on or after 1 January 2004.
- Calls for a return to the old pension scheme are slowly gathering support in other states.
- Recently, a political party made a similar promise related to the old scheme in its election manifesto for Uttar Pradesh.

Why is the Move Problematic?

- The resolution presents a classic case of a nationwide reform being undone by some states after having agreed and completed a significant portion of it. Such back and forth could jeopardize our new institutional reforms.
- Going back and forth in reforms within a federal system sharpens political competition that can result in tensions over the federal

bargain between national and state governments. This poses challenges for short-term political opportunity spaces and efficient resource utilization

- Rajasthan's decision raises larger issues of sustaining reforms in a federal system. Some important questions crop up:
- First, have state governments identified their priorities among desired outcomes? States must allocate resources accordingly and adhere to these allocations, as fiscal slippages could prove costly in this recovery phase of the economy.
- Second, it raises an issue of the levels of expenditure that states can afford in the short, medium, and long term. Some expenses in the short and medium terms cannot be sustained in the long term and so pruning them is necessary.
- Third is the level of commitment by states to the cause of reforms. The level of political stability and its implications in turn for electoral cycles often decides the level of political commitment to economic, institutional and governance reforms.

Scenario of Institutional and Economic Reforms in India:

- The process of furthering economic and institutional reforms in India is facing some unexpected challenges at this juncture.
- As these reforms have to deal with complex political and social contexts, the decisions needed are fundamentally political and shaped by political settlements. Though we must take politics seriously, crucial changes to economic institutions need to emphasize the underlying economic gains and highlight the virtues of patience as these changes takes decades to pay off.
- There are some signs of states and political parties getting restless and trying to undo past reforms. One such example is the case of pensions.

Evolution of India's Pension Scheme:

- Prior to India's pension reforms, the civil services pension scheme was designed as Pay-as-you-go defined-benefit scheme.
- Studies and various panel reports showed that this scheme of pension and provident fund arrangements in Central and state governments would strain future public finances and could lead to a fiscal crisis.
- Discussions culminated in policy reforms, leading to the discontinuation of defined benefit (DB) schemes and a shift to a defined contribution (DC) scheme.
- All new Union government recruits after a date in 2004 were enrolled in the National Pension Scheme (NPS), state government followed suit, and in 2007, public sector banks also moved to the NPS under its corporate plan. Regulated by the Pension Fund Regulatory and Development Authority (PFRDA), the NPS is now open to all citizens.

Why the Cooperative Federalism is Desired?

- Reforms on issues such as pensions touch upon many aspects of people's lives. This often makes it complex to push these reforms and implement them.
- It is here that we must recognize the importance of joint initiatives between states and the central government, so that we achieved better outcomes.
- Both the Centre and states can learn a lot from each other through an exchange on key aspects of these reforms that can develop into expertise on how to fix the system.
- Importantly, such mechanisms can facilitate the implementation of reforms and compliance with them.
- In the current recovery phase of the Indian economy, states and the Centre need to work together and utilize forums for dialogue to identify significant areas for reforms.
- State- level institutions could be catalysts for the implementation of agreed reforms. We need reform accelerators. This could be done keeping in mind the political economy factors that have impeded reforms in the past.

States as Reform Accelerators:

Such an approach could be built on four pillars:

- **Tailoring:** Issues can be identified at the state level and solutions provided to tackle them directly.
- Prioritization and sequencing of reforms which could include combining gradual reforms with longer term structural changes, and their translation into clear, achievable, and measurable targets.
- **Transparency:** Both targets and the process can be made public to increase participation and shared commitments.
- **Flexibility:** This can ensure that the process allows for adjustments if targets are not reached and create space for innovation.

Why the Successful Reforms at State Level Imperative?

- Successful reforms at the state level are not only about technical capacity, knowledge, and targets, it is also about the imperative of creating a sense of accountability and infusing a process of shared responsibility across a coalition in support of changes.
- In order to sustain reforms at the state level, top political commitment is necessary. State governments can either create political momentum for reforms or capitalize on the existing momentum to support change.

Pension Schemes before 2004:

Prior to 2004, the existing pension schemes were limited in their coverage. Broadly there were two kinds of pension schemes:

- **First,** there was **a pension scheme for civil servants and employees of autonomous bodies such as universities, which was fully funded by the government.** Under the scheme, employees on their retirement used to get usually 50 per cent of their last drawn salary, as pension with dearness relief linked to inflation.
- **Second,** there is **the pension scheme by the Employees Provident Fund Organisation (EPFO),** which is mandatory for establishments covered by the EPFO (roughly speaking, companies with more than 20 workers).

What were the Benefits of NPS over Old Pension Scheme?

The introduction of the NPS had solved two problems:

- The first was the **explosive fiscal burden of pensions.** The reversion to the old pension system will **have fiscal implications** as the government would either have to **cut on investments or borrow more to pay for a higher pension bill under the old pension system.**
- The second objective addressed by NPS was to **move away from concentrating the government's pension obligations from a thin slice of the population to the wider population and to the poor and unorganised workers.**

Conclusion:

- By going back to giving a defined benefit pension to civil servants, the **Rajasthan government will reduce the chances of creation of a nationwide pension system for all workers.**
- The proposal will **reintroduce inequity into old age benefits of the Indian population**
- We must **replace blame assignment with a culture of finding solutions by doing, and, eventually, empowering stakeholders and supporting them in outcome delivery.** This requires a move from **'thinking politically' to 'working differently'.**

1.5. MHA report on Citizenship Amendment Act (CAA)

Why In News ?

- Recently ,the Ministry of Home Affairs (MHA) released the annual report for the **Citizenship Amendment Act (CAA) .**
    - The notification of rules for the Citizenship Amendment Act (CAA) remains pending for over two years.

Major points

- The report said between April 1, 2020 and December 31, 2020, 3,014 and 217 cases of **Long Term Visa (LTV)** have been disposed of by the **MHA for minority communities from Pakistan and Afghanistan, respectively.**
    - During the same period, one case of LTV for minority community from Bangladesh was also disposed of by the MHA, even as a total of 412 **Citizenship Certificates** were granted by various competent authorities.
- According to the report, as many as **32,79,315 foreigners (including 4,751 Pakistani nationals) visited** India during the period despite a raging pandemic.

What is The Citizenship (Amendment) Act?

- The Citizenship (Amendment) Act, 2019 (CAA) is an act that was passed in the Parliament on December 11, 2019.
- The 2019 CAA amended the Citizenship Act of 1955 allowing Indian citizenship for Hindu, Sikh, Buddhist, Jain, Parsi, and Christian religious minorities who fled from the neighboring Muslim majority countries of Pakistan, Bangladesh and Afghanistan before December 2014 due to "religious persecution or fear of religious persecution".
    - However, the Act excludes Muslims.
- Under CAA 2019 amendment, migrants who entered India by December 31, 2014, and had suffered "religious persecution or fear of religious persecution" in their country of origin, were made eligible for citizenship by the new law.
    - These types of migrants will be granted fast track Indian citizenship in six years. The amendment also relaxed the residence requirement for naturalisation of these migrants from eleven years to five.
- **Relaxations**: Under The Citizenship Act, 1955, one of the requirements for citizenship by naturalisation is that the applicant must have resided in India during the last 12 months, as well as for 11 of the previous 14 years.
    - The amendment relaxes the second requirement from 11 years to 6 years as a specific condition for applicants belonging to these six religions, and the aforementioned three countries.
- **Definition**: Under the Act, an illegal migrant is a foreigner who
    - Enters the country without valid travel documents like a passport and visa, or
    - Enters with valid documents, but stays beyond the permitted time period.
- **Exemptions:** Illegal migrants may be put in jail or deported under The Foreigners Act, 1946 and The Passport (Entry into India) Act, 1920.
    - It **exempts the members of the six communities from any criminal case** under the **Foreigners Act, 1946 and the Passport Act, 1920.**
    - The two Acts **specify punishment for entering the country illegally** and staying here on expired visas and permits.
- **Sixth Schedule**: The Citizenship (Amendment) Act does not apply to tribal areas of Tripura, Mizoram, Assam and Meghalaya because of being included in the Sixth Schedule of the Constitution.
    - Also areas that fall under the **Inner Limit notified under the Bengal Eastern Frontier Regulation, 1873,** will also be outside the Act's purview.
    - This keeps almost the entire Arunachal Pradesh, Mizoram and Nagaland out of the ambit of the Act.
        - It would ensure protection of **indigenous and tribal populations of the region**.

Significance

- **Benefit non-Muslims**: It will benefit non-Muslims excluded from the proposed citizens' register, while excluded Muslims will have to prove their citizenship.
- **Religious persecution**: It aims to grant citizenship to minorities who have faced religious persecution in Muslim-majority foreign countries.
- **Partition**: It is righting the wrongs of history by granting refuge to the sons and daughters of

"Ma Bharti", who were left stranded by Partition.

Controversy

- **Targeting Muslims**: The fundamental criticism of the act has been that it specifically targets Muslims.
    - The protesters claimed that the law violates the Constitution as it aims to grant Indian citizenship on the basis of religion — barring Muslims.
- **Article 14**: Critics argue that it is violative of Article 14 of the Constitution, which guarantees the right to equality.
- **In the North-eastern states**: the prospect of citizenship for massive numbers of illegal Bangladeshi migrants has triggered deep anxieties, including fears of demographic change, loss of livelihood opportunities, and erosion of the indigenous culture.
- **Law and order situation**: The protests, some of them violent, have created a law and order situation. But even as the northeast and the rest of India join in the protests against the Act, the purpose of their protests are very different from each other.

Governments Stand

- According to the government the legislation is "**compassionate and ameliorative"** and does not **deprive any Indian of citizenship**.
- The CAA is a **limited and narrowly tailored legislation** which seeks to provide a **relaxation to aforesaid specific communities** from the specified countries with a clear cut-off date.
- The CAA does not apply to Indian citizens. Therefore, it does not in any way take **away or abridge the rights of any Indian citizen.**
- The present legal process of acquiring Indian citizenship by any foreigner of any category as provided in the Citizenship Act-1955 is very much operational and the **CAA does not amend or alter this legal position** in any manner whatsoever.
- Hence, **legal migrants of any religion from any country** will continue to get **Indian citizenship** once they fulfil the eligibility conditions already provided in the law for registration or naturalisation.
- The CAA does not affect the protection granted by the Constitution to indigenous population of northeastern states

1.6. States Suggestions on New Cooperative Policy

Why In News?

- Recently, a two-day national conference on a new cooperative policy was held in Delhi.

Key suggestions on New Cooperative Policy

- **Foreign Direct Investment (FDI):**
    - Allow **Foreign Direct Investment (FDI)** in the cooperative sector, particularly in **Primary Agricultural Cooperative Societies (PACS)** to improve infrastructure
    - It should be allowed for augmentation of resources and infrastructure of cooperative societies.
    - FDI suggestion came from Haryana.
- **Upper age limit:**
    - Fix an upper age limit of 70 years for board members in cooperative societies.
    - The recommendation of an age limit was put forward by Maharashtra.
- **Technology upgradation:**
    - Creation of a technology upgradation fund for the sector is also being thought of.
- **Land available with PACS:**
    - It can be leveraged for expanding the resource base of cooperative societies.
    - PACS have more land than the Railways.
- **Sahakar se Bajar:**
    - PACS should be given better market linkages under the label "Sahakar se Bajar '' (cooperative to market).
- **Electronic voting:**
    - There were also suggestions for electronic voting to be implemented in cooperative societies.

- **Lease to private company:**
    - Storage facilities available with PACS to be leased out to private e-commerce operators like Amazon.

Significance of this move

- **FDI can drive the expansion of cooperative infrastructure across states**: particularly the cold chain network, which is essential for storage, transportation and preservation for fruits and vegetables and dairy products.
- Presently, there is no such age bar and the suggestion is **aimed at governance reforms.**

Challenges Associated with this Cooperative sector

- **The exclusive control of the central registrar, who is also the Central Cooperative Commissioner, was meant to allow smooth functioning of these societies.**
    - The central Act cushions them from the interference of state authorities so that these societies are able to function in multiple states.
    - What was supposed to facilitate smooth functioning, however, has created obstacles.
- **For state-registered societies, financial and administrative control rests with state registrars who exercise it through district- and tehsil-level officers.**
    - Thus if a sugar mill wishes to buy new machinery or go for expansion, they would first have to take permission from the sugar commissioner for both.
    - Post this, the proposal would go to the state-level committee that would float tenders and carry out the process.
- **While the system for state-registered societies includes checks and balances at multiple layers** to ensure transparency in the process, these layers do not exist in the case of multi state societies.
    - Instead, the board of directors has control of all finances and administration.
- **For expenditure above a certain level, the annual general body meeting of the society has to be called**: The annual report of these societies has to be submitted either online or offline to the central registrar.
- **There is an apparent lack of day-to-day government control on such societies**: Unlike state cooperatives, which have to submit multiple reports to the state registrar, multistate cooperatives need not.
- **Inspection**: The central registrar can only allow inspection of the societies under special conditions; a written request has to be sent to the office of the registrar by not less than one-third of the members of the board, or not less than one-fifth of the number of members of the society.
    - Inspections can happen only after prior intimation to societies.
- **The on-ground infrastructure for central registrar is thin**: there are no officers or offices at state level, with most work being carried out either online or through correspondence.
    - For members of the societies, the only office where they can seek justice is in Delhi, with state authorities expressing their inability to do anything more than forwarding their complaints to the central registrar.
- **There have been instances across the country when credit societies have launched ponzi schemes taking advantage of these loopholes**: Such schemes mostly target small and medium holders with the lure of high returns. Fly-by-night operators get people to invest and, after a few instalments, wind up their operations.

Implications of the move

- It will ensure better governance of the societies.
- **Technology** will be used to bring in transparency.
- It has been suggested that **administrative control** of such societies should be vested in the state commissioners.
    - This way, day-to-day **control can be wielded to ward off cases of fraud.**

1.7. Draft Indian Antarctic Bill, 2020

Why In News?

- The government introduced the **'Antarctica Bill'** in the Lok Sabha.

Objectives and Need

- There is growing concern over preserving the **pristine Antarctic environment** and **ocean around Antarctica from the exploitation of marin**e living resources and **human presence in Antarctica**.
- In the future, the private ship and aviation industry will also start operations and **promote tourism and fishing in Antarctica**, which needs to be regulated.
- The continuing and growing presence of Indian scientists in Antarctica warrants **domestic legislation on Antarctica** consistent with its obligations as a member of the **Antarctic Treat**y. This is also in sync with the emergence of India as a global leader on important international fronts.

- The primary aim of the Bill is **to bring in penal provisions for breaking the law** in Antarctica.

Major Highlights of Bill

Regulation of activities:

- It prohibits **Indian expedition to Antarctica** or carrying out certain activities in **Antarctica without a permit** or the **written authorisation** of another Party to the Protocol.
    - It **prohibits drilling, dredging, excavation or collection of mineral resources** or even doing anything to identify where such mineral deposits occur – the only exception is for scientific research with a permit.
    - There will be a **strict prohibition on damaging native plants**; flying or landing helicopters or operating vessels that could disturb birds and seals; using firearms that could disturb the birds and animals; removing soil or any biological material native to Antarctica; engaging in any activity that could adversely change the habitat of birds and animals, or harm them.

Inspection:

- It **provides for inspection** in India by an officer designated by the Central government as an Inspector and to constitute an i**nspection team to carry out inspections in Antarctica.**

Committee:

- It **Establishes a Committee** to be called the **Committee on Antarctic Governance and Environmental Protection** to regulate the Indian Antarctic expedition and to **exercise powers conferred** on and perform the functions assigned to it.

Constitution of the fund:

- It provides for the **constitution of the fund** to be called the **Antarctic fund** which shall be applied towards the welfare of Antarctic research work and the protection of the Antarctic environment.

Applicability:

- It will **apply to Indians, foreign citizens,** corporations, firms and joint ventures functioning in India, and any vessel or aircraft that is either Indian or part of an Indian expedition.

Penal Provisions:

- It prescribes **penal provisions for certain serious violations.**
- Violators can face imprisonment as well as penalties.
- **Setting up a separate designated court** to try crimes committed in Antarctica.

Criticism

- The Bill is **applicable to Indian citizens as well as foreign citizens.**

- It is challenging to ensure the applicability of Indian law to foreign citizens.

1.8. Punjab's Claim on Chandigarh

Why In News?

- Recently, the Punjab Assembly passed a resolution reiterating the state's claim on Chandigarh.

About

- Recently, the Ministry of Home Affairs issued a notification stating that employees of Chandigarh UT administration will get the same pay and other benefits as those working under the central government.
- Under the rules, the retirement age of Chandigarh employees will increase from 58 to 60 years and women employees will get childcare leave of two years instead of the current one year.
- **Punjab's stand:**
  - The State accused the Centre of "trying to upset this balance" in the administration of the Union Territory and other common assets "through many of its recent actions.
  - Federalism is being hurt by superseding the powers of the Centre.

Punjab Reorganisation Act, 1966

- The resolution states that the reorganisation of Punjab was done through the Punjab Reorganisation Act, 1966.
- Further, Punjab was reorganised into the state of Haryana, UT of Chandigarh and parts of it were also given to then UT Himachal Pradesh.
- In **administration**, the balance was maintained for common assets including Bhakra Beas Management Board (BBMB) by providing management positions in some proportion to nominees of both the states.
  - Recently, the Centre advertised the BBMB posts to officers of all states and the central government. The issue is that earlier these posts were filled up by officers from Punjab and Haryana. This is being taken as that the centre is intervening in this maintained balance.
- Chandigarh is administered with a ratio of 60:40 officers of Punjab and Haryana

How Chandigarh came into being?

Nehru's idea:

- Before Chandigarh, the temporary capital of Indian Punjab was Shimla but PM Jawaharlal Nehru wanted to have a modern city as the capital. Thus, the idea of Chandigarh came into existence.

Punjab Government + Central Government:

- The Punjab government, in consultation with the Centre, decided the picturesque foothills of the Shivaliks to be the new capital of Punjab.

Official capital:

- In 1953, Chandigarh became the official capital of Punjab and was also inaugurated by then President Rajendra Prasad.

Birth of Haryana:

- Haryana was created through the Punjab Reorganisation Act of 1966.
- Haryana was born on a **linguistic basis**.
- Through the act, the centre took direct control over Chandigarh by creating a new Union Territory.
- The hill territories of Punjab were transferred to Himachal Pradesh by the central government.
- Technically, The Capital of Punjab (Development and Regulation) Act, 1952 identifies Chandigarh as the Capital of Punjab. The arrangements of the 1952 act were not changed even after the arrival of the States Reorganisation Act, 1966.

Aggressive Movements Claiming Chandigarh:

- Prime Minister Indira Gandhi announced that Haryana would get its own capital and Chandigarh would be given to Punjab.
- Gandhi had to take the decision after a leader of the Punjabi Suba movement Fateh Singh threatened self-immolation if Chandigarh was not transferred to Punjab.
- The partition of Chandigarh was also considered by the centre but later opposed.
- Haryana was given office and residential accommodation in Chandigarh for use for 5 years until having its own capital.

Rajiv-Longowal Accord,1985:

- In 1985, the Rajiv-Longowal Accord was signed between then Prime Minister Rajiv Gandhi and Akali leader Harchand Singh Longowal.
- One among other things was the transfer of Chandigarh to Punjab and the date of transfer was also fixed on 26 January 1986.
- Before the event took place, militants assassinated Harchand Singh Longowal.

Way Ahead

- The dispute needs a solution that will satisfy all the stakeholders without any biases.

Union Territories

- Unlike the states of India, which have their own governments, Union Territories (UTs) are federal territories, administered by the union government of India.
- In UTs, the central government appoints the Lieutenant Governor, who is the administrator and the representative of the President of India.
- However, as an exception, Puducherry and Delhi have an elected legislature and government, as they were granted partial statehood, under the special Constitutional amendment.
- Currently, India has eight Union Territories including, Delhi, Andaman and Nicobar, Chandigarh, Dadra and Nagar Haveli and Daman and Diu, Jammu and Kashmir, Ladakh, Lakshadweep, and Puducherry.

1.9. Reforming Death Penalty

Why In News?

- The Supreme Court has suo motu opened a review of the process by which courts award the death penalty.

India's justice system

- **Death penalty or capital punishment is the highest degree of punishment** that can be awarded to an individual under any penal law in force in any part of the world.
- **Capital punishment in India is a legal penalty** for some crimes under the country's main substantive penal legislation, the Indian Penal Code, as well as other laws.
    - **Executions are carried out by hanging.**
- **There must be a very high degree of fairness in a system** that is interested in subjecting individuals to the experience of death row, and ultimately taking lives through the instrumentality of law.
- **After 1947, India became a democratic state, and the system of awarding death penalties too changed drastically**.
    - **The Indian Penal Code** in accordance with the provisions **enshrined in the Constitution of India** provided for awarding of capital punishment for certain specific offences.
- **Article 21 of the Constitution**: which guarantees to every citizen the fundamental right to life, also expressly states, "no person shall be deprived of his life or personal liberty except according to **procedure established by law."**

What was the need for SC to examine practices in death penalty sentencing?

- **The court is undertaking an exercise to reform the procedures** by which information necessary in a death penalty case is brought before courts.
- **Supreme Court is acknowledging concerns** with the manner in which death penalty sentencing is being carried out.

- **While the death penalty has been held to be constitutional**, the manner in which it has been administered has triggered accusations of unfairness and arbitrariness.

How are judges supposed to choose between life and death sentences?

- **Bachan Singh's case**: In 1980, when the Supreme Court upheld the constitutional validity of the death penalty in Bachan Singh's case, a framework was developed for future judges to follow when they had to choose between life imprisonment and the death penalty.
- **Stating the reasons**: At the heart of that framework was the recognition that the legislature in the Criminal Procedure Code had made it clear that life imprisonment would be the default punishment and judges would need to give "special reasons" if they wanted to impose the death sentence.
- **Rarest of rare framework**: Through the 1980 framework popularly but inaccurately known as the "rarest of rare" framework the Supreme Court said that judges must consider both aggravating and mitigating factors concerning the crime and the accused when deciding if the death penalty is to be imposed.
- **The judgment also made it clear that** life imprisonment as a sentence would have to be "unquestionably foreclosed" before judges imposed the death sentence.
    - **There was an indicative list of factors** that the judgment identified as being relevant, but it was clear that it was not meant to be an exhaustive list.

Issues/ Challenges

- **Inconsistency in application**: The Supreme Court has repeatedly lamented the inconsistency in application of the Bachan Singh framework.
    - **Similar concerns** have been expressed by the **Law Commission of India (262nd Report).**
- **One of the main concerns has been the crime-centred approach to sentencing**, often in violation of the mandate in Bachan Singh that factors relating to both the crime and the accused have to be considered.
- **Arbitrary action**: There has been widespread concern that the imposition of death sentences has been arbitrary.
- **A study by Project 39A looking at 15 years of death penalty sentencing in trial courts** has shown that the Bachan Singh framework has broken down, with judges attributing to it multiple and inconsistent meanings.
- **A study of the 595 death sentences imposed in the last five** years shows that this concern is intensifying.
- **Very sparse sentencing information about the accused is brought before the judges.**
    - **While the judgment in Bachan Singh did develop a framework**, it was a framework that depended on the relevant information brought before the court.
    - **But the framework did not have any mechanisms** to ensure the actual collection of such information and its presentation before judges.
- **It is an empirical reality that the vast majority of death row prisoners are economically vulnerable and very often receive poor legal representation.**
    - As a result, they **do not have access to professionals and experts** with the necessary training and skill sets to undertake the complex exercise of collecting mitigation information.
- **There has been no real guidance on how judges must go about assigning weight** to aggravating and mitigating factors, and how they should approach weighing one factor against another.

Suggestions/ Way forward

- **Expert's opinion**: Reports from probation officers, prison superintendents, and independent mental health experts should be called in an attempt to correct the errors.
- **Proper information**: Comprehensively examine procedures in death penalty cases to ensure that judges who have to choose between life imprisonment and the death sentence have comprehensive sentencing information.

- **Fairness:** The criminal justice system needs to do all it can to ensure that systems are created for procedural fairness.

1.10. De-notified, Nomadic and Semi-nomadic Tribes

Why In News?

- A standing committee of Parliament has criticized the functioning of the development programme for **denotified, nomadic and semi-nomadic tribes**.
    - The committee noted that the **Scheme for economic empowerment of Denotified Tribes (DNTs) communities** has total outlays of Rs 200 crore for the period of five years from 2021-22 and the Department could not spend even a single rupee in 2021-22.

Who are Denotified, Nomadic and Semi-nomadic Tribes?

- These are communities who are the **most**
- **Denotified tribes (DNTs)** are communities that were 'notified' as being '**born criminal'** during the **British regime** under a series of laws starting with the **Criminal Tribes Act of 1871.**
    - **Nomadic and Semi-nomadic communities** are defined as those who **move from one place to another rather than living at one place all the time.**
- Historically, **Nomadic Tribes and De-notified Tribes** never had access to private land or home ownership.
- While most DNTs are spread across the **Scheduled Castes (SC), Scheduled Tribes (ST) and Other Backward Classes (OBC) categories**, some DNTs are not covered in any of the SC, ST or OBC categories.
- **Many commissions and committees constituted** since Independence have referred to the problems of these communities.
    - These include the **Criminal Tribes Inquiry Committee, 1947** constituted in the United Provinces.
    - **Ananthasayanam Ayyangar Committee in 1949** (based on the report of this committee the Criminal Tribes Act was repealed).
    - **Kaka Kalelkar Commission** (also called first OBC Commission) constituted in 1953.
    - In 1965, an Advisory Committee constituted for revision of the SC and ST list under the **chairmanship of B N Lokur** referred to denotified tribes.
    - The B.P Mandal Commission constituted in 1980 also made some recommendations on the issue.

Issues/ Challenges

- **Deprived of support**: These tribes escaped the attention of our Constitution makers and thus got deprived of the Constitutional support unlike Scheduled Castes and Scheduled Tribes.
- **Lack of inclusion**: While a number of these tribes are categorized under SC, ST and OBC, many are not.
    - These communities are frequently left out because they are less visible and difficult to reach.
- **Scheme for economic empowerment of DNT communities**: It was formulated to provide coaching, health insurance, facilitate livelihood and financial assistance for construction of homes for the members of DNT, for the period of five years from 2021-22 to 2025-26 and the Department could not spend even a single rupee in 2021-22.
- **Reduced budgetary allocation**: Budgetary allocation has been reduced to Rs 28 crore for 2022-23 against the budgetary allocation of Rs 50 crore for 2021-22.
- **Delays in scheme**: Department has already delayed in formulation of the Scheme for welfare of Denotified, Nomadic and Semi Nomadic communities.
- **The denotified tribes have been wrongly stigmatized as crime prone** and subjected to high handed treatment as well as exploitation by the representatives of law and order as well as by the general society.

2. Economy

2.1. Getting Serious About Supporting the Care Economy

Why in news?

- Care work is vital for economies in general and India needs to have a strategy and action plan for improved policies.

What is care economy?

- The care economy refers to the paid and unpaid labor and services that support caregiving in all its forms.
- Care work encompasses direct activities such as feeding a baby or nursing an ill partner, and indirect care activities such as cooking and cleaning.
- It also encompasses a range of sectors such as education, health, and social work involving teachers, nurses, community health workers, social workers, and domestic workers.

Why is there an increasing demand for care work?

- Demographic transition- Demographic transition in low- and middle-income countries will lead to a higher proportion of the elderly at the expense of the working-age population.
- Urbanisation- Urbanisation is changing the traditional joint-family structure to nuclear, single-parent, and transnational households, alienating them from community care bonds.
- Climate change- Climate change has caused water scarcity and rural food distress which increases care burden on women and children.

What is the significance of care economy?

- The importance of care work is covered in various international commitments such as the SDGs and the International Labour Organization (ILO)'s Centenary Declaration.
- **Work balance**- ILO's report highlights the importance of maternity, paternity, and special care leave, which help balance women's and men's work and family responsibilities throughout their lives.
- **Employment-** According to the International Trade Union Confederation (2019), an investment of 2 % GDP in care in India would create 11 million jobs, of which 32.5 % would be garnered by women.
- **Health outcomes-** Workplaces that provide time, income security and space for undertaking care services such as breastfeeding, enable positive nutrition and health outcomes.
- **Aging in dignity-** Nurturing elderly care services will deliver the benefits of aging in dignity and independent living as the population grows older.

What is the status of care services?

- Maternity leave- Maternity leave is a universal human and labour right.
- India offers 26 weeks of maternity leave, against the ILO's standard mandate of 14 weeks.
- But, this coverage extends to only a tiny proportion of women workers in formal employment in India, where 89% of employed women are in informal employment as given by ILOSTAT.
- Paternity leave is not provided in many countries, including India.
- Globally, the average paternity leave is 9 days, which further aggravates inequity.
- Child care- India has a long history of mandating the provision of creches in factories and establishments but there is limited information on its actual implementation.
- Though childcare and anganwadi workers undertake important work, they lack recognition as workers and do not have requisite access to workers' rights and entitlements in India.

- Domestic workers- Important developments such as Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, minimum wage schedule in many States, etc. have been extended.
- However, domestic workers face challenges in accessing decent work.
- They became ad hoc care workers during the novel coronavirus pandemic without adequate social or health protection measures.
- According to the Government's 2019 estimates, 26 lakh of the 39 lakh domestic workers in India are female.

What is the need of the hour?

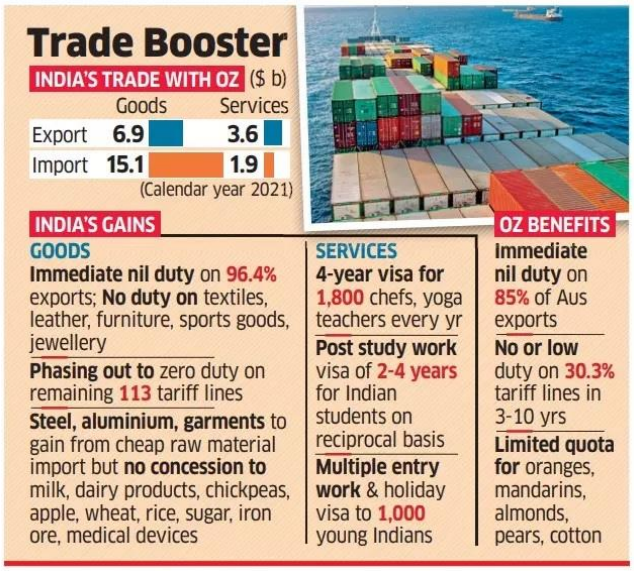
- Action plan- In consultation with the relevant stakeholders, the government needs to conceptualise a strategy and action plan for improved care policies, care service provisions and decent working conditions for care workers.
- Public good- Care work should be viewed as a collective responsibility and public good.
- Investment- Investing in a combination of childcare infrastructure and parental leave policies will have a higher maternal employment to population ratios.
- Gender-inclusive economic growth- Recognising AWWs, ANMs, ASHAs, domestic help, etc. as formal sector workers would allow their economic contribution to be counted in the GDP.
- ILO's 'Decent Work Agenda' principles emphasis on recognising the value of unpaid care work.
- Reducing gender-based income inequalities- India's average female daily wage was 59 % of the male wage in 1993-94 and improved to 72 %in 2018-19.
- 5R framework- The ILO proposes a 5R framework for decent care work centred around achieving gender equality. It urges on
    1. Recognition
    2. Reduction of unpaid care work
    3. Redistribution of unpaid care work
    4. Rewarding care workers and decent work
    5. Representation in social dialogue and collective bargaining.

2.2. Economic Cooperation and Trade Agreement

Why in news?

- After 11 years, India and Australia have signed a historic trade deal — the Australia-India Economic Cooperation and Trade Agreement (Ind-Aus ECTA).

What is the Ind-Aus ECTA about?



- Ind-Aus ECTA is envisaged as an 'early-harvest' agreement that targets a goal of doubling bilateral trade to about 50 billion dollars in 5 years.
- The India-Australia FTA negotiations first began in 2011 but they were suspended in 2015 as the talks were stuck over issues such as market access for dairy products and visa liberalisation.
- The negotiations were resumed in 2021, and the pact was signed in just over six months.
- The best feature of the ECTA is the incorporation of a compulsory review mechanism at the end of 15 years.
- Australia's offer- Under the agreement, Australia would offer zero duty access to India for about 96.4 % of exports (by value).
- This covers many products which currently attract 4-5 % customs duty in Australia.
- Australia has agreed to resolve the double taxation issue being faced by domestic IT companies in that market.

- The agreement will allow for faster approval of Indian medicines by Australian regulators as they have agreed to use inspection reports and approvals from Canada and the EU in the evaluation process for India pharmaceuticals and manufacturing facilities.
- The ECTA will allow for granting extended post-study work visas to Indian graduates from STEM (Science, Technology, Engineering and Mathematics).
- **India's offer-** India will be offering zero duty access for over 85 % of its tariff lines for Australia which will include products like coal, sheep meat, wool, LNG, coal, alumina, metallic ores, including manganese, copper and nickel; titanium and zirconium.
- India has also agreed to reduce duties on Australian wine.
- **Exclusions-** New Delhi has managed to completely shield its dairy sector from any tariff reduction.
- The products which are exempted includes milk and dairy, chickpeas, walnuts, pistachio nuts, wheat, rice, bajra, apples, sunflower seed oil, sugar, oil cake, gold, silver, platinum, jewellery, iron ore and most medical devices.

What is the significance of ECTA?

- **Bilateral trade**- The pact is expected to boost bilateral trade in goods and services to 45-50 billion dollars over five years.
- **Trade barriers-** The pact will not only lower tariffs on a large number of goods but also address the non-tariff barriers such as technical barriers to trade, apart from sanitary and phytosanitary restrictions.
- **CECA**- Both sides want to deepen the engagement and work towards a Comprehensive Economic Cooperation Agreement (CECA).
- It has been agreed that within 75 days of the signing of the pact, a negotiating subcommittee will start negotiations on other areas for market access for goods and services, a digital trade chapter, and a government procurement chapter .

Significance for India

- Employment- The pact will generate over 1 million jobs in India.
- Raw materials- As Australian exports are more concentrated in raw materials and intermediates, many industries in India will get cheaper raw materials which will make them competitive in sectors like steel, aluminium and garments.
- Market access- As the ECTA allows for zero duty access to India, it will enjoy greater market access, pushing India's export momentum higher.
- Access to pharma sector- The easing of regulatory processes in the pharmaceutical sector will give India access to Australia's attractive 12 billion dollar sector.
- Global position- It would increase investor interest and boost India's position in global supply chains.

Significance for Australia

- Market access- The pact is beneficial for Australia which is looking for a new market for its exports after its old friend China took offence to Australia's actions.
- Political gains- A deal like this would boost Australian Prime Minister Scott Morrison's chances at the upcoming elections.

2.3. Delinking Open Offer Price in PSU Disinvestments

Why in news?

- The SEBI has proposed to ease the pricing formula used for determining the 'open offer' price in case of public sector undertaking (PSU) disinvestments.

What is disinvestment?

- The disinvestment strategy means the market activity in which the government sells or liquidates government-owned assets.

Objectives of disinvestment

- Reducing the financial burden on the government
- Improving public finances
- Encouraging an open share of ownership
- Introduction, competition, and market discipline
- Depoliticising essential services
- Rationalising and retraining the workforce
- Building competence and strength in R&D
- Department of Investment and Public Asset Management, Ministry of Finance handles all the disinvestment-related tasks.

How is open offer price in a listed company determined?

- The open offer price in a listed company is determined by taking into account
- the price at which the stake was sold to the acquirer
- the volume-weighted average market price of the share over a period of 60 days prior to the date of public announcement
- The higher of the two prices is fixed as the price offered to public shareholders.
- Problems- The news about prospective stake sale is known to everyone as soon as the Union Cabinet makes a decision in this regard.
- The long gap between the Cabinet decision and the final PSU stake sale results in heightened speculative activity in these stocks, influencing prices.
- Such speculative rallies deter the acquirer company as it will need to keep revising upwards its cost of acquisition.

What is the SEBI's proposal about?

- The SEBI has said that the 60-day rule for discovering the open offer price could be dispensed with in the case of PSU disinvestment.
- The acquirer shall disclose upfront the negotiated price for both direct acquisition as well for indirect acquisition.
- The intent behind SEBI's open offer provision is to provide an exit to existing shareholders in a company at a fair valuation when the control of the company changes hands.

What is the way forward?

- The Centre needs to deliberate on the reason why the disinvestment program is showing such slow progress.
- A revised road-map needs to be drawn up for the disinvestment policy unveiled in 2021.
- The manner in which the Centre needs to exit PSUs in non-strategic sectors while retaining small stakes in PSUs in strategic sectors such as atomic energy, transport and communication and power is the need of the hour.
- It is important to begin the operations of Special Purpose Vehicle (SPV) for monetising surplus land with various ministries and departments.

2.4. Alternative Investment Industry

Why in news?

- Alternative investment solves the supply-side problems of mainstream investing by creating companies of scale that attract investors across the spectrum.

What is an Alternative Investment?

- An alternative investment is a financial asset that does not fit into the conventional categories (stocks, bonds or cash)
- Private equity or venture capital, hedge funds, real property, commodities, and tangible assets are all examples of alternative investments.
- It creates diversification in an investment portfolio and act as a hedge against the movements of the traditional asset classes.

Key Characteristics of Alternative Investments

- Have high fees and minimum investments
- Have lower transaction costs
- Less liquid than conventional securities

How about the alternatives industry in India?

- In India, the traditional three asset classes have been FDs, gold, and mutual funds.
- In 2012, SEBI introduced the Alternative Investment Funds (AIF) regulation to bring all investment funds under the regulatory oversight of SEBI.
- The alternatives industry in India is dominated by venture capital funds, private equity funds, hedge funds, venture debt funds and, now, special situation funds.
- The Indian alternatives industry has grown at a rapid pace of over 30% CAGR over the last 4-5 years, making it one of the fastest growing markets for alternative assets globally.
- The emergence of the Buyout Strategy has been one of the major drivers of hyper-growth in Indian PE/VC investments post 2015.
- A buyout is the acquisition of a controlling interest in a company and is used synonymously with the term acquisition.
- For a country that aims to grow to a 5 trillion dollar GDP by 2025, the alternatives and the innovation economy are expected to contribute 1 trillion dollar to this goal.

What steps have been taken to boost the alternatives?

- The Government's focus on improving the ease of doing business has helped buyouts become more manageable. The measures include
    - The Insolvency and Bankruptcy Code (IBC)
    - Corporate tax reforms
    - GST
    - Streamlining of the labour codes
- Continuing liberalisation of the FDI regime across a wide range of sectors has boosted India's image as a preferred destination for foreign investment.
- These in conjunction with policies such as Make in India, PLI scheme, REITs, InvITs etc. are attracting large global capital pools to increase their allocation towards the Indian market.
- In Budget FY23, the government has announced the creation of an expert committee to conduct a holistic examination of frictions that affects the private equity and venture capital industry.
- The Indian government is also viewing the PE/VC model as a means of allocating capital to important sectors through market-determined means.

What reforms can be suggested?

- **Increasing retail participation**- SEBI can consider reducing the minimum investment amount to increase retail participation and increase investment in AIF industry.
- Increasing retail participation could generate additional avenue for retailers to earn higher-than-equity returns.
- **Increasing Maximum Number of investors-** SEBI can ease the limit on maximum number of investors that can participate in a scheme.
- This will help in generation of higher AUMs under each scheme, resulting in greater investment amounts.
- **Increasing transparency-** The SEBI shall introduce regulations to increase the transparency of operations of AIFs to assist investors to make better decisions and to confidence of investors.
- **Providing Tax Advantages**- The SEBI could provide tax advantages or tax deductions to investors in a bid to scale up investment in AIFs.
- This would aid in diversifying investments in multiple asset classes and boosting multiple financial areas.

2.5. TRAI's Spectrum Recommendations

Why in News?

- Recently TRAI has recommended a sharp 36 per cent cut in the pan-India reserve prices for 3300-3670 MHz, which will be used for 5G services, from ₹492 crore per MHz to ₹317 per MHz.
- TRAI has also recommended a further cut of 40 per cent in the reserve price for 700MHz spectrum, compared to the 2021 auction, and 66 per cent lower compared to the 2016 reserve prices, to ₹3,930 crore per MHz.

- The pan-India reserve prices for other existing spectrum bands (800MHz to 2500MHz) have also been slashed in the range of 24-49 per cent compared to 2021 auctions.

How Significant is TRAI's Recommendation on Spectrum Price?

- The recommendations set the ball rolling for India to adopt 5G services.
- The 3300-3670 Mhz band and the 700 Mhz band are crucial for 5G services.
- 5G rollout has been delayed in India because the operators could not buy spectrum in the last round of auction due to the high reserve price.
- Therefore a 36-40 per cent cut in the reserve price should attract operators to buy spectrum this time.

How Much Money will the Operators have to Spend to buy Spectrum?

- Operators will have to be ready to spend at least ₹35,000 crore each to acquire pan-India 5G spectrum, going by the reserve price set by the telecom regulator.
- The operators will be eyeing spectrum in the 3500 Mhz band and the 700 Mhz band, but are likely to acquire more of the former since it is priced much lower — ₹320 crore per Mhz — compared with ₹3,900 crore per Mhz in the 3500Mhz band.
- An operator will need at least 100 Mhz of spectrum to offer any meaningful 5G services.
- This means that an operator will need at least ₹32,000 crore to acquire pan-India spectrum in the 3500 Mhz band.
- In addition, spectrum in the 700 Mhz band will be needed for high-density areas, where coverage will be crucial.
- Spectrum in the sub-Ghz bands is more valuable due to their efficient propagation characteristics compared to higher frequency bands.

What does all of this Mean for Consumers?

- Consumers can expect to experience 5G services by the end of this year or early 2023. This will transform the wireless broadband market significantly as 5G brings higher speeds and lower latencies, which will enable services like telemedicine in addition to entertainment and video streaming.
- The advent of private enterprise networks and satellite broadband services will infuse competition in a sector that currently has only two strong players(AirTel and Reliance Jio).
- So consumers, both retail and enterprise, will get more options for their communication needs.

Conclusion

- The Government has given top priority to creating digital infrastructure and rolling out 5G services as it is crucial to build India's digital future.
- The launch of 5G services has already been delayed because the reserve price for the spectrum in the last round of auctions was too much for the operators.
- The Government has spectrum worth ₹5 lakh crore and the real loss to the exchquer would be if operators do not buy due to high pricing.
- A reduction in spectrum price will enable the government to sell at least some of the available spectrum. The economic growth that will come as a result of digital tools and 5G infrastructure will be the real gain.

2.6. Global Coal Plant Capacity Dips in 2021

Why In News?

- Global coal-plant capacity under development declined in 2021, according to a report by the Global Energy Monitor.

Major Findings of the report

- **China leads in coal power expansion:**
  - With about 25,000 MW in new coal plants, **followed by India** with around 6,100 MW.
  - In all, 45,000 MW of global coal power capacity, a little over half of which was

from China was commissioned in 2021 while 26,8000 MW was retired, causing a net increase in the global coal fleet of 18,200 MW.
    - In 2020, the net increase was 11,500 MW, which was the result of 56,800 MW in new capacity and 45,300 MW of global retirements.
- **Decline in Coal power capacity:**
    - After rising in 2020 for the first time since 2015, total coal power capacity under development declined 13% last year, from 525 GW to 457 GW, a record low.
    - 1 GW is 1,000 MW.
- **Plants under consideration:**
    - **Thirty-four countries** have new coal plants under consideration, down from 41 countries in January 2021.
- **Countries to stop funding in coal:**
    - **China, South Korea, and Japan** have pledged to stop funding new coal plants in other countries, but China continues to lead all countries in domestic development of new coal plants, commissioning more coal capacity than the rest of the world combined.
- **2021 was a significant year in the continued global shift away from new coal power:**
    - With multiple countries making significant public commitments to pivot their energy futures and swathes of pre-construction coal capacity cancelled.
- **EU based study:**
    - **The European Union's 27 member states retired** a record 12.9 GW in 2021, with the most retirements in Germany (5.8 GW), Spain (1.7 GW), and Portugal (1.9 GW).
    - **Portugal became coal free in 2021**, nine years before its targeted 2030 phase-out date.
- **Fall in coal plant capacity:**
    - There has been a **77% fall in coal plant capacity** in pre-construction since the **Paris Agreement was signed in 2015.**

India Specific Outcomes

- **India's aim is to achieve net-zero emissions by 2070** and also pledged to attain **500 GW of installed electricity capacity from non-fossil fuel sources by 2030.**
- **Climate justice**: India has also insisted that its right to use coal be recognised in the context of principles of climate justice.
- **Coal power capacity decreased**: From 2015 to 2021, pre-construction coal power capacity in the country decreased nearly 90%, from approximately 238.6 GW in 2015, to 36.6 GW in 2020 and down an additional 12.7 GW in 2021, to 23.8 GW.
- **Despite the phase-down of new coal**: more than 23.8 GW of planned capacity remains, with more than half (12.6 GW or 52%) permitted; 31.3 GW under construction; and few if any plants with firm retirement dates.

Way forward

- **IPCC which showed there was no carbon budget left** to accommodate new coal plants, and that coal use needed to fall by 75% by 2030 (from 2019 levels) to limit global temperature rise below 1.5 degrees Celsius, in line with the Paris Agreement.
- **The Environment Ministry has introduced more stringent pollution standards for coal plants** in 2015, but the deadline to comply with the standards has been repeatedly delayed.

2.7. Poverty in India: World Bank Report

Why In News?

- According to a World Bank working paper,**extreme poverty in India dropped to 10.2%** in the **pre-Covid year of 2019** from as much as **22.5% in 2011** .
    - This is the second working paper after a recent International Monetary Fund paper that talked about poverty reduction.
    - However, while the former dealt with the period before Covid, the latter

focuses on the period during the pandemic.

About

- The paper uses the **Consumer Pyramids Household Survey (CPHS**) – an annual survey conducted by the Centre for Monitoring the Indian Economy (CMIE) – to provide **estimates of how poverty and inequality in India** have evolved since 2011.
- The CPHS is more recent, has wide coverage, and collects comprehensive data from Indian household living conditions.
- The paper implements a **careful reweighting exercise** to make CPHS to approach the representativeness of nationally representative surveys such as the Periodic Labour Force Survey (PLFS) and the National Family Health Survey (NFHS).
- It also makes full use of the CPHS consumption to make it comparable to the NSS consumption. In that way, it can show the evolution of poverty in India from 2011 to 2019.
- **Aims**
    - To encourage exchange of ideas on development and quickly disseminate the findings of research in progress.

Major Highlights of the report

- Poverty in India is **12.3 percentage points lower in 2019** as compared to 2011.
- The poverty headcount rate has declined from **22.5 percent in 2011 to 10.2** percent in 2019.
- Poverty reduction was **higher in rural areas** as compared to urban India.
    - Rural poverty dropped by 14.7 percent while urban poverty declined by 7.9 percentage points during 2011 to 2019.
- Farmers with small landholding sizes have **experienced higher income growth.**
    - **Real incomes for farmers with the smallest landholding**s have grown by 10 percent in annualised terms between the two survey rounds [2013 and 2019] compared to a 2 percent growth for farmers with the largest landholding,
- **Extreme poverty was as low as 0.8 per cent** in the pre-pandemic year of 2019, and food transfers were instrumental in ensuring that it remained at that level in the pandemic year of 2020.
    - **Extreme poverty** is measured as the number of people living on less than $1.90 per day (?144.40 at ?76 a dollar).
- Consumption inequality in India has moderated after 2011, with almost no change between 2015 and 2019.

What is Poverty?

- It is a multidimensional concept .
- It can be defined as a **condition in which an individual or household lacks the financial resource**s to afford a basic minimum standard of living.
- Economists and policymakers estimate "absolute" poverty as the shortfall in c**onsumption expenditure** from a threshold called the **"poverty line".**
- The official poverty line is the expenditure incurred to obtain the goods in a **"poverty line basket" (PLB).**
    - The PLB comprises goods and services considered essential to a basic minimum standard of living — food, clothing, rent, conveyance, and entertainment. The price of the food component can be estimated using calorie norms or nutrition targets.

How is it measured and its importance?

- **Poverty can be measured** in terms of the number of people living below this line (with the incidence of poverty expressed as the head count ratio).
    - The "depth" of poverty indicates how far the poor are below the poverty line.
- **Six official committees** have so far estimated the number of people living in poverty in India
    - the working group of 1962
    - V N Dandekar and N Rath in 1971
    - Y K Alagh in 1979
    - D T Lakdawala in 1993

- Suresh Tendulkar in 2009
- C Rangarajan in 2014.
- The government did not take a call on the report of the Rangarajan Committee; therefore, poverty is measured using the **Tendulkar poverty line**.
    - The Lakdawala Committee assumed that health and education is provided by the state — therefore, expenditure on these items was excluded from the consumption basket it proposed. Since expenditure on health and education rose significantly in the 1990s, the Tendulkar Committee included them in the basket.

- **Poverty numbers matter** because central schemes like **Antyodaya Anna Yojana** (which provides subsidised food grains to households living below the poverty line) and Rashtriya Swasthya Bima Yojana (health insurance for BPL households) use the definition of poverty given by the NITI Aayog or the erstwhile Planning Commission.
    - The Centre allocates funds for these schemes to states based on the numbers of their poor. Errors of exclusion can deprive eligible households of benefits.

Other ways can poverty be estimated

- In 2011, Oxford University researchers Sabina Alkire and James Foster devised the **multidimensional poverty index (MPI)** to capture poverty using 10 indicators: nutrition, child mortality, years of schooling, school attendance, ownership of assets, and access to proper house, electricity, drinking water, sanitation, and clean cooking fuel.
    - The MPI is a more comprehensive measure of poverty because it includes components that capture the standard of living more effectively.

Governments initiatives in this context

- Multi-pronged strategies are being taken by the Ministry of Rural Development (MoRD) to address rural poverty and improve the economic well-being of the people in rural areas with the main focus on increasing livelihood opportunities, empowering rural women, providing social safety net, skilling of rural youth, infrastructure development, increasing land productivity etc. through programmes of Department of Rural Development, viz.,
    - Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS)
    - Deendayal Antyodaya Yojana – National Rural Livelihoods Mission (DAY-NRLM)
    - Deen Dayal Upadhyay – Gramin Kaushalya Yojana (DDU-GKY)
    - Pradhan Mantri Awaas Yojana – Gramin (PMAY-G)
    - Pradhan Mantri Gram Sadak Yojana (PMGSY)
    - Shyama Prasad Mukherjee National RuRBAN Mission (SPMRM) and National Social Assistance Programme (NSAP), and programmes of Department of Land Resources, viz., Watershed Development Component of Pradhan Mantri Krishi Sinchai Yojana (WDC-PMKSY).

- **Other related schemes:**
    - Pradhan Mantri Jan Dhan Yojana
    - Schemes for Financial Assistance:
    - Pradhan Mantri Kisan Samman Nidhi
    - Pradhan Mantri Jan Dhan Yojana
    - Integrated Rural Development Programme (IRDP)

Issues /Challenges

- **Poverty alleviation** has always been accepted as one of India's main challenges by the policy makers, regardless of which government was in power.

- Government policies have failed to address a majority of vulnerable people who are living on or just above the poverty line.
- It also reveals that high growth alone is not sufficient to reduce poverty. Without the **active participation of the poor,** successful implementation of any programme is not possible.
- It remains among middle-income countries that are home to over half the world's poor. Progress in poverty alleviation has also been affected by shocks like demonetisation and the pandemic
- The pandemic is the biggest setback to poverty reduction worldwide and it will stretch out targets for countries like India.

Way Forward

- Poverty can **effectively be eradicated only when the poor start contributing** to growth by their active involvement in the growth process.
- This is possible through a **process of social mobilisation, encouraging poor people to participate and get them empowered.**
- This will also help c**reate employment opportunities** which may lead to increase in levels of income, skill development, health and literacy.
- Moreover, it is necessary to identify poverty stricken areas and provide infrastructure such as schools, roads, power, telecom, IT services, training institutions etc.

2.8. Centre For Monitoring Indian Economy Report

Why in News?

- A growing number of people, particularly women, are no longer even looking for work in India, according to new data from the Centre for Monitoring Indian Economy Pvt- a Private Research Firm in Mumbai.
- They are reportedly frustrated at not being able to find the right kind of job.

Findings of the Report

Labour Participation Rate

- Between 2017 and 2022, the overall labour participation rate dropped to 40% from 46%.
- About 2.1 crore (21 million) disappeared from the workforce, leaving only 9% of the eligible population employed or looking for positions.
- In March 2022, India's labour participation rate (LPR) fell to 39.5 per cent from 39.9 per cent in February 2022. (This was lower than the rate during the country's second COVID-19 wave in June 2021, when it was 39.6 per cent.)
- An LPR of 39.5 per cent means that over 60 per cent of the employable workforce is not even looking for work.
- This situation is ominous for a country like India, which is relying on young workers to drive economic growth.

Don't Want a Job

- According to the CMIE, more than half of the 90 crore (900 million) Indians of legal working age don't want a job.
- Millions of Indians, especially women, are dropping out of the labour force, tired and disappointed with their failure to find jobs because there are no jobs available.
- The phenomenon is called discouraged drop out.

Women workforce

- Though women represent 49% of India's population, women contribute only 18% of its economic output, about half the global average.
- There are not many employment opportunities and it hurts women and men both but the discrimination is more against women employment in a market with poor employment opportunities.
- Reasons like safety, workplace being far from home, transportation, discrimination against women become more apparent in a market where job opportunities are already shrinking.
- Women do not join the labour force in as many numbers because jobs are often not kind to them.
- For women, the reasons sometimes relate to safety or time-consuming responsibilities at

home. Another example - men are willing to change trains to reach their job. Women are less likely to be willing to do that. This is happening on a very large scale.
- Half the women in the younger age group are basically neither in the labour force nor trying to find work.

Educated not seeking work

- A large part of the dejected population has some degree of education. The CMIE surveys cover the population within the age group of 15-64.
- The number of those who are completing education is growing and this demographic of youth over 15-29, who are joining the labour force in larger numbers are not finding work.
- There are about 5 million educated youth seeking work each year. These are new people every year looking for work and when they don't find work, they drop out of the labour force. This also affects the social fabric.

Closure of other sectors

- Closure of micro and small enterprises like tailoring, beauty parlours, stationary shops, among others during the COVID-19 pandemic has also resulted in people quitting the labour force.

Disguised unemployment

- Employment has not been picking up requisitely and the quality of employment has dropped.
- Opportunities have decreased and poor quality employment is replacing better quality employment.
- A lot of people have also moved from regular and even casual employment to some form of self-employment, like agriculture.

Implications

- The expectation from India's demographic dividend is that when younger people get jobs they are going to add to the country's growth. The large share of discouraged workers implies that India will not be able to reap the demographic dividend.
- This would mean that India would remain in the middle-income trap, with the K-shaped growth path further fueling inequality.
- Failing to put young people to work could push India off the road to developed-country status.

Way Ahead

- Overall it's a reflection of the fact that there is not sufficient demand for work because opportunities are declining.
- India needs to create at least 9 crore (90 million) new non-farm jobs by 2030, according to a 2020 report by McKinsey Global Institute. That would require an annual GDP growth of 8% to 8.5%.

2.9. Quarterly Employment Survey (QES) Report

Why in News?

- Recently, the Labour and Employment Ministry released the third Quarterly Employment Survey (QES) report.

Highlights of the report

- The Report indicates increasing trend in employment in organized segment, employing 10 or more workers, of the selected nine sectors.
- Almost all (99.4%) establishments were registered under different statutes.
- Over four lakh jobs were created in firms with 10 or more workers in nine selected sectors in October-December 2021.
- Employment had increased from 3.10 crore in July-September 2021 to 3.145 crore in the next quarter.
- 'Manufacturing' sector is the largest employer accounting for around 39% of the estimated total number of workers followed by Education Sector 22%.
- The nine sectors reported 1.85 lakh vacancies cross different sectors, with 81,846 in manufacturing, 47,076 in health and 39,014 in education.

- The report stated that 5% of the vacancies were "in the process of being filled up".
- About 4% of the vacancies remained due to "non-availability of requisite skilled workers".
- Overall around 23.55% of units provided on-the-job training to their workers.
- Among 9 sectors, 34.87% of units in health sector provided on-the-job training, followed by IT/BPOs at 31.1%.
- 3% of the workers were Regular workers and 8.9% contract workers.



Quarterly Employment Survey

- The report of "Quarterly Employment Survey" is an important publication meant to give insights into the change of employment over the previous quarters and many other related parameters.
- This serves as a useful data for policy-makers, Central/ State Governments officials, researchers and other stakeholders.

2.10. Taxes And Duties on Petrol and Diesel

Why in News?

- The Centre and the states are at loggerheads over taxes and duties on petrol and diesel.
- The Centre feels the states are not reducing VAT in line with the Centre's cut in excise duty.
- The states have expressed concerns over their fiscal cushion, especially because the GST compensation regime is due to end in June.

Taxes and duties on petrol and diesel

- Taxes, in India, the price of petrol and diesel is dependent on international product prices, rupee-dollar exchange rate and other factors like dealer margin and freight charges.
- Petrol and diesel do not come under the purview of goods and services tax (GST).
- Taxes make up around 50% of the retail price.
- Public sector Oil Marketing Companies (OMCs) revise the retail prices of petrol and diesel in India on a daily basis, according to changes in the price of global crude oil.
- The price charged to dealers includes the base price set by OMCs and the freight price.
- The central government taxes the production of petroleum products, while states tax their sale.
- The central government levies an excise duty on petrol and on diesel. These make up around 31% and 34% of the current retail prices of petrol and diesel, respectively.
- While excise duty rates are uniform across the country, states levy sales tax/ Value Added Tax (VAT) which varies across states.
- For instance, Odisha levies 32% VAT on petrol, while Uttar Pradesh levies 26.8% VAT or Rs 18.74 per litre, whichever is higher.
- In addition to the tax rates many state governments, such as Tamil Nadu, also levy certain additional levies such as cess (Rs 11.5 per litre).
- Note that unlike excise duty, sales tax is an ad valorem tax, i.e., it does not have a fixed value, and is charged as a percentage of the price of the product. This implies that while the value of excise duty component of the price structure is fixed, the value of the sales tax component is dependent on the other three components, e., price charged to dealers, dealer commission, and excise duty.

The Petrol & Diesel prices have 4 different components. Here is an explanation of these components:

- **Price Charged to Dealers:** The Oil Marketing Companies or OMCs as they are called charge this price to the dealers. IOCL, HPCL & BPCL may charge a marginally different price to the dealers because of various other factors. This price is arrived at based on factors like Global Crude oil price of the Indian Basket, price

incurred on freight, exchange rate of US Dollar, price incurred on refining etc.

- **Central Excise Duty:** The Central Excise Duty is levied by the Central Government (Government of India). This is a fixed amount and not a percentage on the price. The excise duty on Petrol increased from Rs 9.48 per liter to a high of Rs 21.48 per liter by January 2016. In October 2017, the excise duty on Petrol was reduced by Rs 2 per liter, the first such reduction by the current government. On the other hand, the duty on Diesel increased by more than 4 times from Rs 3.56 per liter to a high Rs 17.33 per liter. Like Petrol, the duty was reduced by Rs 2 per liter in October 2017 to Rs 15.33 per liter.
- **Dealer Commission:** This is the amount of commission paid by the OMCs to the petrol pump dealers. The dealers manage all their expenses with this commission.
- **State specific VAT/Sales Tax:** The State Governments levy Value Added Tax (VAT) or sales tax on the price arrived at by adding dealer price, central excise duty & dealer commission. This is usually a mix of percentage & a fixed amount. The State VAT on petrol is at least 25% in 21 states with the highest in Mumbai at 39.54%. The State VAT on diesel is more than 20% in 14 states and highest of 28.31% in Andhra Pradesh.

Fuel levies as revenue share

- Excise duty and VAT on fuel constitute an important source of revenue for both the Centre and the states.
- Excise duty on fuel makes up about 18.4% of the Centre's gross tax revenues.
- Petroleum and alcohol, on an average, account for 25-35% of states' own tax revenue, as per the RBI's Study of Budgets 2020-21. Of the revenue receipts of states, central tax transfers comprise 25-29%, and own tax revenues 45-50%.
- Petroleum taxes with states are shared out of basic excise duty. The Centre also levies additional excise duty and cesses on petroleum products.
- The levies on fuel and liquor have also become an important source of revenue for states as other indirect tax revenue is routed through the GST regime.
- States apply an ad valorem VAT or sales tax on the base price, freight charges, excise duty and dealer commission on petrol and diesel. Therefore, state collections also rise as the Centre hikes excise duties.

How are Fuel Prices Determined in India?

- Fuel rates are revised everyday at 06:00 AM in India,and this is called dynamic fuel price method.
- This makes sure that variations of global oil prices throughout the day are transmitted and reflected to fuel users and dealers.
- India imports 80 percent of crude oil. We process this crude oil in our domestic refineries to generate petroleum products. A large share of our petrol comes via this process. In fact, we barely import any petrol or diesel. This crude oil goes through three stages of the transaction before it comes to your automobiles in the form of petrol and diesel.

How can Government controls Prices of Fuels?

- Central government's tool to control prices of fuel is Excise Duty.
- State government's tool to control prices of fuel is VAT.

Who is the official regulator of Fuel prices in India?

- Apart from taxes, Central government regulates the prices of fuels through base prices and cap prices at which dealers and OMCs deal with each other, decided by PPAC (Petroleum Planning and Analysis Cell) under Ministry of Petroleum and Natural Gas.
- Apart from this there are many licenses, regulations, laws applicable to refineries, OMCs, dealers, etc. and after passing through all this processes we get our tank filled with the fuel.

How Retail Price Of Petrol & Diesel Calculated?

- Fuel rates are decided by oil marketing companies. State-owned oil marketing

companies (OMCs).Since they aren't government regulated anymore, it's the responsibility of the oil companies to adjust prices according to global rates.

- The retail price of fuel is decided according to the rolling average of international benchmark prices over the previous 15 days; new prices come into effect at 6 am every day.
- However, the state and central governments takes taxes on the retail price of petrol and diesel.

2.11. Asian Development Bank Outlook Report

Why In News?

- Recently, **Asian Development Outlook (ADO) 2022** was released .

Major Findings

- **Asian Development Bank** projected a **seven per cent collective growth for South Asian economies in 2022** with the sub-region's largest economy India growing by **7.5 per cent in the current fiscal yea**r before picking up to eight per cent the next year.
    - The ADB has factored in the **Russia-Ukraine confict's implications** for India, which would be **largely indirect through higher oil prices**, and has assumed that the **severity of the COVID-19 pandemic** would subside with a rise in vaccination rates.
- Developing Asia's economies are predicted to grow by 5.2 per cent this year and 5.3 per cent in 2023 due to a **robust recovery** in **domestic demand and continued expansion in exports.**
    - Developing Asia comprises 46 member countries of ADB by geographic group: the Caucasus and Central Asia, East Asia, South Asia, Southeast Asia and the Pacific.
    - South Asia comprises Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.

Challenges

- **Inflation will accelerate** and **the current account deficit** will widen due to the **surge in global oil prices.**
- **Mobilising resources was particularly challenging** for the State governments and improving their fiscal resources was critical for India's sustained and inclusive growth.

Suggestions

- Governments in the region will **need to remain vigilant and prepared** to take steps to counter these risks.
- **Monetary authorities should also continue** to monitor their inflation situation closely and not fall behind the curve.
- The **region's economies urgently need to mobilise** fiscal resources to restore the health of public finances and build a more inclusive and sustainable future.
- **Strengthening personal income and property taxes can raise additional revenue and make tax systems** more progressive.
- Significant opportunities exist to expand the use of tax and other fiscal instruments to tackle environmental and health priorities while raising revenue.



3. International Relations

3.1. India's role in a disordered world

Why in News?

- Western nations want to throw Russia out of the G-20. China has opposed them. India will be chair of the G-20 from December 1, 2022. The world is greatly disordered. What should India stand for?

Challenges to the global order

- The war in Ukraine in February 2022 has put the final nail in the coffin of the boundary-less global economy that seemed to be emerging with the fall of the Berlin Wall and the collapse of the Soviet Union in 1991.
- Vaccines were hoarded by rich countries in the COVID-19 pandemic: poor countries starved.
- The World Trade Organization (WTO) was already in a bad state before the novel coronavirus pandemic, with rich and poor countries unable to agree on equitable rules, when COVID-19 froze global supply chains.
- Institutions of global governance have failed to unite the world.

Global order and governance challenge

- In the aftermath of the Second World war, new institutions for global governance were established — the United Nations and the General Agreement on Tariffs and Trade (GATT), and the World Bank and the International Monetary Fund (IMF) to provide finance to build the economies of all countries to eliminate poverty.
- However, the victors retained their veto power within the United Nations Security Council to determine when force can be used to keep the world in order, and to prevent the proliferation of nuclear power.
- The UN General Assembly meets every year — now 193 nations strong.
- It passes many resolutions to address global problems — hunger, poverty, women's rights, terrorism, climate change, etc.
- However, "might is right": members of the Security Council retain their right to deny the democratic will of the Assembly when it does not suit them.
- Global governance is not democratic.

G-7 and G-20

- The United States, the United Kingdom, France, Italy, Japan, West Germany and Canada formed the G7 in 1976. 'so that the noncommunist powers could come together to discuss economic concerns, which at the time included inflation and recession following the Organization of the Petroleum Exporting Countries (OPEC) oil embargo'.
- The European Union was invited to attend in 1977.
- Russia joined in 1998 — and 'its inclusion was meant as a signal of cooperation between East and West after the collapse of the Soviet Union in 1991'.
- However, Russia was removed from G-8 in 2014 when it invaded the Crimea. China was never a member.
- After the Asian financial crisis, the G20 was formed in 1999 with the aim of discussing policies in order to achieve international financial stability.
- Russia and China are members.
- Now western nations want to throw Russia out of the G-20. China has opposed them.
- India will be chair of the G-20 from December 2022.
- Meanwhile, India is being hectored by officials from the U.S. and the U.K. to support their sanctions on Russia.
- India has so far refused to be cowed down.

Backlash against globalisation

- The belief that unfettered flows of finance and trade across national borders will lift people in all poor countries out of poverty and make the world flatter in terms of inequality has failed.
- Strong leaders who put the interests of their own countries first are gaining power through elections — in Turkey, Hungary, Poland, Russia, and even India.
- Free market capitalism is not ideologically compatible with a genuine democracy.
- Capitalist institutions are governed by the fundamental principle of 'property rights'.
- Whereas, genuine democracies are founded on the principle of equal human rights.
- The rules of governance of capitalist and democratic institutions have always been in tension within societies.
- Capitalist institutions want to be unfettered by democratic regulations to make it easier to do business.
- Democratic institutions want to rein in the competitive animal spirits of capitalism to create a more compassionate capitalism.

Conclusion

- To prevent violence, it is essential that global governance becomes genuinely democratic. Countries must not attack each other. But they must be given the freedom to evolve their own democracies and economies and not be dictated to by others.

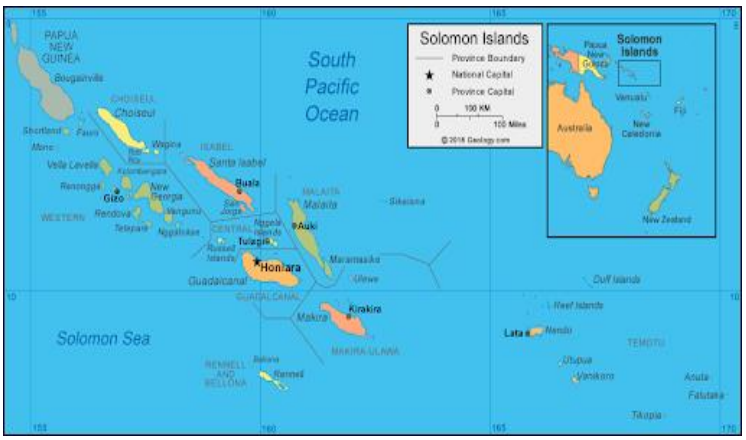
3.2. India and the U.K. Crafting a New Legacy

Why in news?

- Recently, the U.K. Foreign Secretary had visited India and participated in the inaugural edition of India-U.K. Strategic Futures Forum, a Track 1.5 Dialogue, pushing the bilateral relationship on an upward trajectory.

What are the areas of cooperation between the two countries?

- 2030 Roadmap- India and the UK adopted the ambitious 'Roadmap 2030' to elevate bilateral ties to a Comprehensive Strategic Partnership.
- India's Indo-Pacific Oceans Initiative- The U.K. will join India's Indo-Pacific Oceans Initiative and become a major partner on maritime security issues in Southeast Asia.
- The U.K. is a regional power in the Indo-Pacific as it possesses naval facilities in Oman, Singapore, Bahrain, Kenya, and British Indian Ocean Territory.
- Defence cooperation- India is a key strategic partner for the U.K. and was underscored by signing of Defence and International Security Partnership between India and the U.K. in 2015.
- Joint cyber security programme- A new joint cyber security programme is set to be announced to protect online infrastructure as both parties attempt to carry out joint exercises to combat threats from cyber criminals and ransomware.
- Strategic Tech Dialogue- India and the U.K. plan to hold the first Strategic Tech Dialogue, a ministerial-level summit on emerging technologies.
- British International Investment funding- The U.K. has confirmed 70 million euro of British International Investment funding to support the usage of renewable energy in India.
- India–U.K. Free Trade Agreement- In January, India and U.K. managed to conclude the first round of talks for an India–U.K. Free Trade Agreement.
- The negotiations reflected shared ambitions to secure a comprehensive deal between the fifth and sixth largest economies in the world as both sides covered over 26 policy areas.



What are the new areas of cooperation?

- The newer areas of cooperation include
- Fintech
- Market regulation
- Sustainable and green finance
- Cyber security

- The notable success of the collaboration with Oxford-Astra Zeneca and the Serum Institute of India in producing Covishield vaccines in India has been one of the instances of successful cooperation.
- The forthcoming visit of Mr. Johnson to New Delhi signifies the importance of India's role in the dynamically changing global order as New Delhi prepares itself to host the G20 presidency in 2023.
- As India seeks to carve out a new role for itself in the evolving global order as a 'leading power' and the U.K. recalibrates its strategic outlook post-Brexit, this is a unique moment in India-U.K. ties.
- New geopolitical realities demand a new strategic and it is time to seize the moment to lay the foundations of a partnership that can respond adequately to the challenges of the 21st century.

3.3. Red star over Solomon Islands

Why in News?

- The proposed China-Solomon Islands security cooperation agreement.

Background

- A document leaked on social media revealed that the Solomon Islands has proposed a deal aimed at increased security cooperation with China.
- This deal is regarded as an unprecedented one for China in the South Pacific region.
- The island's move has raised alarms in various countries such as the U.S. and Australia which enjoy a high degree of influence in the region.

Key features of the proposed deal

- The deal authorises China to send its "police, armed police, military personnel and other law enforcement and armed forces" to the islands upon the country's request, or if China views that the safety of its projects and personnel in the islands are at risk.
- The deal also enables China's naval vessels to use the islands for their logistics support.
- There are speculations that China may build its next overseas naval base in the Solomon Islands after Djibouti (which also was initially regarded as a logistics support base).

Solomon Islands' increasing proximity to China

- The Soloman islands became independent in 1978 as a constitutional monarchy under the British Crown, with a parliamentary system of government.
- Since then, the Islands shared close security relations with Australia, which is the first responder to any crisis in the South Pacific.
- The island country also had close relations with Taiwan, which came to an end with the current government in the country.
- China offered five hundred million U.S. dollars as financial aid, which was nearly five times that Taiwan spent on the islands in 20 years.
- In 2019, the new government switched its ties with Taiwan to China.
- It is also said by the pro-Taiwan Opposition that the current government has been bribed by China.
- The government has said that the ties with China are aimed at diversification of its security partnerships, focusing on its security dependence on Australia.

China's Interests in Solomon Islands

- Taiwan Factor – The islands in the south pacific are countries where China has competition from Taiwan for diplomatic recognition.
- China sees Taiwan as a breakaway province awaiting reunification, therefore any country that has relations with China will have to sever ties with Taiwan.
- The Solomon Islands was one among the six Pacific islands which had close ties with Taiwan.

- However, in 2019, the Solomon Islands, along with Kiribati have switched towards China.
- Geopolitical interests – These Pacific island states act as potential means to mobilise support for the great powers in international organisations such as the United Nations.
- Maritime interests – These islands have large maritime Exclusive Economic Zones and these 'small island states' are also seen as 'big ocean states'.
- Access to resources – Solomon Islands have crucial reserves of timber and other mineral resources, along with fisheries.
- Strategic interests – The strategic location of these pacific islands allows China to indulge itself between U.S.'s military bases in the Pacific islands and Australia. This became significant after the emergence of the AUKUS.

Geopolitical Implications

- The deal between the countries has become controversial both domestically and internationally as it has the potential to disrupt the traditional security mechanisms in the South Pacific region.
- The Pacific islands have been traditionally under the influence of the Western powers, such as the U.S., U.K., France, Australia and New Zealand.
- These countries have territorial possessions in the region and have also used the region as a nuclear weapons testing ground.
- This established structure has been challenged by China.
- There were protests in the Solomon Islands in 2021 against the government for increasing ties with China.
- Australia has now increased its financial support to the island country and also extended its security mission till 2023 as the country hosts the Pacific Games.
- The U.S. is now planning to reopen its embassy in the Solomon Islands after 29-years.
- New Zealand has criticised China for attempting to militarise the region and causing unwanted tensions.
- There has been a growing dissatisfaction among the islands in the South Pacific over China's economic policies and its adverse impact on their vulnerable economic and political systems.

3.4. Political agreement on the Digital Services Act (DSA)

Why In News?

- Recently, the European Parliament and European Union (EU) Member States have reached a political agreement on the Digital Services Act (DSA).

About

- It is a **landmark legislation** to force big Internet companies to act against disinformation and illegal and harmful content, and to provide better protection for Internet users and their fundamental rights.
- The Act, which is yet to become law, was proposed by the EU Commission (anti-trust) in December 2020.
- The proposed Act will work in conjunction with the EU's Digital Markets Act (DMA), which was approved earlier.

Digital Services Act (DSA)

- **What it will do:** The DSA will tightly regulate the way intermediaries, especially large platforms such as Google, Facebook, and YouTube, function when it comes to moderating user content.
    - Instead of letting platforms decide how to deal with abusive or illegal content, the DSA will lay down specific rules and obligations for these companies to follow.

Applicable to:

- It will apply to a large category of online services, from simple websites to Internet infrastructure services and online platforms.
    - The obligations for each of these will differ according to their size and role.
    - The legislation brings in its ambit platforms that provide Internet access,

domain name registrars, hosting services such as cloud computing and web-hosting services. But more importantly, very large online platforms (VLOPs) and very large online search engines (VLOSEs) will face "more stringent requirements."
    - Any service with more than 45 million monthly active users in the EU will fall into this category. Those with under 45 million monthly active users in the EU will be exempt from certain new obligations.

Significance of New Rules

- **Faster and actions:** Online platforms and intermediaries such as Facebook, Google, YouTube, etc will have to add "new procedures for faster removal" of content deemed illegal or harmful. This can vary according to the laws of each EU Member State.
- **Accountable actions:** These platforms will have to clearly explain their policy on taking down content; users will be able to challenge these takedowns as well. Platforms will need to have a clear mechanism to help users flag content that is illegal. Platforms will have to cooperate with "trusted flaggers".
- **Proper information display:** Marketplaces such as Amazon will have to "impose a duty of care" on sellers who are using their platform to sell products online. They will have to "collect and display information on the products and services sold in order to ensure that consumers are properly informed."
- **Audits:** An obligation for very large digital platforms and services to analyse systemic risks they create and to carry out risk reduction analysis". This audit for platforms like Google and Facebook will need to take place every year.
- **Risk analysis:** The Act proposes to allow independent vetted researchers to have access to public data from these platforms to carry out studies to understand these risks better.
- **Ban:** The DSA proposes to ban 'Dark Patterns' or "misleading interfaces" that are designed to trick users into doing something that they would not agree to otherwise.
    - This includes forcible pop-up pages, giving greater prominence to a particular choice, etc. The proposed law requires that customers be offered a choice of a system which does not "recommend content based on their profiling".
- **Crisis mechanism clause:** It refers to the Russia-Ukraine conflict — which will be "activated by the Commission on the recommendation of the board of national Digital Services Coordinators". However, these special measures will only be in place for three months.
    - This clause will make it "possible to analyse the impact of the activities of these platforms" on the crisis, and the Commission will decide the appropriate steps to be taken to ensure the fundamental rights of users are not violated.
- **Minor protection:** The law proposes stronger protection for minors, and aims to ban targeted advertising for them based on their personal data.
- **Transparency:** It also proposes "transparency measures for online platforms on a variety of issues, including on the algorithms used for recommending content or products to users".
- **Easy exit:** It says that cancelling a subscription should be as easy as subscribing.

3.5. India's Crude Import from OPEC

Why In News?

- India's **crude import from OPEC steadies after six years** of slump.

Surge in crude import

- OPEC's share of India's crude imports for the 2021-22 has risen after a span of 6 years.
- The **surge is primarily because of refiners importing more crude** from the OPEC to counter rising global prices and also **easing of Covid-19 lockdown.**

- In the next few months OPEC's share of India's overall imports could decline because refiners in India are **buying cheaper Russian oil** that has been **sanctioned by the western countries** after Russia's invasion of Ukraine.
- Russian oil continued to **account for less than 1% of India's crude imports in 2021-22.** It has i**ncreased to a little less than 2 percent in recent months** on account of Russia offering crude at discounted rate.
- The share of OPEC crude in India's imports improved while that of Latin America and Africa declined.

The Organization of the Petroleum Exporting Countries (OPEC)

- OPEC is a **permanent, intergovernmental organization** created at the **Baghdad Conference in 1960,** by **Iran, Iraq, Kuwait, Saudi Arabia and Venezuela.**
- The five Founding Members were later joined by Qatar, Indonesia, Libya, United Arab Emirates, Algeria, Nigeria, Angola, Gabon, Equatorial Guinea and Congo.
- **OPEC headquarters is in Vienna, Austria.** Earlier it was situated in Geneva, Switzerland but was moved to Vienna in 1965.
- Qatar moved out of OPEC in 2019, Indonesia in 2016 and Ecuador in 2020.
- **OPEC's objectives:**
    - to **coordinate and unify petroleum policies** among member countries
    - to **secure fair and stable prices** for petroleum producers
    - To **secure an efficient, economic and regular supply** of petroleum to consuming nations
    - **ensuring fair return on capital** to those investing in the industry

How oil prices are determined by OPEC?

- **OPEC is a cartel** which behaves like a **loose oligopoly** thus determining the level of output based on profit maximization.
- However, it has to factor in various conditions to arrive at the production figure based on **global demand and supply, uncertainties** etc.
- Crude prices not only depend on current supply and demand but also on projected future supply and demand.
- OPEC adjusts member **countries' production targets** based on current and **expectations of future supply and demand.**
- Gauging future supply and demand is challenging as market conditions are uncertain and are changing rapidly.
- There can also be **significant lags in OPEC production target** adjustments in response to market conditions, which also can impact prices.
- Despite the mandates to manage production and maintain targeted price levels, member countries do not always comply with the production targets ascertained by the organization.
- Prices of crude are also affected by member countries' reluctance to maintain production targets.
- Furthermore, u**nexpected outages, disruptions** can reduce OPEC production thus affecting crude prices.

How much is India dependent on OPEC for its oil import?

- India as of now **imports roughly 70 percent** of its crude from the OPEC members.
- On a decadal comparison, the **imports have reduced drastically from 87 percent of India's total crude import to 70 percent** in 2021-22.
- This reduction is on account of India **expanding its import basket** to rope in non-OPEC members so as to have a **stable and consistent supply of crude.**
- The **United States is the largest non-OPEC crude importer** to India.

How crude import from Russia can affect India's dependence on OPEC?

- At present India's crude import from Russia a**ccounts for less than 2 percent of India's need** which is lesser than its domestic production.
- In short to medium run it is not favorable for India to import a large chunk of its import needs from Russia due to **sanctions and**

secondly Rupee-Rouble payment arrangement has a limitation.

- In the near future, the Russian crude import can't affect India's dependency on OPEC much but in the long run with India investing in Russian gas fields and ironing out the payment arrangement issues, **India's dependence on OPEC can be drastically reduced.**
- India should look at **OPEC plus nations** as well to reduce its import demands from OPEC.

3.6. Justifying U.N veto Among Permanent Members

Why In News?

- The United Nations General Assembly has **unanimously adopted a resolution** requiring the five permanent members of the Security Council to **justify their use of the veto.**

About

- Though the resolution was planned two years ago, the **urgency was felt after Russia's invasion of Ukraine recently.**
- **Liechtenstein is the primary sponsor** of the resolution but later on France, Britain and Germany along with 100 more counties too joined as co-sponsors.

Need for resolution

- The objective of the resolution is to make the **permanent members more accountable** while exercising their right to veto a Security Council resolution.
- Right to veto is the power of the five permanent members of the UN Security Council to veto or reject any "substantive" resolution.
- The Security Council is the most powerful organ of the United Nations.
- Five permanent members of the Security Council are:
    - **U.S.A**
    - **Russia**
    - **China**
    - **U.K**
    - **France**
- Resolution stresses on the responsibility of a permanent member to **explain its decision to the General Assembly.**
- Proponents of the resolution voiced that the **veto has been abused by the veto-holders** to further their interests in the international geopolitical arena and also to put their rivals in tight spots.

Trajectory of Veto

- So far **more than 200 Security Council proposals have been vetoed.**
- Proposals ranging from Korean War, Israeli-Palestinian conflict, climate change, reporting on weapons stockpiles to governance of a part of the Indian Ocean nation Comoros.
- **Soviet Russia (now Russia) has exercised the most vetoes** so far, followed by the US.

India's stand

- India so far has not been a co-sponsor of the resolution. It has maintained a strategic autonomy so as to not fall in either camp.
- It's one of the members of G-4 nations who have potential candidacy for permanent membership at the Security Council.
- G4 comprises Brazil, Germany, India, and Japan which support each other's bids for permanent seats on the United Nations Security Council.
- Germany and Japan have joined the resolution as co-sponsors but Brazil and India have refrained.

3.7. India - China Relations

Why in News?

China has said that it is ready to permit the return of "some" Indian students stranded in India for over two years following the visa and flight restrictions imposed by Beijing due to the COVID-19 pandemic.

- China attaches high importance to Indian students' concerns about returning to China for studies. However, a timeline for their return is not released yet.

Issue of convergence in India-China relations:

- India-China relations have now acquired a strategic and global dimension and their cooperation is critical for tackling global issues such as **Climate Change, terrorism, protectionism, free trade, global financial order**
- Both countries should work together
    - To safeguard the legitimate rights and interests of developing countries
    - Safeguard multilateral trading system and advancing the WTO reforms
    - Speed up negotiations on the Regional Comprehensive Economic Partnership Agreement (RCEP).
- China stated that "**Sino-Indian ties" c**ould be the most "important bilateral partnership of the century
- Two countries agreed to coordinate their **development programmes in Afghanistan in the areas of health, education and food security**
- India is critical for global success of **5G,**where China's Huawei is the leader.

Issue of concerns in India-China relations:

- **Belt Road Initiative**: India has objected this, since its inception on grounds of violating its sovereignty pointing to China Pakistan Economic Corridor.
- India's support to China on global issues has not led to Beijing's reciprocation for instances: **China opposed India's permanent membership to UN Security Council and entry into NSG.**
- India faces trade imbalance heavily in some favor of China. In 2017-18, trade deficit has gone wide to US$62.9 billion in China's favor.
- Two countries **failed to resolve their border dispute**and steadily established military infrastructure along border areas Indian media outlets have repeatedly reported Chinese military incursions into Indian territory
- China has expressed **concerns about Indian military and economic activities in the disputed South China Sea**. Same way India is also concerned about rising Chinese activities in Indian Ocean.
- China's strong **strategic bilateral relations**with Pakistan and other neighboring countries like Nepal and Bhutan is cause of concern as these countries act as buffer states.

Measure taken so far:

Political Relations

- In 1993, Agreement on the Maintenance of Peace and Tranquility along the Line of Actual Control (LAC) on the India-China Border Areas was signed to bring stability and substance in bilateral ties.
- In 2008, two countries have also extended their strategic and military relations.
- MoU was signed to open an additional route for Kailash Mansarovar Yatra through Nathu La.
- India and China have also established a High Level Dialogue Mechanism on Counter Terrorism and Security
- To facilitate exchanges between Indian states and Chinese provinces, States/Provincial Leaders Forum was established

Commercial and Economic Relations

- China will establish two Industrial Parks in India and expressed their intention to enhance Chinese investment in India
- India extended e-visa facility to Chinese nationals
- Trade and Economic Relationship are shaped through various dialogue mechanism
- Joint Economic Group led by the Commerce Ministers of both sides
- Strategic Economic Dialogues led by the Vice Chairman of NITI Aayog and the Chairman of National Development and Reform Commission of China

Cultural Relations

- India and China have entered into an agreement on co-production of movies
- Yoga is becoming increasingly popular in China. China was one of the co-sponsors to the UN resolution designating June 21 as the International Day of Yoga

Education Relations:

- India and China signed Education Exchange Programme (EEP), which is an umbrella agreement for educational cooperation between the two countries.
- Chinese students are also annually awarded scholarships to study Hindi at Kendriya Hindi Sansthan, to learn Hindi

Indian Community:

- Presently around 35,500 Indians are staying in China, students and working professional form a major part of it.
- PICFA" Pondicherry India China friendship association is an NGO dedicated for developing people-to-people relation between India and China in areas of education, culture and tourism.

Way Forward:

Managing relationship with China has become the biggest test for Indian foreign policy

- Trust deficit is a critical issue in Sino-Indian bilateral relations. In order to solve this problem, track II diplomacy can play a more active role. For e.g. BCIM (Bangladesh–China–India–Myanmar) economic corridor is an outcome of track II dialogue.
- There is a need to control negative publicity in the relationship. Deeper engagements between the media persons of the two countries can help in improving image of the two countries.
- Improvement of the India-China relations require rational voices, A comprehensive and substantial study of each other's national and social conditions is need to be done by scholars to strengthen cooperation.
- Cultural industry, including tourism, entertainment, publications, internet service sectors, needs to be targeted to reduce the trade deficit.
- There is need to increase the frequency of talks at highest levels multilateral meets such as East Asia Summit (EAS), the Shanghai Cooperation Organisation (SCO), Conference on Interaction and Confidence-Building Measures in Asia (CICA), BRICS and G-20.
- India and China should seek an early settlement of the border issue, before the final settlement of the boundary question is reached we should jointly maintain peace and tranquillity in the border areas.

3.8. MISSION SAGAR IX

Why in News?

- With the overarching aim of **providing critical medical aid to Sri Lanka during the ongoing crisis**, INS Gharial as part of Mission SAGAR IX arrived at Colombo and delivered over 760 kgs of 107 types of critical lifesaving medicines.
- In line with **GoI's vision of SAGAR – Security And Growth for All in the Region** – the Indian Navy undertakes several deployments titled 'Mission SAGAR' to assist friendly IOR littorals.
- Since May 2020, Indian Navy has successfully **concluded eight such missions**, deploying ten ships to 18 Friendly Foreign Countries.

Mission SAGAR

- Mission SAGAR is a major milestone in India's engagement with the countries in the Indian Ocean Region, in line with '**SAGAR — Security and Growth for All in the Region'.**
- Launched on **May 10, 2020,** Mission SAGAR is India's initiative **to deliver COVID-19 related assistance to the countries in the Indian Ocean Region.**
- Mission SAGAR is in line with India's role as the **first responder in the region and builds on the excellent relations existing between these countries to battle the COVID-19 pandemic.**
- As part of this Mission, **INS Kesari successively visited Maldives, Mauritius, Madagascar,**

Comoros and Seychelles during May-June 2020 **to deliver assistance to our maritime neighbors in dealing with the COVID crisis.**

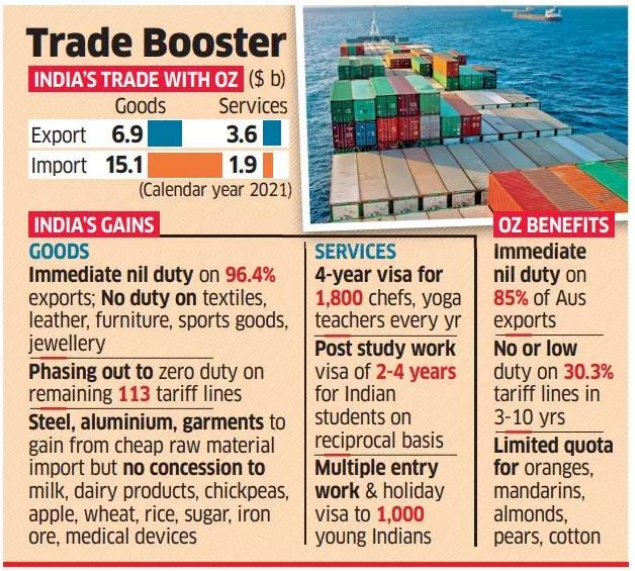
- India's humanitarian assistance included **supplies of essential food items, medicines, Ayurvedic medicines and deployment of medical assistance teams to Mauritius and Comoros.**
- As part of Mission SAGAR-II, Indian Naval Ship Airavat delivered food aid to Sudan, South Sudan, Djibouti and Eritrea.

What is SAGAR policy?

- Prime Minister Narendra Modi introduced the concept of SAGAR — '**Security and Growth for All in the Region' during his visit to Mauritius in March 2015.**
- It is a high-level articulation of India's vision for the Indian Ocean. SAGAR has distinct but inter-related elements and underscores India's engagement in the Indian Ocean.
- The principles enshrined in SAGAR provide **a coherent framework to address some of the challenges related to economic revival, connectivity, security, culture and identity.**
- During his address in Maldives Parliament in June 2019, Modi said SAGAR is also a blueprint for cooperation in the Indo-Pacific region.
- Under the broad vision of SAGAR, **relations have been augmented with partners in the region in defence and security, development partnership, training and capacity building.** The Indian Ocean Region received priority in COVID assistance.

Key features of SAGAR:

- **Enhancing capacities to safeguard land and maritime territories** and interests.
- **Deepening economic and security cooperation** in the littoral.
- **Promoting collective action to deal with natural disasters** and maritime threats like piracy, terrorism and emergent non-state actors.
- Working towards sustainable regional development through enhanced collaboration.
- Engaging with countries beyond shores with the aim of building greater trust and promoting respect for maritime rules, norms and peaceful resolution of disputes.
- The 'Blue Economy' has emerged as a promising new pillar of prosperity in the region, with immense economic and employment potential. India is engaging with its neighbours in Blue Economy initiatives, particularly in the areas of marine bio-technology, exploration and sustainable exploitation of ocean mineral resources, sustainable fishing practices, and harnessing of ocean energy.



Challenges for SAGAR:

- The main challenge is to ensure **intra-ocean trade and investment, and the sustainable harnessing of the wealth of the seas, including food, medicines and clean energy.**
- Security is fundamental to the SAGAR vision. If the revitalised maritime economy of the Indian Ocean region is to be a force for global economic growth, it is essential that the waters remain peaceful, stable and secure.
- The waters must not only be better connected but they should remain free from non-traditional and traditional threats that could impede the seamless movement of goods, people and ideas.
- The Indian Ocean is **prone to non-traditional security threats** like **piracy, smuggling, maritime terrorism, illegal fishing, and trafficking of humans and narcotics.**

3.9. Economic Cooperation and Trade Agreement

Why In News?

- India and Australia signed an **Economic Co-operation and Trade Agreement (ECTA)** with an eye on **doubling bilateral trade to $50 billion** in five years and easing the movement of **people, goods and services across borders**.
  - The negotiations for India-Australia ECTA were formally re-launched on 30 September 2021 and concluded on a fast-track basis by the end of March 2022.
  - In February, India signed an **FTA with the UAE** and is currently working on **FTAs with Israel, Canada, UK and the European Union.**

Salient Features of India-Australia ECTA

- The India-Australia ECTA is the **first trade agreement of India** with a developed **country after more than a decade.**
  - **Free Trade Agreement** is a **pact between** two or more nations to reduce barriers to imports and exports among them.
- The Agreement encompasses **cooperation across the entire gamut of bilateral economic and commercial relations** between the two friendly countries and covers areas like
  - Trade-in Goods, Rules of Origin, Trade in Services, Technical Barriers to Trade (TBT), Sanitary and Phytosanitary (SPS) measures, Dispute Settlement, Movement of Natural Persons, Telecom, Customs Procedures, Pharmaceutical products, and Cooperation in other Areas.
    - Eight subject-specific side letters covering various aspects of bilateral economic cooperation were also concluded as part of the Agreement.

Commitments:

By Australia:

- As regards trade in services, Australia has offered wide-ranging commitments in around **135 sub-sectors and Most Favoured Nation (MFN) in 120 sub-sectors** which cover key areas of India's interest like IT, ITES, Business services, Health, Education, and Audiovisual. Some of the key offers from Australia in the services space include:
  - Q**uota for chefs and yoga teachers;** Post-study work visa of 2-4 years for Indian students on reciprocal basis; mutual recognition of Professional Services and Other licensed/regulated Occupations; and Work & Holiday visa arrangement for young professionals.

By India:

- On the other hand, India has offered market access to **Australia in around 103** sub-sectors and Most Favoured Nation in 31 sub-sectors from the 11 broad service sectors such as 'business services', 'communication services', 'construction and related engineering services, and so on.
  - Both sides have also agreed to a **separate Annex on Pharmaceutical products under this agreement**, which will enable fast track approval for patented, generic and biosimilar medicines.

Impact or Benefits

- ECTA provides an **institutional mechanism** to **encourage and improve trade** between the two countries.
  - Growing **India-Australia economic and commercial relations** contribute to the **stability and strength of a rapidly diversifying** and deepening relationship between the two countries.
- The ECTA covers almost all **the tariff lines dealt in by India and Australia respectively.**
  - India will benefit from **preferential market access provided by Australia on 100% of its tariff lines.**
    - This includes all the **labour-intensive sectors** of export interest to India such as Gems and Jewellery, Textiles, leather,

footwear, furniture, food, agricultural products, engineering products, medical devices, and Automobiles.
    - On the other hand, India will be **offering preferential access** to **Australia on over 70% of its tariff line**s, including lines of export interest to Australia which are primarily raw materials and intermediaries such as coal, mineral ores and wines etc.
- This agreement will **facilitate the exchange of students,** professionals, and tourists between us, which will further strengthen these relations.
- It will create **new employment opportunities,** raise living standards and improve the general welfare of the people of the two countries.
- It will **facilitate work visas for two to four years** for Indian students in Australia on a 'reciprocal basis' and allow Indian chefs and yoga professionals to work Down Under.
- The **India-Australia ECTA** will further cement the already deep, close and strategic relations between the two countries and will significantly enhance bilateral trade in goods and services, create new employment opportunities, raise living standards, and improve the general welfare of the peoples of the two countries.

4. Science & Technology

4.1. Crypto Currencies

Why In News?

- The Lok Sabha approved the Finance Bill, 2022. The approval completes the budgetary process for the next financial year. It has proposed to levy a flat 30% tax on capital gains from crypto currencies/assets, non-fungible tokens (NFT) etc. with effect from April 1, 2022.

What is a Cryptocurrency?

- It is a **digital currency** that can be used in place of **conventional money.**
- In cryptocurrencies, **cryptography is used to secure** and **verify transaction**s. It is also used to **control the supply of cryptocurrencies.**
- It is supported by a **decentralized peer-to-peer network called the blockchain**.
- **First cryptocurrency**: **Bitcoin**, launched in 2009 by S**atoshi Nakamoto.**

Key amendments/changes made

- **Definition for crypto assets**
    - The government in the Union Budget for 2022-23 has for the first time provided definition for crypto assets and set out a list of proposals on the taxation of this new asset class.
- **Coverage**
    - The tax proposal covered all emerging digital assets, including non-fungible tokens (NFTs), assets in metaverse, digital currencies and tokens, among others.
- **Tax deducted at source**
    - The Budget also said a 1% TDS (tax deducted at source) will be applicable on payments made on the transfer of digital assets.
- **Loss from the transfer of virtual digital assets**
    - It will not be allowed to be set off against the income arising from the transfer of another VDA in the proposed amendments.
- **30 per cent tax on income**
    - The government will define virtual digital assets with a view to **levy 30 per cent tax on income from all transfers of such assets.**
    - **Section 115BBH** was introduced in the Finance Bill, 2022 to inter alia tax transfer of VDAs.
- **Capital assets**
    - The amendment now seeks to clear the ambiguity by inserting a sub-section

which applied the **2(47) definition to transfer of VDAs** irrespective of whether they are construed as capital assets or not.

- **Infrastructure cost**
  - Incurred in the mining of virtual digital assets including cryptocurrencies will not be allowed as deduction by the taxman.
- **Penalty**
  - Deduction of surcharge and cess, which has been claimed and allowed to the taxpayer, will be deemed to be under-reported income and will attract a 50 percent penalty.
  - They can **voluntarily declare** such classification and avoid the penalty.
- **Retrospective amendment to the Income-tax Act from 2005-06**
  - The Finance Bill 2022 had proposed a **retrospective disallowance of deduction for surcharge or cess under Section 40(a) (ii) with effect from AY2005-06.**
  - **Citing some court rulings** that had given benefit to taxpayers in claiming cess as expenditure and not tax, the tax department said the retrospective amendment is being done to correct the anomaly.

Some issues with the amendments

- **Double taxation**: The proposed amendment on taxation of VDS could possibly lead to transactions in VDA being subject to TDS or TCS under provisions other than Section 194S and Section 194-O, thereby leading to double taxation.
- **Some tax experts opine that it may be possible to set off crypto losses against crypto gains.**
  - Set off of losses means adjusting the losses against the profit or income of that particular year. This provision is available in stock investments.
- **The meaning of the phrase "transfer" was unclear** as the definition of the term provided under Section 2(47) applied only in relation to capital assets.

Benefits of Cryptocurrency

- **Inherent security:** Use of pseudonyms and ledger systems conceals the identities.
- **Low transaction cost:** Very low fees and charges for transactions.
- **Lack of interference from the banking system:** Outside ambit of banking systems.
- **Lower Entry Barriers:** No entry barriers, unlike conventional banking systems.
- **Universal recognition:** Lots of cryptocurrencies and acceptable in many nations.

Concerns/Challenges with Cryptocurrency

- **Security risks:** Cyberattacks on wallets, exchange mechanism (Cryptojacking).
- **Shield to Crime:** Used for Illicit Trading, Criminal Activities, & organized crimes.
- **Threat to the Indian rupee:** If a large number of investors invest in digital coins rather than rupee-based savings like provident funds, the demand of the latter will fall.
- **Lack of Liquidity and Lower Acceptability:** Outside the traditional banking systems.
- **Price Volatility:** Prone to price fluctuations & waste of computing power.
- **Lack of Consumer Protection:** No Dispute Settlement Mechanisms and control of Securities and Exchange Board of India (SEBI).

4.2. 5G Vertical Engagement and Partnership Program (VEPP)

Why in News?

- The Department of Telecommunications (DoT) has invited Expressions of Interest (EoI) for the "5G Vertical Engagement and Partnership Program (VEPP)".

5G Vertical Engagement and Partnership Program (VEPP):

- The 5G Vertical Engagement and Partnership Program (VEPP) initiative aims to build strong

collaboration partnerships across 5G use-case ecosystem stakeholders.

- In order to multiply the 5G opportunities across the usage verticals, Digital Communications Commission is constituted with representatives from the Ministry of Electronics and IT, the Department of Science and Technology & relevant Vertical Ministries.
- Vertical Ministries viz. Agriculture, Health, Urban Affairs, Education, Power, Mines, Jalshakthi, Commerce, Ports, Railways, Heavy Industries, Road Transport, Tourism, etc. to facilitate collaborative efforts across stakeholders.

Roles of Stakeholders under 5G Vertical Engagement and Partnership Program (VEPP)

Role of the VEPP Partner

- Identify Single Point of Contact (SPoC)
- Ideate and collaborate with other ecosystem players for relevant 5G use cases
- Facilitate access to relevant premises/campus/infra/data for use-case piloting and prototyping to address prevalent problems and also performance efficiencies

Facilitation from DoT

- Non-exclusive access to 5G Tech Ecosystem to enable partnerships
- Conduct awareness sessions on 5G opportunities in the respective vertical at NTIPRIT
- Use case Standardization & Interoperability with the support of TEC & C-DOT

Role of Tech Stakeholders

- Deploy use cases as per the needs of the Vertical User requirements which would potentially accelerate 5G commercial deployment and adoption by enterprises

4.3. Bernardinelli-Bernstein Comet

Why in News?

- Recently, the National Aeronautics and Space Administration's (NASA) Hubble Space Telescope has confirmed that the huge Bernardinelli-Bernstein comet is indeed the largest icy comet nucleus ever seen by astronomers.
- The nucleus is called the C/2014 UN271 which has an estimated diameter of almost 129 kilometres.
- The nucleus is around 50 times larger than that of most known comets, and its mass is estimated to be around 500 trillion tonnes.

What is the Bernardinelli-Berstein Comet?

- The comet was discovered by astronomers Pedro Bernardinelli and Gary Bernstein in archival images from the Dark Energy Survey at an astronomical observatory in Chile.
- It was discovered in November 2010 and has been intensively studied since.
- The comet has been travelling towards the sun for over a million years and it is believed to have originated in the Oort Cloud.
- Oort Cloud is a distant region of the solar system that is predicted to be the source of most comets.
- The Oort Cloud is still only a theoretical concept as the comets that constitute it are too faint and distant to be directly observed. It was first hypothesised by Dutch astronomer Jan Oort in 1950.
- The Bernardinelli-Berstein comet follows a 3-million-year-long elliptical orbit and has an estimated temperature of minus 348 degrees Fahrenheit.
- It is warm enough to sublimate carbon monoxide (CO) from the surface to produce the dusty coma.

What is a Comet?

- Comets are large objects made of dust and ice that orbit the Sun.
- The word comet comes from the Latin word 'Cometa' which means 'long-haired'.
- The earliest known record of a comet sighting was made by an astrologer in 1059 BC.

- Comets or 'dirty snowballs' are mostly made of dust, rocks and ice and can range in their width from a few miles to tens of miles wide.
- When they orbit closer to the sun, they heat up and release debris of dust and gases.
- The solid portions of comets consisting mostly of water, ice and embedded dust particles are inactive when far away from the sun.
- When near the sun, the icy cometary surfaces vaporize and throw off large quantities of gas and dust thus forming the enormous atmosphere and tails.
- The released gases form a glowing head that can often be larger than a planet and the debris forms a tail that can stretch out to millions of miles.
- Each time a comet passes the sun, it loses some of its material and it will eventually disappear completely as a result.
- Comets may be occasionally pushed into orbits closer to the Sun and the Earth's neighbourhood due to forces of gravity.

Where do Comets Come From?

- According to NASA, while there are millions of comets orbiting the sun, there are more than 3,650 known comets as of now.

Predictable Comets:

- The predictable comets are the short-period comets which take less than 200 years to orbit around the sun.
- These can be found in the Kuiper belt, where many comets orbit the sun in the realm of Pluto.
- One of the most famous short-period comets is called Halley's Comet that reappears every 76 years. Halley's will be sighted next in 2062.

Less Predictable Comets:

- The less-predictable comets can be found in the Oort cloud that is about 100,000 AU (Astronomical Unit which is the distance between the Earth and the Sun and is roughly 150 million km) from the sun or 100,000 times the distance between the Earth and the sun.
- Comets in this cloud can take as long as 30 million years to complete one rotation around the sun.

4.4. Space Bricks

Why In News?

- Indian Space Research Organisation and the Indian Institute of Science have developed a sustainable process of making bricks on the moon.

About

Bricks

- The process uses urea, lunar soil, bacteria and guar beans in the making of these bricks.

Process

- The process of creating these bricks involves using urea which can be readily found in human urine and mixing it with lunar soil are the raw materials.
- Adding guar gum that is extracted from guar beans.
- Another option is using a bacterium called Sporosarcina pasteurii, they found, which produces calcium carbonate crystals through a metabolic pathway called the ureolytic cycle.

Significance

- It could be useful in building self-sustaining structures on the moon.
- Many countries have hopes of sending humans to the moon, Mars and the outer planets of our solar system.
- ISRO is working on sending the first human being to orbit in the Gaganyaan mission, slated for 2022.

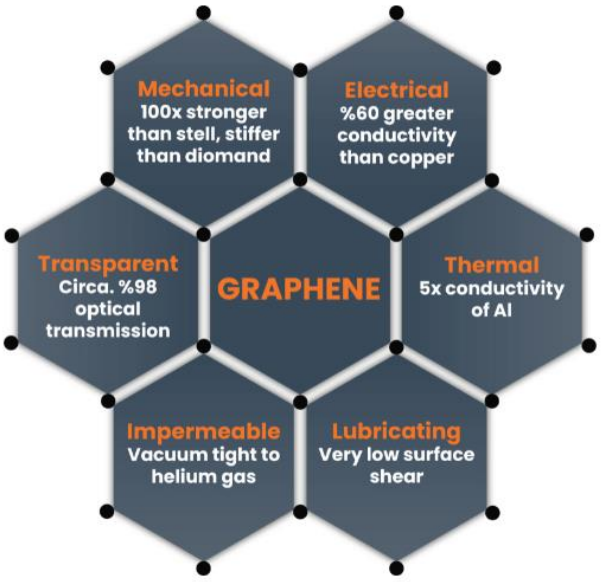
4.5. Anti-Ship Version of Brahmos Missile

Why in the news?

- The Indian Navy and the Andaman and Nicobar Command have successfully tested an anti-ship variant of the BrahMos supersonic cruise missile.
- The Andaman and Nicobar Command is the Indian armed forces' sole tri-services command.

What exactly is BrahMos?

- BrahMos is a collaboration between India's Defence Research and Development Organization (DRDO) and Russia's NPOM.
- The rivers Brahmaputra and Moskva inspired the name BrahMos.
- It is a two-stage missile (first stage with a solid propellant engine and second stage with a liquid ramjet).
- It is a multiplatform missile, meaning it may be fired from land, air, or sea, as well as a multi capability missile with pinpoint precision that can operate at any time of day or night, regardless of weather conditions.
- It operates on the **"Fire and Forgets"** concept, which means that it does not require any direction after launch.
- Brahmos is one of the fastest cruise missiles presently in service, with a speed of Mach 2.8,



or nearly three times the speed of sound.

- The Indian Air Force (IAF) previously successfully tested the BrahMos missile from a Sukhoi fighter plane.
- The Indian Navy recently conducted a successful test-fire of an improved variant of the Brahmos missile from a stealth warship in the Indian Ocean.
- Following India's entrance into the **MTCR (Missile Technology Control Regime)** club in June 2016, the range is expected to be increased to 450 km, with a subsequent extension to 600 km.
- The BrahMos missile was initially designed with a range of 290 kilometres.

What kind of defence equipment does India get from Russia?

- Six conventional submarines propelled by Air Independent Propulsion (AIP) are being built as part of the P75-I project.
- Two nuclear-ballistic submarines are being leased.
- **Frigates and guided-missile destroyers:** Four of the Navy's ten guided-missile destroyers are of the Russian Kashin class, while six of its seventeen frigates are of the Russian Talwar class.

4.6. Charge Density Wave States

Why in News?

- A group of researchers from Indian Institute of Science (IISc), Bengaluru, has discovered that Graphene may possess a new phase called charge density wave states.

About Graphene

- Graphene is an allotrope of carbon consisting of a single layer of atoms arranged in a two-dimensional honeycomb lattice
- It is the building-block of Graphite.It is the thinnest, most electrically and thermally conductive material in the world, while also being flexible, transparent and incredibly strong.
- Graphene is also known as a wonder material due to its vast potential in the energy and medical world.

Recent Study

- Twisted bilayer graphene has been studied for several years. Researchers in IISc produced the material for study. The second layer was twisted with respect to the first by a small angle between one and two degrees. Then they made a third layer of tungsten diselenide to complete the device.
- Tungsten diselenide shows a property called spin-orbit coupling, which is a link between the intrinsic spin and the orbital angular momentum of the electrons.
- Adding this layer, they endowed the material with unique properties and created the charge density wave states.

Characteristics of Charge Density Wave States

- Normally in a conductor, the charge carriers, for example electrons, are free to move anywhere in the conductor.
- But in charge density wave state, some areas are restricted and the electrons can move only in the allowed regions.
- Just like there are variations in particle density in a sound wave, these states show a wave-like variation in the charge density.

4.7. Near Field Communications (NFC)

Why In News?

- **Google Pay** has recently launched a new feature in India, **'Tap to pay for UPI',** in collaboration with Pine Labs.
    - The feature makes use of **Near Field Communication (NFC) technology.**

What is Near Field Communication (NFC)?

- It is a **short-range wireless connectivity technology** that allows NFC-enabled **devices to communicate** with **each other and transfer information** quickly and **easily with a single touch** — whether to **pay bills, exchange business cards, download coupons or share a document.**
- It **transmits data** through **electromagnetic radio fields**, to enable communication between two devices.
    - Both devices must contain **NFC chips**, as transactions take place within a very short distance.
    - NFC-enabled devices must be either **physically touching or within a few** centimetres from each other for data transfer to occur.
- **In 2004,** consumer electronics companies, Nokia, Philips and Sony together formed the NFC Forum, which outlined the architecture for NFC technology to create powerful new consumer-driven products.
    - Nokia released the first NFC-enabled phone in 2007

How does it work?

- Google Pay has been the first among UPI apps to bring the **Tap to Pay feature to work on POS terminals**.
- It **will allow users with UPI accounts configured** on Google Pay to make payments just by **tapping their NFC-enabled Android smartphones** on any Pine Labs Android POS terminal.
- Once users **tap their phones on the POS terminal**, it will **automatically open the Google pay app with the payment amount pre-filled.**
- Users can then **verify the amount and merchant name** and authenticate the payment, using their UPI PIN.
- They will be notified once the payment is successful.
- The p**rocess is much faster compared to scanning** a QR code or entering the UPI-linked mobile number which has been the conventional way till now.

the other applications of NFC technology

- NFC tech has a **wide range of application**s besides driving payment services like **Google Wallet and Apple Pay.**
- It is used in **contactless banking cards** to perform money transactions or to generate contact-less tickets for public transport.

- **Contactless cards** and **readers use NFC** in several applications from securing networks and buildings to monitoring inventory and sales, preventing auto theft, keeping tabs on library books, and running unmanned toll booths.
- It is **present in speakers, household appliances**, and **other electronic devices**
- It also has an application in healthcare, to monitor patient stats through NFC-enabled wristbands. NFC is used in wireless charging too.

Safety Level

- It is **designed for an operation** between devices within a few **centimetres from each other.**
- This makes it **difficult for attackers to record** the communication between the **devices compared to other wireless technologie**s which have a working distance of several metres.
- The **user of the NFC-enabled device** determines by the touch gesture which entity the **NFC communication should take place** with, making it more difficult for the **attacker to get connected**.
- The security level of NFC communication is by defaul**t higher compared to other wireless communication protocols.**
- The NFC Forum has also added **Peer to Peer communication which is a mechanism to cipher all exchanged data** to avoid external interpretation of recorded communication.

4.8. Facial Recognition System (FRS)

Why In News?

- Facial Recognition System (FRS) will be implemented in a phased manner.

About

- Facial recognition System is part of the **Digi Yatra initiative** of the government for providing passengers **seamless and hassle-free experience** at airports.
- The first phase is planned at **Kolkata, Varanasi, Pune, Vijayawada, Bangalore, Delhi and Hyderabad** Airports by March 2023.
- Preliminary testing of the Digi Yatra Biometric boarding system with registration for the 'Day of Travel' at these airports has been completed.

What is a Face Recognition System?

- **About:**
  - This system is used to **identify an individual** from an image.
- **Process:**
  - Firstly, a face image or an image sequence is given as the input to the system.
  - The image can be acquired in real time as well using cameras and sensors.
  - Then, the FRS will process a feature extraction and match it with the images in the stored database.
- **Two processes are very important, they are:**
  - **Verification:** It generally is the process known as a **1-to-1 matching** system because the system tends to match the biometric given by the individual with a reference biometric already on file.
  - **Identification:** It generally is the process also known as a **1-to-many matching** system. The system tends to identify an unknown person, or unknown biometric.

Need of Facial Recognition System

- The requirement of security is dynamic in nature.
- The **Bureau of Civil Aviation Security (BCAS)** in consultation with other concerned agencies and stakeholders, **reviews the security arrangements** at airports from time to time and upgrades the same as per requirement.

Significance of FRS

- **Finding missing people:** With facial recognition, law enforcement agencies have been able to track down missing children,

sometimes even after they've been missing for years.

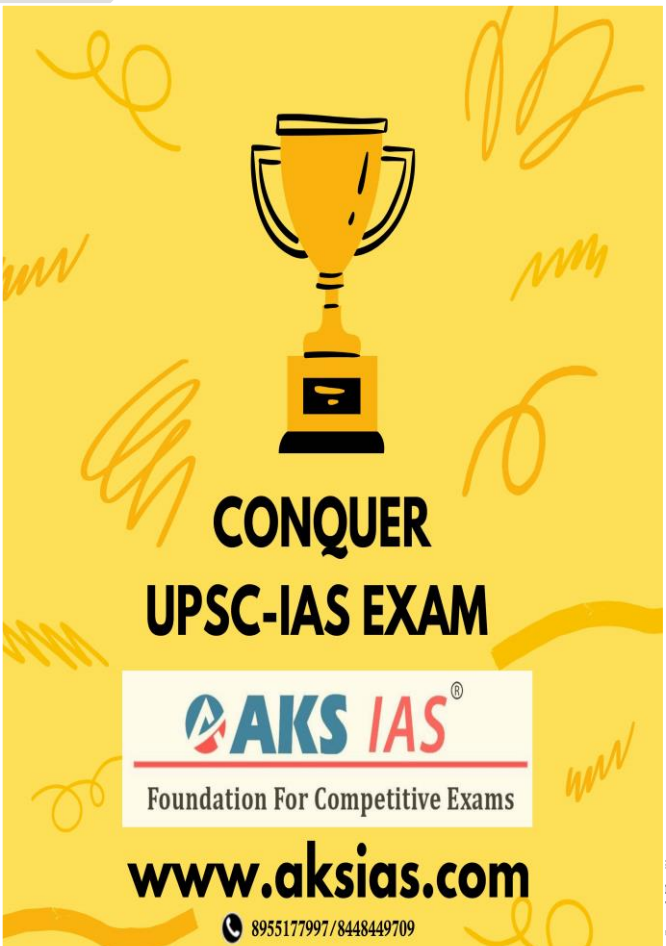
- **Identifying criminals:** Law enforcement agencies can also use facial recognition to identify criminals or suspects in crimes.
- **Making flying safer:** Airports across the globe are using facial recognition to identify criminals and potential threats as they enter airports or try to board flights.
- **More efficient shopping:** Retailers can use facial recognition to make it easier for consumers to check out. Instead of forcing customers to pay with cash or credit, retailers can use facial recognition to immediately charge their purchases to their accounts.

Challenges

- **Pose variation:**
  - Variation in pose causes significant problems in detecting a face. Since the existing FRSs are very sensitive to pose variation, pose correction is essential.
- **Variation in illumination:**
  - Variations of illuminations could reduce the efficiency of FRS.
  - Variation in illumination can vary the total magnitude of light intensity being reflected back from an object.
- **Variation in expression:**
  - Cosmetics and hair styles can also be included in this challenge as changing hair style and putting make-up can also cause variation in facial expression.
- **Ageing:**
  - Another reason for the changes in the appearance of the face could be the aging of the human face and could affect the entire process of face recognition.
  - As per various studies conducted by scientists, in every 10 years there will be significant changes in an individual's face appearance.
- **Occlusions:**
  - Variation in facial appearance can also be caused due to the presence of objects such as occlusion that partially cover the face.
- **Image Resolution:**
  - The varying quality and resolution of the images given as input is also an issue.

Application

- **Security:** One important application of face recognition in airports, ATM machines, border checkpoints etc. It is also widely used in automatic home security systems nowadays.
- **Surveillance:** The use of face recognition techniques come handy in detecting criminals in public areas using CCTV cameras and authorities can be notified.
- **General Identity Verification:** This is the most widely used application of FRSs. We can see this in the areas such as banking, electoral registration, passport identification, Attendance systems in industries as well as in educational institutions.
- **Multi-media environments** with adaptive human computer interfaces. This can be seen in places where continuous monitoring is required, for example childcare centres, hospitals, prison, old age homes etc.
- **Video indexing:** Labelling faces in a video. Most social media applications have this feature. Automatically identifying faces in an image based on your friend list.



5. Social Issues & Justice

5.1. Is Hindi or English beneficial as the link language?

Why in News?

- Union Home Minister's suggestion, made at a meeting of the Parliamentary Official Language Committee, that people of different states should communicate with each other in Hindi rather than English has drawn criticism from several sections.

Arguments against making Hindi the link language:

Threatens unity of the country:

- Though the Home Minister has clarified that the suggestion was that hindi should be accepted as an alternative to English and not to local languages, yet this is being seen as imposition of Hindi on non-Hindi speaking population of the country.
- As against the objective to make Hindi language an important part of the unity of the country, such moves can instead act as a body blow to the unity of the country. Such imposition of Hindi language threatens to revive regionalism given that several states in the country's south are especially sensitive to the language debate because they were founded on the bedrock of linguistic subnationalism after intense and prolonged campaigns.

Harms linguistic diversity of India:

- The push for "one nation, one language" amounts to the imposition of a single language over the country's diverse linguistic cultures. This could adversely impact the linguistic diversity of the country. Some of the regional languages are even older than Hindi and are part of the cultural heritage.
- According to Article 344(1) and the 8th Schedule of the Indian Constitution, there are 22 official languages.

Large proportion of non-Hindi speaking population:

- Though Hindi remains the major language spoken in India, notably however non-Hindi speaking population is numerically higher than Hindi speaking population if one considers languages like Bhojpuri, Rajasthani and Chhattisgarhi as distinct from Hindi.
- Residents of only 12 of the 35 States and Union Territories (UTs) reported Hindi as their first choice of language for communication (Census 2011). While 43% of Indians speak "Hindi", only 26% speak Hindi specifically as their mother tongue. This questions the argument used for pushing Hindi as a link language.

Utility of adopting English as a link language:

- An analysis of the data on migration and development indices show that there is a stronger case for English to be the link language rather than Hindi.
- Regions and states with a higher share of English speakers have higher Human Development Index (HDI) scores while states with a higher share of Hindi speakers have relatively low HDI scores. This is indicative of a positive correlation between a higher standard of living and a higher share of English speakers.
- The pattern of migration also offers a valuable insight. While States which have a high share of Hindi speakers have witnessed net out-migration predominantly non-Hindi speaking states have witnessed net in-migration.

- More people from the Hindi-speaking States have been migrating towards the non-Hindi speaking regions in search of better livelihoods. This pattern was observed for all types of migrations including those done for work and education.
- In this respect English language would be more beneficial for citizens and it would be better to have Hindi speakers benefit by learning English rather than have non-Hindi speaking population learn Hindi.
- Notably, growth engines of Indian economy like the cities of Bengaluru, Hyderabad have been able to make a mark for themselves in the international arena partly attributable to the usage of English language which has functioned as a global link language.

5.2. Integrated Child Development Scheme

Why in News?

- Recently, the Maharashtra government has developed a Migration Tracking System (MTS) application to map the movement of migrant workers to maintain the continuity of the Integrated Child Development Services (ICDS) like nutrition supply, immunisation and health check-up etc.
- MTS is a website based Application that tracks the movement of Vulnerable Seasonal Migrant Workers, through individual unique identity numbers.
- Migrant beneficiaries including children aged up to 18 years, lactating mothers and pregnant women registered with the anganwadi centres will be tracked for ensuring the portability of the ICDS for their families in their destination districts within or outside the state until their return to their native places.

What is ICDS?

About:

- The Umbrella ICDS is a centrally sponsored scheme implemented by the Ministry of Women and Child Development. It was launched in 1975.

What are the Major Objectives of ICDS?

- To improve the nutritional and health status of children in the age-group 0-6 years.
- To lay the foundation for proper psychological, physical and social development of the child.
- To reduce the incidence of mortality, morbidity, malnutrition and school dropout.
- To achieve effective coordination of policy and implementation amongst the various departments to promote child development.
- To enhance the capability of the mother to look after the normal health and nutritional needs of the child.
- To facilitate, educate and empower Adolescent Girls (AGs) so as to enable them to become self-reliant and aware citizens.

5.3. Raising The Marriage Age For Women

Why in News?

- The Parliamentary Standing Committee assigned to study the Prohibition of Child Marriage (Amendment) Bill 2021, held its 2nd meeting.

Details

- The Parliamentary Standing Committee on Education, Women, Children, Youth and Sports met to discuss the provisions of the Prohibition of Child Marriage (Amendment) Bill 2021.

Prohibition of Child Marriage (Amendment) Bill 2021

- According to the National Family Health Survey 2019-21 (NFHS-5), 23% of women between the age of 20 and 24 were married before 18 years of age.
- In India, the practice of child marriage was first legally prohibited in 1929 through the Child Marriage Restraint Act, 1929.
- As per the 1929 Act, marriage of girls below the age of 14 years and boys below the age of 18 years was prohibited.

- This Act was amended in 1978 to increase the minimum age to 18 years for females, and 21 years for men.
- The Prohibition of Child Marriage Act, 2006 replaced the 1929 Act, with the same minimum age limits.
- The Prohibition of Child Marriage (Amendment) Bill, 2021 seeks to increase the minimum age of marriage for females to 21 years.
- The Bill was referred to the Standing Committee on Education, Women, Children, Youth, and Sports on December 21, 2021.
- The Bill was introduced to amend the Prohibition of Child Marriage Act, 2006.
- The main objective is to increase the minimum age of marriage for females to 21 years.
- Under the 2006 Act, a person married below the minimum legal age (18 years) may apply for dissolution within two years of reaching majority (before 20 years of age).
- The 2021 Bill is going to increase this to five years (23 years of age).
- Repeated pregnancies and Childbirth before they are physically mature and psychologically ready.
- Domestic violence, women feel powerless and lack access to vital resources and decision-making power

Child Marriage

- Child Marriage is defined as a marriage of a girl or boy before the age of minimum legal age (18 years).
- **The reason behind Child Marriage**
    - It is a widely practiced social custom.
    - Poverty and Illiteracy of a Child's parents.
    - Social and Economic Condition of the family including the Cultural values of the family and the Surrounding Society.
    - Lack of awareness about the harmful effects Lack of easy access to Schooling.
- Political Patronage: Due to Social acceptance politicians find it difficult to oppose the practice of child marriage as it may mean losing votes and Support.
- Child marriage is also widely reported to be used to traffic girls from poor and tribal families for either Sex trade or as cheap labour.
- It is more prevalent in rural areas.
- Rates of Child marriage are highest in Central and Western parts of India and lower in the eastern and southern parts of India.

Result of Child Marriage

- It Restricts access to education and better opportunities in the future.
- It limits the freedom of decision and promotes socio-economic and gender inequality.
- It is associated with multiple health risks, limited Knowledge and access to, and use of, Contraception and reproductive health services and information.

Significance of the Bill

- Increasing the minimum age of marriage for females to 21 years, ensures gender equality, as the legal marriage age for males is already 21 years, different ages of marriage promote the Stereotype that wives must be younger than their husbands.
- The Bill increases the minimum age of marriage for females to 21 years. This signifies that a person married between 18 and 21 years may also apply for voiding the marriage.
- Increasing the age of marriage will help in achieving various goals including improvement of maternal and infant mortality rates (IMR and MMR), nutrition levels, the sex ratio at birth (SRB), female labour force participation, and gender equality, and will lead to the empowerment of women.

Concern

- About a quarter of 20-24-year-old women are married before the age of 18 years, despite that being the minimum age of marriage since 1978.
- The limited success of the current law raises the question of whether an increase in minimum age would have any significant impact on reducing the incidence of child marriage

- According to NFHS-5 (2019-21), the prevalence of underage marriages remains high, with 23% of women between 20 and 24 years of age married before the age of 18. At the same time, the detection of such marriages remains low, with only 785 cases registered under the law in 2020.
- This raises the question of whether the increase in the minimum age would have any significant impact on reducing child marriages.
- Increasing the legal age for marriage for women will increase the number of marriages performed underage and render young adults without legal protection.

Steps by Government

- Beti Bachao Beti Padhao to address the declining Child Sex Ratio.
- PM Matru Vandana Yojana (PMMVY) Providing Cash incentives for improved health and nutrition to pregnant and nursing mothers.
- Scheme for Adolescent Girls aims at girls in the age group 11-18, to empower and improve their social status through nutrition, life skills, home skills and vocational training
- Pradhan Mantri Mahila Shakti Kendra scheme promotes community participation through the involvement of Student Volunteers for the empowerment of rural women
- National Crèche Scheme to provide daycare facilities to children of the age group of 6 months to 6 years of working women who are employed.
- Rashtriya Mahila Kosh (RMK) to provide micro-credit to poor women for various livelihood support and income-generating activities at concessional terms
- Swadhar Greh to provide relief and rehabilitation to destitute women and women in distress.
- Ujjawala is a Comprehensive Scheme for the prevention of trafficking and for rescue, rehabilitation, reintegration and repatriation of victims of trafficking for commercial sexual exploitation.
- Working Women Hostels for ensuring safe accommodation for women working away from their place of residence.
- One-Stop Centre (OSC) and Women Helpline (WH) are being implemented to facilitate access to an integrated range of services including medical aid, police assistance, legal aid/ case management, psychosocial counseling and temporary support services to women affected by violence.
- Emergency Response Support System set up under Nirbhaya Fund.
- Mahila Police Volunteers, to report the incidences of violence against women.
- Dowry Prohibition Act, 1961, Penalizes Giving & taking.
- SABLA Scheme, Providing life Skills andSupplementary nutrition to out of Schoolgirls.
- The national database on Sexual offenders includes the name, addresses, photographs and fingerprint details of those Convicted in Sexual assault Cases.

National Policy for Women, 2016

- Addresses women's issues throughout life-Cycle, issues from education, health, economic participation, decision making, violence, Creation of an enabling environment etc.
- In 2020, the Union government has set up a task force under Ms Jaya Jaitly, it suggested increasing the age of marriage for females to 21.

Way Forward

- The practice of child marriages is largely due to the overall social customs, tradition, illiteracy, poverty, low status of women in society, and lack of awareness. These issues cannot be tackled by legislative interventions alone.
- There is a need for improved access to education, skill training and employment opportunities, safety for women and strengthening maternal health services to reduce maternal and infant mortality rates.
- The issue of rising the age of marriage for women must be supported with the measures that help delay underage marriages such as access to education and improving women's safety.

6. Health

6.1. Achieving Universal Health Care

Why in News?

- The Covid-19 crisis has provided a good time to revive an issue that is, oddly, slow to come to life in India — Universal Health Care (UHC).
- Universal Health Care is seen as a route to building robust, responsive and efficient health systems capable of addressing growing inequalities in healthcare demands along with shielding populations from spiralling healthcare and medicine costs.

What is Universal Health Care (UHC)?

- The basic idea of UHC is that no one should be deprived of quality health care for the lack of ability to pay. UHC, in recent times, has become a critical indicator for human equity, security and dignity.
- UHC has become a well-accepted objective of public policy around the world. It has even been largely realised in many countries, not only the richer ones (except the US) but also a growing number of other countries such as Brazil, China, Sri Lanka and Thailand.

The time has come for India (or some Indian States at least) to take the plunge.

What are the Routes to Achieve UHC?

- UHC typically relies on one or both of two basic approaches: public service and social insurance. In the first approach, health care is provided as a free public service, just like the services of a fire brigade or public library.
- The second approach (social insurance) allows private as well as public provision of health care, but the costs are mostly borne by the social insurance fund(s), not the patient,
- Quite different from a private insurance market, it is the one where insurance is compulsory and universal, financed mainly from general taxation, and run by a single non-profit agency in the public interest.
- The basic principle is that everyone should be covered and insurance should be geared to the public interest rather than private profit.

What are the Challenges to UHC?

- Unavailability of Public Health Centres: Even in a system based on social insurance, public service plays an essential role. The absence of public health centres, dedicated to primary health care and preventive work, create the risks of patients rushing to expensive hospitals every other day thus making the whole system wasteful and expensive.
- Containing Costs: Containing costs is a major challenge with social insurance, because patients and health-care providers have a joint interest in expensive care — getting better healthcare for one and earning for the other.
- A possible remedy is to make the patient bear part of the costs but that conflicts with the principle of UHC.
- Recent evidence suggests that even small co-payments often exclude many poor patients from quality health care.
- Identifying Services under UHC: Another big challenge remains in identifying what services are to be universally provided to begin with and what level of financial protection is considered acceptable.
- Offering the same set of services to the entire population is not economically feasible and demands huge resource mobilisation.
- Regulation of Private Sector: Another challenge with social insurance is to regulate private health-care providers. A crucial

distinction needs to be made between for-profit and nonprofit providers.
- Non-profit health-care providers have done great work around the world
- For-profit health care, however, is deeply problematic because of the pervasive conflict between the profit motive and the well-being of the patient.

What is the HOPS Framework and How will it Help Achieve UHC?

- About: It is possible to envisage a framework for UHC that would build primarily on health care as a public service. The framework might be called "Healthcare As An Optional Public Service" (HOPS).
- Under HOPS, everyone would have a legal right to receive free, quality health care in a public institution if they wish. It would not prevent anyone from seeking health care from the private sector at their own expense.
- But the public sector would guarantee decent health services to everyone as a matter of right, free of cost.
- Example: Some Indian States are already doing so, such as in Kerala and Tamil Nadu, most illnesses can be satisfactorily treated in the public sector at little cost to the patient.
- Significance: If quality health care is available for free in the public sector, most patients will have little reason to go to the private sector.
- Social insurance could also play a role in this framework by helping cover procedures that are not easily available in the public sector (e.g., high-end surgeries).
- Although HOPS would not be as egalitarian as the national health insurance model initially, it would still be a big step toward UHC.
- Moreover, it will become more egalitarian over time, as the public sector provides a growing range of health services.

What can be the Way Forward?

- **Vibrant Health System:** A vibrant health system shall include not only good management and adequate resources but also a sound work culture and professional ethics.
- A primary health centre can work wonders, but only if doctors and nurses are on the job and care for the patients.
- **Standards for UHC:** The main difficulty with the HOPS framework is to specify the scope of the proposed health-care guarantee, including quality standards. UHC does not mean unlimited health care: there are always limits to what can be guaranteed to everyone.
- HOPS shall lay down certain health-care standards along with a credible method to revise these standards over time. Some useful elements are already available, such as the Indian Public Health Standards.
- **State Specific Legislation on Health:** Tamil Nadu is well placed to make HOPS a reality under its proposed Right to Health Bill. The state is already successful in providing most health services in the public sector with good effect.
- A Right to Health Bill would be an invaluable affirmation of the State's commitment to quality health care for all; it would empower patients and their families to demand quality services, helping to improve the system further.
- Tamil Nadu's initiative could be an emulation for other states.
- **Health Financing:** In order to achieve UHC, it is vital that governments intervene in their country's health financing system to support the poor and vulnerable.
- This requires establishing compulsory publicly governed health financing systems with a strong role for the state in raising funds fairly, pooling resources and purchasing services to meet population needs.
- Greater targeted financing for public health systems will help tackle inherent weaknesses around quality of care and access, reduce out of pocket spending on drugs and improve human resource and infrastructure shortfalls.

6.2. Guillain Barre Syndrome

Why In News?

- The risk for developing Guillain-Barré syndrome after receipt of a COVID-19

vaccine is small, but higher with the Johnson & Johnson shot.

Guillain-Barré syndrome (GBS)

- **About:**
  - It is a rare condition in which a **person's immune system attacks the peripheral nerves.**
  - The **syndrome can affect** the nerves that **control muscle movement** as well as those that **transmit pain, temperature and touch sensations**.
    - This can result in muscle weakness and loss of sensation in the legs and/or arms.
  - It is more common in adults and in males, people of all ages can be affected.
- **Causes:**
  - Guillain-Barré syndrome is often preceded by an infection. This could be a bacterial or viral infection. Guillain-Barré syndrome may also be triggered by vaccine administration or surgery.
- **Symptoms:**
  - Weakness or tingling sensations. They usually start in the legs, and can spread to the arms and face.
  - For some people, these symptoms can lead to paralysis of the legs, arms, or muscles in the face.
- **Treatment:**
  - It is **potentially life-threatening**. GBS patients should be hospitalised so that **they can be monitored closely.**
  - **Supportive care includes monitoring** of breathing, heartbeat and blood pressure.
  - Some patients also need immunological therapies.

6.3. Health Data Management (HDM) Policy

Why In News?

- The **National Health Authority (NHA)** has revised the **draft Health Data Management (HDM) policy** with the objective to protect individuals' personal data.

About the new policy

- **Federated architecture**
  - The NDHE is based on the principle of federated architecture, which allows interoperability between independent and decentralised information systems, while enhancing the security and privacy of personal data of individuals.
- **Applicability**
  - The provisions of this Policy shall be applicable to all the entities and individuals who are part of the Ayushman Bharat ecosystem.
- **Objectives**
  - The key objective of HDM policy is to provide adequate guidance and to set out a framework for the secure processing of personal and sensitive personal data of individuals who are a part of the NDHE in compliance with all applicable laws.
- **Data privacy**
  - HDM policy also aims to increase awareness of the importance of data privacy and instil a privacy-oriented mindset among the members of ABDM and its ecosystem partners.
  - To ensure portability in the provision of health services.

Significance of the policy

- Setting standards for data privacy protection: It acts as a guidance document across the National Digital Health Ecosystem and sets out the minimum standard for data privacy protection.
- It should be followed across the board in order to ensure compliance with relevant and applicable laws, rules and regulations.
- To safeguard digital personal data within the ambit of the NDHE: including the Personal Health Identifier, the electronic health records and electronic medical records, by

implementing adequate technical and organisational measures across the NDHE.

- To create a system of digital health records: This is easily accessible to individuals and healthcare service providers and is voluntary in nature, based on the consent of individuals, and in compliance with relevant standards.
- This will also work to leverage the information systems existing in the Indian health sector by encouraging conformity with the defined data privacy standards and integrating such existing systems with NDHE.

6.4. Global Centre for Traditional Medicine (GCTM)

Why In News?

- Recently, the first-of-its-kind **WHO Global Centre for Traditional Medicine (GCTM)** was inaugurated in **Jamnagar, Gujarat.**

What is Traditional Medicine?

- **The WHO describes traditional medicine** as the total sum of the "**knowledge, skills and practices indigenous** and different cultures have used over time to maintain health and prevent, diagnose and treat physical and mental illness.
- Its **reach encompasses** ancient practices such as **acupuncture, ayurvedic medicine** and **herbal mixtures** as well as modern medicines.
- **Traditional medicine in India** is often defined as including practices and therapies such as **yoga, Ayurveda, Siddha** that have been part of Indian tradition historically, as well as others such as **homoeopathy** that became part of Indian tradition over the years.
- **Practices: Ayurveda and yoga** are practised widely across the country.
    - **The Siddha system** is followed predominantly in Tamil Nadu and Kerala.
    - **The Sowa-Rigpa system** is practised mainly in Leh-Ladakh and Himalayan regions such as Sikkim, Arunachal Pradesh, Darjeeling, Lahaul & Spiti.

About GCTM

- **Establishment**: India (Jamnagar) and the WHO.
    - **Why Jamnagar?: Institute of Teaching and Research in Ayurveda (ITRA)** in Jamnagar supported by the Gujarat government and financed by the central government, is the **first university to offer education and training in the field of Ayurveda across the world.**
- **Aim:** The GCTM will aim to focus on evidence-based research, innovation, and data analysis to optimise the contribution of traditional medicine to global health.
    - Its main focus will be to develop norms, standards and guidelines in technical areas relating to traditional medicine.
- **Significance of the centre**: it will seek to set policies and standards on traditional medicine products and help countries create a comprehensive, safe, and high-quality health system.
- **The GCTM will support efforts to implement the WHO's Traditional Medicine Strategy (2014-23):** which aims to support nations in developing policies & action plans to strengthen the role of traditional medicine in pursuing the goal of universal health coverage.
    - According to WHO estimates, **80% of the world's population** uses traditional medicine.

Challenges faced by traditional medicine

- **National health systems and strategies** do not yet fully integrate traditional medicine workers, accredited courses and health facilities.
- **The WHO has stressed the need to conserve biodiversity** and sustainability as about 40% of approved pharmaceutical products today derive from natural substances.
    - **Examples** are the discovery of **aspirin drawn on traditional**

medicine formulations using the bark of the **willow tree.**
    - **The contraceptive pill** was developed from the roots of **wild yam plants** and child cancer treatments have been based on the **rosy periwinkle.**
- **The WHO has referred to modernisation of the ways traditional medicine is being studied**: Artificial intelligence is now used to map evidence and trends in traditional medicine.
    - **Functional magnetic resonance imaging** is used to study brain activity and the relaxation response that is part of some traditional medicine therapies such as meditation and yoga.
- **Need to build standards**: traditional medicine is also being extensively updated by mobile phone apps, online classes, and other technologies.
    - The GCTM will serve as a hub for other countries, and **build standards on traditional medicine practices and products.**

Significance of the move

- **The WHO says 170 of its 194 WHO Member States** have reported the use of traditional medicine, and these member states have asked for its support in creating a body of reliable evidence and data on traditional medicine practices and products.
- **Jamnagar centre will serve as the hub**, and focus on building a solid evidence base for policies and help countries integrate it as appropriate into their health systems.

7.education

7.1. Online Schooling

Why in News?

- According to a published report "In Delhi, Online school education has marginalized urban poor as nearly 20% kids missed a year of learning".

More Details:

- The Delhi government has allocated 23% of its budget to the education sector, which is the highest in the country.
- The latest study shows that about 8% of school-going children in slums are not enrolled in any school.
- The Study stated that overall there is a positive perception of the conditions of government schools in the capital.
    - Nearly 80% of People have said that the condition of government schools in Delhi has improved in the last 2-3 years.
- The study also highlighted that the children enrolled in Delhi government schools are likely to get more facilities than those admitted to private schools.
    - Nearly 65% of households having a child in a Delhi government school reported that he or she was getting lunch and basic educational facilities like uniforms, books and stationery.
- Many children in the slums have to drop out and are deprived of education due to multiple factors.
    - Households reported that their children are both studying and working
    - Children had to drop out of school to support their families financially.
- School closure from March 2020 made online education essential, resulting in many students missing out on a year of school due to a lack of smartphones and laptops.
- Approx 20% of households having children under the age of 18 years reported that children had to completely stop their studies in the last one to two years because of not having access to a mobile or a laptop.

Challenges in Indian Education System

- India has achieved universal enrolment at the elementary level. This is a great achievement, but getting Students to School is only the beginning of human Capital formation.
- Poor quality of facilities, Shortage of qualified faculty.
- Out of date Curriculum, Limited university-industry Partnership.
- Indian origin Scientists have won the Nobel Prize, but post-independence work done in India has not led to a Science novel. If Indians Studying and working abroad can have a great impact, then obviously the problem has to do with our Systems of education and research.
- Broken governance System. There are few rewards for being a good teacher and few Punishments for being a Careless one.
    - Need more effective and accountable governance Systems.
- The greed of Private Colleges to earn the maximum from every Student puts traumatic Pressure on Students which results in mental breakdown.
- More girls than boys drop out of School. While boys drop out to work, girls usually Stay at home and help with domestic Work. Social Conception of gender roles is an important factor.
- Learning loss due to pandemics and the digital divide.

Steps by the Government

- The 86th Constitution Amendment provides the Fundamental right to free and compulsory education under Article 21A includes a Common education System where the “rich and Poor are educated under one roof".
- Rashtriya Uchchatar Shiksha Abhiyan provides funding to eligible State higher educational institutions.
- Declaration of Educational Institutions as institutions of Eminence, to provide world-class education to Indian Students within the Country.
- Creation of Higher Education Financing Agency, for high-quality infrastructure in Premier educational institutions.
- National Institution Ranking Framework for ranking our higher education institutions.
- GIAN Initiative to invite distinguished academicians, entrepreneurs, scientists, and experts from premier institutions across the world to teach in higher educational institutions in India.
- SWAYAM Portal for online Courses.
- SWAYAM Prabha Provide HD educational Channels through DTH on a 24X7 basis.
- Sodhganga to develop a national repository of universities in India, digital Study material for higher education.
- Samagra Shiksha Scheme to ensure inclusive and equitable quality education at all levels of school education.

7.2. Revamping School Curriculum

Why in News?

- The Education Minister has chaired the discussion with members of the national steering committee on modifying the school curriculum.

More Details

- The inter-ministerial discussion is seen as the initial step to include “emerging topics” such as “consequences of zoonotic diseases”, Vedic mathematics, coding and Swachh Bharat in the school curriculum to “reflect current realities and priorities”.
- Recently, Controversy erupted over CBSE's decision to revamp the school curriculum.

CBSE's decision to revamp the School Curriculum

- The Central Board of Secondary Education (CBSE) has decided to drop certain chapters from the syllabus of history and political science in classes 11 and 12.The CBSE has dropped chapters related to;
- **The Non-Aligned Movement.**
    - The Cold War era.

    - The Rise of Islamic empires in Afro-Asian territories.
    - The Chronicles of Mughal courts.
    - The Industrial Revolution.
- The dropped chapter on the "Central Islamic Lands" in the class 11 history syllabus explains the rise of Islamic empires in the Afro-Asian territories and its implications for the economy and society.
- The dropped chapter In the class 12 history syllabus 'The Mughal Court: Reconstructing Histories through Chronicles' examined the chronicles of Mughal courts to reconstruct the social, religious and cultural history of the Mughal.
- The CBSE has dropped the following chapters from the class 10 economics syllabus;
    - Impact of globalization on agriculture
    - Food Security
- It has dropped the poems of Faiz Ahmed Faiz related to the 'Religion, Communalism and Politics — Communalism, Secular State' section.
- CBSE has also dropped the chapters on “Democracy and Diversity”.

The rationality behind the decision

- The CBSE officials stated that the changes are part of the rationalization of the syllabus and according to the proposals of the National Council of Educational Research and Training (NCERT).
- This is not the first time the board has dropped certain chapters from the syllabus. In 2020, CBSE announced that chapters on federalism, citizenship, nationalism, and secularism in class 11 political science textbooks will not be considered while assessing students.
- CBSE annually provides a curriculum for classes 9 to 12 containing a syllabus for examinations with learning outcomes. Therefore it is a regular exercise done by the Board to rationalise the syllabus according to the time and need.

Challenges in Indian Education System

- India has achieved universal enrolment at the elementary level. This is a great achievement, but getting Students to School is only the beginning of human Capital formation.
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8. Agriculture

8.1. Adapting Indian Agriculture to Climate Chang

Why in news?

- The Working Group III contribution to the Sixth Assessment Report, Climate Change 2022: Mitigation of Climate Change was released recently.

What are the IPCC reports?

- The objective of the IPCC is to provide governments at all levels with scientific information that they can use to develop climate policies.
- It was created in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP).
- The Assessment Reports, the first of which had come out in 1990, are the most comprehensive evaluations of the state of the earth's climate.
- The first part report centred on the scientific basis of climate change.
- The second tranche of reports for the first time, made regional and sectoral level assessment of climate change impacts on ecosystems, biodiversity, and human communities.

What is the WG III report about?

- The WG III report places climate change firmly in the context of sustainable development, assessing wider risks and co-benefits.
- The report documents and explains recent developments in emission and mitigation efforts.
- It considers emission pathways and corresponding mitigation efforts over the 21st century.
- For the first time, the WG III AR6 report includes a chapter on social aspects of mitigation that covers factors shaping consumption patterns and opportunities to reduce emissions on the demand.
- The report also includes for the first time a chapter dedicated to innovation and technology.

How vulnerable is India's agriculture towards climate change?

- According to the Global Climate Risk Index 2021, India is among the top ten countries most affected by climate change.
- Several studies suggest that climate change already has evident effects on crop production, with associated consequences for local food supply disruptions and negative impacts on rural incomes and poverty.
- A Report by the Parliamentary Standing Committee on Agriculture, 2017 estimated that climate change related losses are about 4-9 % of the agricultural economy each year, which is an overall GDP loss of 1.5%.
- As nearly 86%of Indian agriculture is small-holder agriculture and a significant part of it is subsistence agriculture, adaptation is an issue of survival.

What activities should be prioritised?

- Agriculture being a State subject, planning and policy implementation falls within the purview of respective States and local institutions, with the Central government providing the broad policy framework and guidelines.
- It would be important to prioritise activities having both adaptation and mitigation benefits.
- As fragmented and small land size reduces farmers' adaptive capacity to climate change, it is essential to design policies and strategies especially focussing on small and marginal landholders.
- The development of State Action Plan on Climate Change (SAPCC) needs to be dynamic by revising it in lines with the post 2020 NDC goals and the SDGs.
- A pro-active adaptation approach in agriculture is needed, streamlining efforts and resources on climate and disaster resilience for preparedness in coping with disasters.

How should India equip itself to tackle natural disasters?

- India has well developed institutional arrangements for disaster management at the national, State and district level.
- Adaptation measures pertaining to impact of natural disasters in agriculture and allied sectors need to be embedded in the disaster management plans prepared at the district level.
- It is important to provide the supporting infrastructure including water supply, power and physical connectivity on which agricultural value chain depends.
- Areas affected by floods, hailstorms and drought need to be rebuilt better based on disaster management assessment.
- Mainstreaming of climate considerations across the development programmes as well as in the process of spatial planning are required.
- Adaptation to climate change in the sector requires not only large and continued financial investment, but also in terms of knowledge and human capacity.

9. Environment

9.1. Intergovernmental Panel on Climate Change (IPCC)

Why in News?

- In its latest assessment report, the Intergovernmental Panel on Climate Change (IPCC) has laid out several scenarios on the steps that ought to be taken to keep temperatures below 2°C.
- It warned that even temporarily exceeding the warming level of 1.5°C over the next two decades would mean additional severe impact, some irreversible.

How is This Report Prepared?

- Scientists from around the world including India are part of the Working Group III of the IPCC.
- They analyse the various interventions that can be made to ensure that temperature rise by the end of the century is minimal.
- The group does this by assessing the most credible, updated literature on the scientific, technological, environmental, economic and social aspects of mitigating the impact of climate change.
- This specific group studies social developments, such as decisions taken at the annual Conference of Parties (COP), progress

on clean energy technologies and availability of finance.

- Placing the data in the context of climate science, the scientists analyse the role played by various groups such as forest communities, indigenous tribes and businesses, in addressing climate change and finally recommend steps that must be taken over three periods: until 2030, until 2050 and until 2100, on what needs to be done to limit temperature rise.
- A key part of the report, called the Summary for Policymakers, was approved by 195 member-governments of the IPCC, through a virtual approval session that started on March 21.
- The latest report is the third installment of the IPCC's Sixth Assessment Report (AR6), which will be completed this year.

What are the Key Messages?

- Total net anthropogenic GHG (greenhouse gas) emissions have continued to rise from 2010–2019, as have cumulative net CO2 emissions since 1850.
- Average annual GHG emissions during 2010-2019 were higher than in any previous decade, but the rate of growth between 2010 and 2019 was lower than that between 2000 and 2009.
- By 2019, the largest growth in absolute emissions occurred in carbon dioxide from fossil fuels and industry followed by methane.
- The per-unit costs of several low-emission technologies have fallen continuously since 2010, however innovation has lagged in developing countries due to weak enabling conditions.
- Even if countries adhered to their promises towards reducing emissions, called Nationally Determined Contributions, warming will still exceed 1.5°C during the 21st century.
- Keeping warming below 2°C would then rely on a rapid acceleration of mitigation efforts after 2030.
- Tracked financial flows were still falling short of the levels needed to achieve mitigation goals across all sectors and regions.
- The challenge of closing gaps was largest in developing countries as a whole. Increasing financial flows can be supported by clear policy choices and signals from governments and the international community.
- According to the scientists, limiting warming to around 1.5°C requires global greenhouse gas emissions to peak before 2025 at the latest and be reduced by 43% by 2030; at the same time, methane would also need to be reduced by about a third.
- Even if this happened, it is almost inevitable that this ceiling would be temporarily breached but, with appropriate action, it could again dip by the end of the century.
- The global temperature will stabilise when carbon dioxide emissions reach net zero.
- For 1.5°C, this meant achieving net zero carbon dioxide emissions globally in the early 2050s; for 2°C, it is in the early 2070s.
- Even limiting warming to around 2°C would still require global greenhouse gas emissions to peak before 2025 at the latest and be reduced by a quarter by 2030, the report stressed.

Conclusion

- The traditional sources of energy such as oil, gas and coal would have to be almost completely abandoned over the next few decades if the climate goals have to be achieved.
- The IPCC report says that coal would need to be given up entirely by 2050, while the use of oil and gas need to be reduced by at least 60 and 70 percent respectively.
- The new IPCC report is expected to make this campaign even stronger.

9.2. A window for inter-State collaboration, to breathe easy

Background:

- **Air pollution in Delhi** has been a major challenge, especially so over the last few years. The persistence of **stubble burning in Punjab** remains a major contributor to winter pollution in Delhi.

- The political blame game between the elected governments of Delhi and adjoining state of Punjab on the issue of air pollution undermined any collaborative action on the pollution issue.
- Given that the same political party holds power in both Delhi and Punjab, this provides the ideal opportunity to resolve the air quality issue in Delhi and Punjab.

Recommendations:

- The following measures could be taken to ensure collaboration on the pollution issue.

Engagement:

- The people in charge in the two states must engage in talks setting aside their disagreements.
- This would provide the necessary impetus to take the issue forward. This will also help them arrive at a **common understanding of the issue** and also help in finding solutions that are amenable to both governments.

Sharing information:

- There should be the **creation of platforms for knowledge exchange**. This could involve information on **air quality levels and source assessment studies.**
- A common knowledge centre would facilitate cross-learning on possible solutions and also developing long-term strategies for pollution mitigation.

Collaboration in execution:

- Delhi and Punjab should not only **co-design solutions** that would improve air quality but also **collaborate to execute proven solutions.** They could jointly institutionalise a joint task force comprising experts from State-run institutions to pilot these solutions and assess their impact. This would ensure wider acceptance of the solutions.

Market for diversified crops:

- Given that **'paddy-wheat cycle'** is one of the major factors for continued stubble burning practice, there is the need to push for crop diversification to wean the farmers away from 'paddy-wheat' combination.
- However, the lack of an assured market for agricultural products, other than wheat and paddy, has acted as a deterrent and this necessitates the need to **create a market for diversified crop products**. The two states should consider appropriate policy measures to signal demand and create an assured market for diversified crop products.

Extending inter-state cooperation:

- Delhi and Punjab governments should going forward assert the need for **extending inter-State cooperation to other States in the Indo-Gangetic plains** through different inter-State forums such as the Northern Zonal Council.
- They must use this platform to highlight the need for coordination with neighbouring States to alleviate the pollution crisis.

Significance of collaboration:

- The high pollution levels has an adverse **impact on the health of the citizens**, with notable impact on children and elderly populations. Apart from the health impacts, air pollution also leads to **economic losses**. In 2019, Delhi and Punjab together faced economic losses estimated to be approximately ₹18,000 crore due to worsening air pollution. The collaboration which would help mitigate air pollution will no doubt address the above challenges.

9.3. Wildlife (Protection) Amendment Bill, 2021

Why in News?

- Standing Committee on Science and Technology, Environment, Forests and Climate Change has recommended government to remove the controversial clause in the Wild

Life (Protection) Amendment Bill, 2021 that encourage sale and purchase of captive elephants.

Background:

- The Wild Life (Protection) Amendment Bill 2021 was introduced in the Lok Sabha on December 17, 2021 and was referred to the Parliamentary panel on December 25.

Panel recommendations:

- The committee has argued for a "careful balance" between traditions and conservation.
- It is deeply conscious of the fact that a number of religious and cultural institutions in some states own elephants which play a crucial role in daily worship and rituals.
- It has attempted to strike a careful balance to ensure that age-old traditions are not interfered with while at the same time addressing widespread concerns that nothing should be done to give an impression that private ownership of elephants and trade is going to be encouraged.
- It has recommended that the government could bring in additional checks to allow sale and purchase by religious institutions.
- It pointed out many discrepancies with the compilation, as a number of species are missing in all the three Schedules.
- It founds species that should be in Schedule I but have been placed in Schedule II. There are species missing altogether both in Schedules I and II as well as in Schedule III.
- The Bill fails to address "human-animal conflict".

Wild Life (Protection) Amendment Bill 2021

- The 2021 amendment Bill proposes 50 amendments to the existing Wildlife (Protection) Act, 1972.
- The amended bill also seeks to rework the protection Schedules.
- The Bill seeks to increase the number of species protected under the law, and implement the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- Instead of the present six Schedules in the principal Act, the Bill proposes three Schedules —
    - Schedule I for species that will enjoy the highest level of protection
    - Schedule II for species that will be subject to a lesser degree of protection, and
    - Schedule III covers plants.
- **Obligations under CITES:** The Bill provides for the central government to designate a:
    - Management Authority, which grants export or import permits for trade of specimens, and
    - Scientific Authority, which gives advice on aspects related to impact on the survival of the specimens being traded.
- **Invasive alien species:** The Bills empowers the central government to regulate or prohibit the import, trade, possession or proliferation of invasive alien species.
- Invasive alien species refers to plant or animal species which are not native to India and whose introduction may adversely impact wild life or its habitat.
- **Control of sanctuaries:** The Act entrusts the Chief Wild Life Warden to control, manage and maintain all sanctuaries in a state.
- **Conservation reserves:** Under the Act, state governments may declare areas adjacent to national parks and sanctuaries as a conservation reserve, for protecting flora and fauna, and their habitat. The Bill empowers the central government to also notify a conservation reserve.
- **Surrender of captive animals:** The Bill provides for any person to voluntarily surrender any captive animals or animal products to the Chief Wild Life Warden. No compensation will be paid to the person for surrendering such items. The surrendered items become the property of the state government.
- **Penalties:** The Act prescribes imprisonment terms and fines for violating the provisions of the Act. The Bill increases these fines.

9.4. Carbon Pricing

What is Carbon Pricing?

- It's an **instrument that captures the external costs** of greenhouse gas (GHG) emissions and links it to their sources through a price in the form of a price on the carbon dioxide (CO_2) emitted.
- Through this measure the **burden of emission and its effects is shifted** to those who are producing it. This further discourages producers from emitting GHG gasses recklessly.
- It is in **pursuance with Kyoto Protocol and Paris Agreement of UNFCCC** which aims at limiting the GHG emissions, avoid extreme weather conditions and **limit the temperature of earth to 1.5 degree Celsius by 2050.**

Has carbon pricing served its purpose?

- Carbon pricing is seen as an effective tool to **limit GHG emissions.**
- It has led to **internalisation of the externalities** thus leading to polluters owning the responsibility and acting on it in various sectors.
- However, the **extreme weather conditions have not stopped** and there is a global rise in temperature.
- Reasons for carbon pricing not realising its full potential:
    - The member countries have not **obliged to their commitments** under the Paris Agreement faithfully, keeping their development needs first thus sideling the sustainability premise.
    - The developing world **does not have required funds** to upgrade their technology for sustainable development.
    - The political economy, primarily in the developing world has forced the political class to go slow on sustainable transitions. Hence the technology in agriculture, manufacturing has remained mostly the same or has moved at snail's pace.
    - **Developed countries have not kept their promise of COP 16** accord of climate financing under which they were required to contribute $100 billion annually for sustainable projects in the developing world.
    - Reversing climate change requires holistic changes. **Carbon pricing alone can't be an answer to climate change.** It has served its purpose in limited capacities because of the above mentioned reasons.

Different types of Carbon Pricing

- **Emissions trading system:** Under this mechanism emitters can trade emission units to meet their emission targets. The emitter can either implement internal abatement measures or acquire emission units in the carbon market.
- The two main types of ETSs are cap-and-trade and baseline-and-credit:

- Cap-and-trade systems: Under this mechanism, a limit on the emissions is put and emissions allowances are distributed through auctions for the amount of emissions equivalent to the cap.
- Baseline-and-credit systems: Here a baseline emission level is set and credits are issued to entities that have reduced their emissions below this level. These credits can be sold to other entities exceeding their baseline emission levels.

- **Carbon tax:** Under the mechanism, an explicit tax rate on GHG emissions is set
- **Offset mechanism:** The protocol predetermines the GHG emission reductions for projects. The emission certificates can then be sold to the emitters who could not meet the emission norms.
- **RBCF:** Result Based Climate Finance is an instrument through which payments are made after predefined outcomes pertaining to managing climate change.
- **Internal carbon pricing:** It is an entity which an entity uses internally to guide its decision-

making process in relation to climate change impacts, risks and opportunities.

Different countries, different carbon pricing

- Different countries deploy different types of carbon pricing on the **basis of national circumstances and political realities.**
- Under mandatory carbon pricing initiatives, **ETSs and carbon taxes are the most common** types of instruments which emitting entities follow.
- The choice of carbon pricing is in alignment with the broader national economic priorities and institutional capacities.
- In India there is **no specific carbon tax** but there are **hosts of other mechanisms** to limit climate change such as:
    - **PAT (Perform, Achieve and Trade) Scheme**
    - **Coal Cess**
    - **Renewable Purchase Obligations (RPO)**
    - **Renewable Energy Certificates (REC)**
    - **Internal Carbon Pricing (ICP).**

9.5. Declining Nitrogen Levels

Why In News?

- According to a new Report, Nitrogen levels are on a decline in the 'nitrogen-rich world' and plants and animals may face consequences.

Key Findings

- **Imbalance in Availability:**
    - An imbalance in nitrogen availability has been reported across the globe, with some places having an excess and others a shortage of the element.
- **Shrinking Locations:**
    - Nitrogen availability has been shrinking in grasslands in **central North America** for a hundred years.
    - Many forests in **North America and Europe** have also suffered from nutritional declines for several decades or longer due to the same reason.
    - **Tropical and boreal forests** may be particularly vulnerable.
- **Factors responsible for Nitrogen decline:**
    - **CO2 and nitrogen:** Plants grow quickly when exposed to high carbon dioxide (CO2) concentrations. Thus, their demand for nitrogen also goes up.
        - High CO2 levels dilute plant nitrogen, triggering a cascade of effects that lower the availability of nitrogen.
    - **Warming** and disturbances, including wildfire.
    - **Eutrophication:** When excessive nitrogen accumulates in the streams, inland lakes and coastal bodies of water, it could sometimes result in eutrophication
- **Negative effects:**
    - Imbalance of nitrogen has been hurting **aquatic and terrestrial life** that feed on it.
    - **Cattle grazing** these areas have had less protein in their diets over time.
    - **Slower and smaller growth:** Without nitrogen, an essential nutrient, plants grow slowly and produce smaller flowers and fruits. Their leaves turn yellowish and are less nutritious to insects, birds and animals.
    - **Insect apocalypse:** Plants with low nitrogen levels can encourage swarming in some species of locusts.
    - Low nitrogen availability could **limit plants' ability to capture CO2** from the atmosphere.
    - **Eutrophication** leads to harmful algal blooms, dead zones and fish kills.
- **Production by Human:** Human production of nitrogen is now five times higher than it was 60 years, according to a 2017 study.
- **Effects in Human:** In humans, high levels of nitrogen in the groundwater are linked to **intestinal cancers** and miscarriages and can be fatal for infants.

Declining nitrogen in natural ecosystems

- Nitrogen (N) availability is key to the functioning of ecosystems and the cycling of nutrients and energy through the biosphere.

- The productivity of ecosystems and their capacity to support life depends on **access to reactive nitrogen**.
- Over the past century, humans have more than doubled the global supply of reactive N through industrial and agricultural activities.
    - However, long-term records demonstrate that N availability is declining in many regions of the world.
    - Reactive N inputs are not evenly distributed, and global changes—including elevated atmospheric carbon dioxide (CO2) levels and rising temperatures—are affecting ecosystem N supply relative to demand.

Nitrogen Cycle

- It is the circulation of nitrogen in various forms through nature.
- Nitrogen, a component of **proteins and nucleic acids**, is essential to life on Earth. Although 78 percent by volume of the atmosphere is nitrogen gas, this abundant reservoir exists in a form unusable by most organisms.
- Through a series of **microbial transformations**, however, nitrogen is made available to plants, which in turn ultimately sustain all animal life.
- The steps, which are not altogether sequential, fall into the following classifications:
    - nitrogen fixation,
    - nitrogen assimilation,
    - ammonification,
    - nitrification, and
    - denitrification.

9.6. WHO Air quality Database 2022

Why In News?

- The World Health Organisation's air quality database 2022 has stated that almost the entire global population (99 percent) breathes air that exceeds WHO's air quality limits.

Key Findings

Quality monitored but still bad:

- More than 6,000 cities in 117 countries are now monitoring air quality but their residents are still breathing unhealthy levels of **fine particulate matter and nitrogen dioxide**, while people in low and middle-income countries suffer the highest exposure.

NO2 concentrations:

- For the first time data has been taken from on ground measurements of annual mean concentrations of nitrogen dioxide (NO2).
- NO2 is a common urban pollutant and precursor of particulate matter and ozone.

Particulate matter:

- It also includes measurements of particulate matter with diameters equal or smaller than 10 µm (PM10) or 2.5 µm (PM2.5).
- Both groups of pollutants originate mainly from human activities related to fossil fuel combustion.

Effect on health:

- **Particulate matter**, especially PM 2.5, is capable of penetrating **deep into the lungs** and entering the bloodstream, causing cardiovascular, cerebrovascular (stroke) and respiratory impacts.
- **NO2** is associated with **respiratory disease**s, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms.

Significance

- **Increasing Awareness:**
    - As many as 2,000 more cities and human settlements are now recording ground monitoring data for particulate matter, PM10 and/or PM2.5, than in the last update.
    - This marks an almost sixfold rise in reporting since the database was first made in 2011.
- **Better Evaluation:**

- WHO last year revised its air quality guidelines, making them more stringent in an effort to help countries better evaluate the healthiness of their own air.

WHO's New Air Quality Guidelines

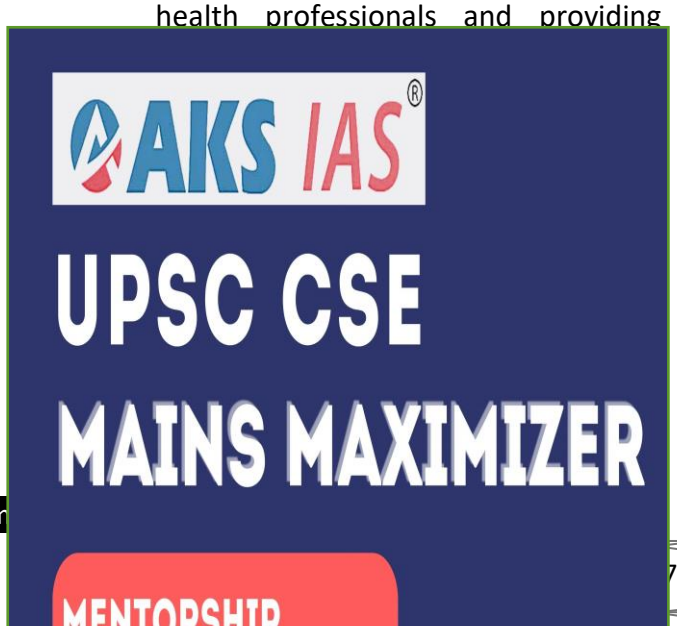
- WHO's new guidelines recommend air quality levels for six pollutants —
  - particulate matter (PM),
  - ozone (O?),
  - nitrogen dioxide (NO?)
  - sulfur dioxide (SO?) and
  - carbon monoxide (CO) —

  that are not just health hazards but they also give rise to other damaging pollutants.

- **PM10:**
  - The annual average for PM 10 should not exceed 15 micrograms per cubic metre of air, while the 24-hour average should not exceed 45 micrograms per cubic metre.
  - Compared to this, the earlier limit was 20 micrograms per cubic metre annually and 50 micrograms per cubic metre in a day.
- **PM2.5:**
  - The recommendation for PM 2.5 is that the annual average should not exceed 5 micrograms per cubic metre, or 15 micrograms per cubic metre in a day.
  - The earlier limit was 10 micrograms per cubic metre annually and 25 micrograms per cubic metre in a day.
- **Ozone:**
  - Ozone levels average should not exceed 100 micrograms per cubic metre over a 24-hour period,
- **NO2:**
  - nitrogen oxide should not exceed 25 micrograms per cubic metre,
- **SO2:**
  - sulphur dioxide should remain below 40 micrograms per cubic metre
- **CO:**
  - carbon monoxide levels should not exceed more than 4 micrograms per cubic metre over the same time period.

Way Ahead

- **Standardisation & Monitoring:**
  - Adopt or revise and implement **national air quality standards** according to the latest WHO Air Quality Guidelines.
  - Monitor air quality and **identify sources** of air pollution
- **Energy Efficiency:**
  - Support the transition to exclusive use of **clean household energy** for cooking, heating and lighting
  - Invest in energy-efficient housing and power generation.
  - Curbing fossil fuel use and taking other tangible steps to reduce air pollution levels.
- **Sustainable Transportation:**
  - Build **safe and affordable public transport systems** and pedestrian- and cycle-friendly networks
  - Implement **stricter vehicle emissions and efficiency standards**; and enforce mandatory inspection and maintenance for vehicle
- **Waste Management:**
  - Improve industry and municipal waste management
  - Reduce agricultural waste incineration, forest fires and certain agro-forestry activities (e.g. charcoal production)
- **Awareness & Education:**
  - Include air pollution in curricula for health professionals and providing



10. Internal Security

10.1. Indigenous Intelligent Transportation Systems (ITS) Solutions

Why in News?

- An indigenous Onboard Driver Assistance and Warning System – ODAWS, Bus Signal Priority System and Common SMart iot Connectiv (CoSMiC) software have been launched under the Ministry of Electronics and Information Technology (MeitY).

Onboard Driver Assistance and Warning System – ODAWS:

- ODAWS incorporates vehicle-borne sensors for monitoring driver propensity and vehicle surroundings to deliver acoustic and visual alerts for driver assistance.
- The project involves the development of sub-modules such as the navigational unit, driver assistance console, and mmWave radar sensor.
- The ODAWS algorithm is used to interpret sensor data and offer real-time notifications to the driver, boosting road safety.

Bus Signal Priority System:

- The Bus Signal Priority System is an operational strategy that modifies normal traffic signal operations to better accommodate in-service public buses at signal-controlled intersections.
- The developed system will enable to minimize person delay by providing priority to public transport buses, either through Green extension or Red truncation, considering all vehicles approaching a signalized intersection.

Common SMart iot Connectiv (CoSMiC):

- The CoSMiC platform also provides Interworking Proxy Entity (IPE) APIs for connecting non-oneM2M (NoDN) devices or third-party applications to get connected to the CoSMiC platform.
- CoSMiC provides a Dashboard page showing IoT units, products, applications, and its live data in a Geographical Information System (GIS) map.
- It provides an end-to-end solution for the seamless connection of IoT devices and applications.

10.2. Amending the Weapons of Mass Destruction Act

Why in News?

- Recently, the Weapons of Mass Destruction (WMD) and their Delivery Systems (Prohibition of Unlawful Activities) Amendment Bill, 2022 was introduced in the Lok Sabha.

Weapons of Mass Destruction (WMD) and their Delivery Systems (Prohibition of Unlawful Activities) Amendment Bill, 2022:

- In July 2005, the WMD and their Delivery Systems (Prohibition of Unlawful Activities) Act was passed.
- Its main goal was to create a comprehensive set of laws prohibiting illegal activities involving all three types of WMD, their delivery systems, and related materials, equipment, and technologies.
- It established penalties for violating these provisions, including fines and imprisonment for a period of not less than five years (extendable for life).
- The Act was passed to comply with a UN Security Council Resolution (UNSCR) 1540 from 2004 that imposed an international obligation.

What has the Amendment added to the existing Act?

- The Amendment broadens the definition to include the prohibition of financing any activity related to weapons of mass destruction or their delivery systems.
- The central government will have the authority to freeze, seize, or attach funds, financial assets, or economic resources of suspected individuals in order to prevent such financing.
- It also prohibits people from providing financial or other services to others who are engaging in such behaviour.

Need of the Amendment:

- The Amendment adapts to changing threats that deal with domestic laws and international agreements.
- Due to rapid advances in science, technology, and international commerce, one such review conducted in 2016 concluded that the risk of proliferation to non-state actors is increasing.
- Two specific gaps are being addressed
    - To align India's own legislation with international benchmarks, relevant international organizations such as the Financial Action Task Force are being consulted.
    - To address new types of threats that were not adequately addressed in existing legislation with technological advancements.
- They must be adaptable and flexible in order to keep up with non-state actors' shifting tactics.

Concerns with the latest Amendment:

- In Parliament, some members expressed concern on whether the new legislation could make existing business entities or people in the specific sector susceptible to a case of mistaken identity.

International significance of this legislation:

- To prevent acts of terrorism involving WMD or their delivery systems, all nation-states must invest equally in a network of national and international measures.
- Such actions are required to strengthen global enforcement of export standards for sensitive items, as well as to prohibit the financing of such activities.
- Harmonization of global WMD controls may be possible if best practices on legislation and implementation are shared.

Recommendations:

- India must take additional steps to meet new obligations and demonstrate to the international community its legislative, regulatory, and enforcement frameworks.
- On a domestic level, this Amendment will need to be implemented through proper outreach to industry and other stakeholders in order for them to understand their new responsibilities under the new provisions.
- India's WMD Act outreach efforts have spanned both regional and sectoral concerns. To explain the new aspects of the law, similar efforts will be required.
- It is also critical that India maintains a high level of international attention on WMD security. To avoid weak links in the global control system, even countries without WMD

technology must be made aware of their role in the control framework.
- Through the IAEA (International Atomic Energy Agency) or on a bilateral basis, India can assist other countries in developing national legislation, institutions, and regulatory frameworks.

10.3. Indigenisation Efforts of Navy

Why in News?

- The Navy is ramping up indigenisation efforts especially in weapons and aviation related items in line with the Government's push to cut down on defence imports and boost domestic manufacturing.
- Indigenisation efforts has gained further urgency due to ingoing Russian war in Ukraine and the large scale dependency of Indian military on Russian arms and equipment.
- Earlier, the Ministry of Defence (MoD) has released the third positive indigenisation list of 101 items, comprising major equipment/platforms.

What are the Efforts taken by the Navy for Indigenisation?

Indian Navy Indigenisation Plan 2015-2030:

- In 2014 Navy promulgated the Indian Navy Indigenisation Plan (INIP) 2015-2030 to enable indigenous development of equipment and system.
- Till date, the Navy has indigenised around 3400 items under INIP, including over 2000 machinery and electrical spares, over 1000 aviation spares and over 250 weapon spares.

Naval Aviation Indigenisation Roadmap 2019-22:

- The existing Naval Aviation Indigenisation Roadmap (NAIR) 2019-22 is also under revision.
- All fast moving aircraft mandatory spares and high cost indigenous repairs are being included in the revised NAIR 2022-27.
- There is particular focus on the fight component (which is weapons) as there is still a long way to go compared to the float and move components.
- Float consists of the ship, move comprises the propulsion and fight consist of weapons and sensors.

Indigenisation Committees:

- Four in-house indigenisation committees have been formed to handle indigenisation of spares with respect to naval aircraft.

Naval Liaison Cells:

- In addition, the Naval Liaison Cells (NLCs) located at various places have been nominated as 'indigenisation cells'.
- There are currently 41 ships and submarines under construction, 39 are being built in India shipyards while in principle approval from MoD exists for 47 ships to be built in India.
- Since 2014, 78 % of Acceptance of Necessity (AoN), by value, and 68 % of contracts, by value, have been awarded to Indian vendors.
- AoN clears the way for the tendering process to start.

Collaboration with DRDO:

- The Navy is working with the Defence Research and Development Organisation (DRDO) and the industry to cut down developmental timelines.
- Some of the focus areas include indigenous design and development and production of Anti-Submarine Weapons and sensors, Satcom and electronic warfare equipment, Anti-Ship Missiles and Medium Range Surface to Air Missile, combat management system, software defined radios, network encryption devices, Link II communication system, main batteries for submarines, distress sonar system, components of missiles and torpedoes etc.

Naval Innovation and Indigenisation Organisation (NIIO):

- Launched in August 2020, it provides a flexible and accessible interface for academia and industry with Indian Navy capability development apparatus.
- In the last two years, 36 Intellectual Property Rights(IPR) applications have been filed by Navy personnel.
- Over two IPR applications are filed every month since the creation of NIIO and Transfer of Technology to 12 Micro, Small and Medium-sized Enterprises (MSMEs) has already been undertaken.

User Inputs under Naval Project Management Teams:

- The Navy has now forward deployed user inputs through Naval Project Management Teams at cluster Headquarters of DRDO and two such clusters are already operational.
- These have interfaced with the DRDO labs and their Development cum Production Partners (DcPP) to provide user inputs at every stage to 15 futuristic Technology and 100 plus DRDO projects underway for development of Indian Navy's combat capability.

Make I & Make II:

- The Navy has more than 20 Make I & Make II cases being progressed, under various domestic development routes of the procurement procedure.
- The 'Make' category of capital acquisition is the cornerstone of the Make in India initiative that seeks to build indigenous capabilities through the involvement of both public and private sector.
- 'Make-I' refers to government-funded projects while 'Make-II' covers industry-funded programmes.
- Make-I is involved in development of big-ticket platforms such as light tanks and communication equipment with Indian security protocols.
- Make-II category involves prototype development of military hardware or its upgrade for import substitution for which no government funding is provided.

What is the Indigenisation of Defence?

About:

- Indigenisation is the capability of developing and producing any defence equipment within the country for the dual purpose of achieving self reliance and reducing the burden of imports.
- Self-reliance in defence manufacturing is one of the key objectives of Department of Defence Production.
- Defence Research Development Organisation (DRDO), Defence Public Sector Undertakings (DPSUs) and private organisations are playing a critical role in indigenisation of defence industries.
- India is among the world's largest arms importers, and the armed forces are expected to spend about USD 130 billion on defence purchases over the next five years.

Related Initiatives:

- Increased the Foreign Direct Investment (FDI) limit from 49% to 74%
- Corporatization of the Ordnance Factory Boards
- Defence India Startup Challenge
- SRIJAN Portal: To provide access to the vendors to take up items for indigenization.

10.4. National Cyber Security Strategy

Why in News?

- Amid a surge in cyberattacks on India's networks, the Centre is yet to implement the National Cyber Security Strategy which has been in the works since 2020.

What is the National Cyber Security Strategy?

- It was conceptualised by the Data Security Council of India (DSCI), headed by Lt General Rajesh Pant report that focuses on 21 areas to ensure a safe, secure, trusted, resilient, and vibrant cyberspace for India.

The main sectors of focus of the report are:

- Large scale digitisation of public services that focus on security in the early stages of design in all digitisation initiatives, developing institutional capability for assessment, evaluation, certification, and rating of the core devices and timely reporting of vulnerabilities and incidents.
- **Supply chain security:** Monitoring and mapping of the supply chain of the Integrated circuits (ICT) and electronics products, scaling up product testing and certification.
- **Critical information infrastructure protection:** Integrating Supervisory control and data acquisition (SCADA) security with enterprise security, monitoring digitisation of devices, evaluating security devices, maintaining a repository of vulnerabilities
- **Digital payments:** Mapping and modeling of devices and platform deployed, supply chain, transacting entities, payment flows, interfaces and data exchange, timely disclosure of vulnerabilities
- **State-level cyber security:** Developing state-level cybersecurity policies, allocation of dedicated funds, critical scrutiny of digitization plans, guidelines for security architecture, operations, and governance
- **Security of small and medium businesses:** Policy intervention in cybersecurity granting incentives for higher level of cybersecurity preparedness, developing security standards, frameworks, and architectures for the adoption of Internet of Things (IoT) and industrialization.

What steps does the report suggest?

- Budgetary provisions: A minimum allocation of 0.25% of the annual budget, which can be raised upto 1% has been recommended to be set aside for cyber security. Setting up a Fund of Funds for cybersecurity and provide Central funding to States to build capabilities in the same field.
- Research, innovation, skill-building and technology development: The report suggests investing in modernisation and digitisation of Integrated Circuits (ICT), set up a short and long term agenda for cyber security via outcome-based programs and provide investments deep-tech cyber security innovation.
- A national framework should be set in collaboration with institutions like National Skill Development Corporation (NSDC) and ISEA (Information Security Education and Awareness) to provide global professional certifications in security.
- Crisis management: For adequate preparation to handle crisis, holding cybersecurity drills which include real-life scenarios with their ramifications. To identify possible weakness and exploitations in systems, DSCI recommend sharing of threat information between government departments.
- Cyber insurance: To address cybersecurity risks in business and technology scenarios as well as calculate threat exposures DSCI recommends developing cyber insurance products for critical information infrastructure and quantify the risks involving them.
- Cyber diplomacy: Cyber diplomacy plays a huge role in shaping India's global relations. Hence cyber security preparedness of key regional blocks like BIMSTEC and SCO must be ensured via programs, exchanges and industrial support.
- Cybercrime investigation: With the increase in cybercrime across the world, the report recommends unburdening the judicial system by creating laws to resolve spamming and fake news.
- DSCI suggests advanced forensic training for agencies to keep up in the age of AI/ML, Blockchain, IoT, Cloud, Automation. The report also suggests creating a special cadre of Cybercrime investigators.

Why does India need a cybersecurity strategy?

- As per American cybersecurity firm Palo Alto Networks' 2021 report, Maharashtra was the most targeted state in India — facing 42% of all ransomware attacks.
- The report stated that India is among the more economically profitable regions for hacker groups and hence these hackers ask Indian firms to pay a ransom, usually using cryptocurrencies, in order to regain access to the data.

- One in four Indian organisations suffered a ransomware attack in 2021 — higher than the global average of 21%.
- Software and services (26%), capital goods (14%) and the public sector (9%) were among the most targeted sectors. An increase in such attacks has brought to light the urgent need for strengthening India's cybersecurity.

11. Geography & Disaster Management

11.1. El Nino and La Nina

Why in News?

- The India Meteorological Department (IMD) forecasts 'normal' monsoon in India and no El Nino Conditions.

El Nino

- El Nino literally means 'little boy' or 'Christ child'.
- El Nino refers to the large-scale ocean-atmosphere climate interaction linked to unusual warming of surface waters across the central and east-central Equatorial Pacific.
- El Nino is the "warm phase" of a phenomenon called the El Nino-Southern Oscillation (ENSO).
- It is associated with high pressure in the western Pacific.
- This condition results in heavy rains in Peru robbing the Indian subcontinent of its normal monsoon rains.
- The larger the temperature and pressure difference, the larger the rainfall shortage in India.

La Nina

- La Nina literally means 'little girl' and is also known as 'cold event'.
- During La Nina conditions the water temperature in the Eastern Pacific gets colder than normal. Due to this, there is a strong high pressure over the eastern equatorial Pacific and a low pressure in the Western Pacific and off Asia.
- La Nina causes drought in Peru and Ecuador and heavy rains in Australia, high temperatures in Western Pacific, Indian Ocean and good monsoon rains in India.
- La Nina is beneficial for the Indian monsoon.

11.2. Black Sea and Russia

Why in News?

- Recently, the sinking of the warship Moskva, flagship of the Russian Black Sea Fleet — whether due to a Ukrainian missile strike or, as Russia claims, a fire on board — is a serious setback for Russia in the War against Ukraine.

What is the Black Sea's Geography?

- Littoral Geography: The Black Sea is bordered by Ukraine to the north and northwest, Russia and Georgia to the east, Turkey to the south, and Bulgaria and Romania to the west.
- Maritime Geography: It links to the Sea of Marmara through the Bosphorus Strait and then to the Aegean Sea through the Dardanelles strait.

What is the Importance of Black Sea to Russia?



- Strategic Importance: Domination of the Black Sea region is a geostrategic imperative for Russia, both to project Russian power in the Mediterranean and to secure the economic gateway to key markets in southern Europe.
- Gateway to Mediterranean Sea: It has traditionally been Russia's warm water gateway to Europe.
- Strategic Buffer: It is a strategic buffer between the North Atlantic Treaty Organisation (NATO) and itself.
- Black Sea Fleet: In this context, Russia has been making efforts to gain complete control over the Black Sea since the Crimean crisis of 2014.
- Thus, Russia has stationed its Black Sea naval fleet in the Black Sea.
- Black Sea Fleet: The Black Sea Fleet has a long history and is considered to have been founded back in 1783.
- It comprises warships of the Russian Navy in the Black Sea, Sea of Azov, and the eastern Mediterranean, and is headquartered at Sevastopol, the major port on the Crimean peninsula.

What is Russia Doing in the Black Sea?

- During the ongoing invasion, the domination of the Black Sea has been a major Russian objective, along with the land bridge to connect Russia and Crimea.
- Capturing Mariupol: There have been intense efforts to capture Mariupol, the Sea of Azov port in the breakaway eastern Ukrainian oblast of Donetsk.
- Capturing Odessa: Russia was also expected to focus its military efforts on Odessa, to the west of Crimea.
- If the Odessa region were to fall as well, Ukraine would lose access to its entire Black Sea coastline and would in effect be reduced to a landlocked country.
- It is also the largest region in Ukraine which serves as an important energy and transport corridor with abundant natural resources.
- The Rhine-Main-Danube canal connects the Black Sea to the Atlantic Ocean and the port of Odessa serves as a vital link between Ukraine and the outside world.

What are Russia's Prospects?

- The loss of the warship Moskva is expected to put brakes on an anticipated amphibious assault on Odessa.
- This incident means Russia has now suffered damage to two key naval assets since invading Ukraine, the first being Russia's Alligator class landing ship Saratov in March 2022.
- Both events will likely lead Russia to review its maritime posture in the Black Sea.

11.3. Kuril Islands

Why In News?

- Recently, Japan's Diplomatic Bluebook for 2022 described the Kuril Islands as being under Russia's "illegal occupation".

What are the Kuril Islands/ Northern Territories?

- These are a set of four islands situated between the Sea of Okhotsk and the Pacific Ocean near the north of Japan's northernmost prefecture, Hokkaido.
- Both Moscow and Tokyo claim sovereignty over them though the islands have been under Russian control since the end of World War II.

- The Soviet Union had seized the islands at the end of World War II and by 1949 had expelled its Japanese residents.
- Tokyo claims that the disputed islands have been part of Japan since the early 19th century.
- Since 1991, there have been many attempts to resolve the dispute and sign a peace treaty.
- The most recent attempt was under Prime Minister Shinzo Abe when joint economic development of the disputed islands was explored.

12. History- Art & Culture

12.1. Madhavpur Ghed Fair or Madhavpur Mela

Why in News?

- The President of India inaugurated the Madhavpur Ghed Fair or Madhavpur Mela.

Madhavpur Ghed Fair

- The Fair has been organised since 2018 by the Government of Gujarat in association with the Ministry of Culture.
- The Ministry of Development of the North Eastern Region is also involved in organizing the fair on a larger scale from the year 2022.
- Madhavpur Mela will be held at Madhavpur Ghed, Porbandar in Gujarat.
- Madhavpur Ghed is a small village and according to folklore, it is said that Lord Krishna married Rukmini, the daughter of King Bhishmaka in this place.
- The fair will commence every year on the occasion of "Rama Navami" to celebrate the sacred union of Lord Krishna and Rukmini.
- Madhavpur Mela is a unique celebration of India's cultural diversity and vibrancy.
- The Madhavpur Fair connects Gujarat with the north-east region of India
- The Madhavpur Mela of Gujarat has its connection to the Mishmi Tribe of Arunachal Pradesh.
- The Mishmi Tribe trace their ancestry to the legendary King Bhishmak.
- The fair includes events such as cultural performances and the display of crafts and foods.

12.2. National Tribal Freedom Fighters' Museum

Why in News?

- A National Workshop to expedite the Development of National Tribal Freedom Fighters' Museum Organised At Bhopal, Madhya Pradesh.

National Tribal Freedom Fighters' Museum

- On 15th August 2016, during the Independence Day speech at Red Fort, the Prime Minister of India announced the setting up of tribal freedom fighters' museums in various parts of the country.
- The objective establishment of these museums is to acknowledge and promote awareness about the contributions of the unsung tribal heroes in the national freedom struggle.
- The Ministry of Tribal Affairs has sanctioned the establishment of ten Tribal Freedom Fighter museums across the country.

- On 15th November 2021 on the country's first tribal day or Janjatiya Gaurav Diwas, Tribal Freedom Fighter Museum in Ranchi, Jharkhand dedicated to Birsa Munda was inaugurated.
- The largest among the series of planned tribal museums will be at Garudeshwar near Rajpipla in Gujarat's Narmada district and it will be dedicated to the heroes of India's freedom struggle from across the country.

Significance of Tribal Freedom Fighters' Museum

- The Museums help recognise the contribution of India's tribal peoples to nation building, and said it helps take the soul of India to newer heights by drawing its energy from the tribal community.
- These museums will help to spread awareness about India's tribal history to the newer generations of the country.
- These museums also play a key role in preserving and promoting the songs, music, art-skills, handicrafts and crafts of tribal communities in India.
- The Museum will also give a new impetus to tourism in these regions.

12.3. Cyclopean wall

Why in News?

- Bihar seeks UNESCO's tag for 'Cyclopean wall'.

Cyclopean wall

- The Cyclopean Wall is a 2,500 years old structure at Rajgir in Bihar.
- The Cyclopean Wall of Rajgir is a 40 km long wall built before the 3rd century BC, which encompasses the ancient city of Rajgriha and was built to protect it from invaders.
- The Cyclopean Wall of Rajgir is believed to have been built in the pre-Mauryan era, using massive undressed stones.
- It is among the oldest examples of cyclopean masonry in the world.
- Cyclopean masonry is a type of stonework built with limestone boulders fitted together with minimal gap between adjoining stones and with clay mortar or no use of mortar.
- The wall is said to have been constructed by the rulers of the Brihadratha (Rawani) Dynasty.

12.4. Chennakeshava temple

Why in News?

- The historic Chennakeshava temple in Belur in Hassan district of Karnataka kept alive its tradition of kicking off the rathotsava or the chariot festival after reciting passages from the Quran despite opposition from Hindu right-wing organisations.
- The 'Rathotsav' ceremony at the Belur temple is performed for two days. The idol of Channakeshava is embellished with gold and diamond jewels gifted by the erstwhile kings of the Mysuru kingdom. Lakhs of devotees throng Belur during this temple fair.

Belur's Chennakeshava temple

- The temple was commissioned by the Hoysala king Vishnuvardhana to mark his victories against the Cholas in 1116 AD.
- The temple is located at Belur (also called Velapura) in Hassan district of Karnataka.
- The temple is constructed on the banks of the Yagachi River.
- It is a Vaishnava temple that also includes themes of Shaivism, Shaktism, Jainism and Buddhism.
- It is a remarkable example of the Vesara style of architecture and is a testimony of the artistic, cultural and theological heritage of the 12th century Hoysala Empire.

12.5. Rongali Bihu and Bihu dance

Why in News?

- Assamese women were seen performing Bihu on the occasion of Rongali Bihu in Sonapur.

Rongali Bihu

- Rongali Bihu is a traditional ethnic festival celebrated in the Northeastern Indian state of Assam.
- The festival is celebrated in the first month of the Assamese calendar and marks the advent of the Assamese New Year.
- This festival coincides with the advent of the spring season.
- It is usually celebrated in the 2nd week of April, signifying the time of harvest.
- The festival is celebrated by the performance of the Bihu dance by the locals.

Bihu dance

- The Bihu dance is a native folk dance of Assam.
- It is related to the Bihu festival and is an important part of Assamese culture.
- The Bihu dance is performed in a group and the dancers are usually young men and women.
- The dancing form consists of brisk steps and rapid handclaps and movements.
- The dancers are seen in colourful costumes mainly with a red colour theme which represents joy and vigour.

12.6. Pohela Boishakh

Why in News?

- Festival of happiness and joy, Pohela Baisakh or Poila Baisakh is celebrated in West Bengal.

About Pohela Baisakh:

- In Bengali, the word Pohela means first and Baisakh signifies the new month. Therefore, according to Bengali calendar Baisakh is the first month.
- For Bengalis, Pohela Boishakh is a significant celebration since it symbolises the start of a new fiscal year.
- Bengalis meet and greet families, and wear new clothes and eat traditional food on Pohela Baisakh.
- Children as well as adults perform on Rabindra Sangeet and sing songs in cultural events.
- On this day, people wish each other by saying 'Shubho Nobo Borsho', wherein 'Shubho' means happy, 'Nobo' means new and 'Barsho' means year.
- Goddess Lakshmi and Lord Ganesha is especially worshipped on this day.

12.7. Vishu

Why in News?

- Keralites celebrated Vishu with traditional zeal.

Vishu:

- Vishu is a Hindu festival celebrated in the Indian state of Kerala, Tulu Nadu region in Karnataka, Mahé district of Union Territory of Pondicherry,neighbouring areas of Tamil Nadu and their diaspora communities.
- The festival marks the first day of Medam, the ninth month in the solar calendar followed in Kerala.
- The Vishu arrangement typically includes an image of Krishna.

12.8. Kathputli Puppetry

Why in News?

- A once vibrant community of puppeteers and folk artistes from Kathputli Colony, which now resides at a transit camp in Anand Parbat, was dealt another blow after a fire razed 24 shanties and damaged 20 others.

About Kathputli:

- It is a string puppet theatre, native to Rajasthan.
- It is the most popular form of Indian puppetry.
- Being a string marionette, it is controlled by a single string that passes it from the top of the puppet over the puppeteers.

- Kathputli means a puppet that is made entirely from wood. However, it is made out of wood, cotton cloth and metal wire.
- Kathputli art tradition is more than thousands of years old.
- The tradition of Kathputli is based on folk tales and stories.
- Scholars believe that folk tales convey the lifestyle of ancient Rajasthani tribal people.
- Characteristic of this form are the shrill voices produced by the lead puppeteer which are spoken through a bamboo reed.

12.9. Khalsa Panth

Why in News?

- The Prime Minister has greeted everyone especially the Sikhs on the special occasion of Khalsa Saajna Diwas.

About Khalsa:

- It refers to both a community that considers Sikhism as its faith, as well as a special group of initiated Sikhs.
- The Khalsa tradition was initiated in 1699 by the Tenth Guru of Sikhism, Guru Gobind Singh after his father, Guru Tegh Bahadur, was beheaded during the Islamic sharia rule of the Mughal Emperor Aurangzeb.
- Guru Gobind Singh created and initiated the Khalsa as a warrior with a duty to protect the innocent from Islamic religious persecution.
- Its formation was a key event in the history of Sikhism.
- The founding of Khalsa is celebrated by Sikhs during the festival of Vaisakhi.
- It created a new institution for the temporal leadership of the Sikhs, replacing the earlier masand system.
- The Khalsa provided a political and religious vision for the Sikh community.
- Upon initiation, a Khalsa Sikh was given the titles of Singh (male) meaning lion and Kaur (female) meaning princess.
- The rules of life, included behavioral code (Rahit, such as no tobacco, no intoxicants, no adultery, no Kutha meat), no modification of hair on the body, and a dress code (Five Ks).
- Guru Gobind Singh Ji initiated the Five K's tradition of the Khalsa,
    - Kesh: uncut hair.
    - Kangha: a wooden comb.
    - Kara: an iron or steel bracelet worn on the wrist.
    - Kirpan: a sword.
    - Kachera: short breeches.
- The four prohibitions or mandatory restrictions of the Khalsa or life of Khalsa at the time of Guru Gobind Singh Ji are:
- Not to disturb the natural growth of the hairs.
- Not to eat the kutha meat of any animal.
- Not to cohabit with a person other than one's spouse.
- Not to use tobacco, alcohol or any type of drugs.

13. Awards

13.1. Best Infrastructure Project' Award

- The Border Roads Organisation (BRO) engineering marvel, Atal Tunnel, built-in Rohtang in Himachal Pradesh, received the Indian Building Congress (IBC) 'Best Infrastructure Project' award in New Delhi.
- More than thirty state-of-the-art infrastructure projects were nominated for the award. The IBC jury selected the strategic tunnel as the 'Best Project for Excellence in Built Environment' in 2021.

13.2. Whitley Gold Award

- Noted snow leopard expert and wildlife conservationist Charudutt Mishra has won the prestigious Whitley Gold Award for his contribution to involving indigenous

communities in the conservation and recovery of big cat species in Asia's high mountain ecosystems.

- In 2017, Mishra wrote a paper on eight approaches to community-based conservation that helped involve local communities in snow leopard protection in the upper reaches of the Himalayas, leading to a reduction in retribution killings of the big cats. UN Biodiversity Conference recognised his approach as an outstanding global practice.

13.3. UN Award

- The important effort of Meghalaya's Planning Department, the e-Proposal System, which is part of Meghalaya Enterprise Architecture (MeghEA), has been awarded the prestigious UN Award – World Summit on the Information Society Forum (WSIS) Prizes 2022.
- According to the government, the e-Proposal system now automates all of Meghalaya's departments and directorates' sanctions and administrative approvals, and delivers government services with desired outcomes to all citizens and other stakeholders across the state in an integrated and seamless manner. In government departments, it eliminates 75% of physical files.

13.4. UN 'Champion of the Earth Lifetime Achievement award

- United Nations Environment Programme (UNEP) has named Sir David Attenborough, English natural history broadcaster and naturalist, as the recipient of the Champions of the Earth Award 2021 under the Lifetime Achievement category.
- This award is given to him for his dedication to research, documentation, and advocacy for the protection of nature and its restoration.
- Sir David Attenborough is well known for his innovative educational television programs, especially the nine-part Life series forming the Life collection.
- His well-known documentaries include The Green Planet and A Plastic Ocean. He was knighted twice by Queen Elizabeth II in 1985 and again in 2020. He has won 3 Emmy Awards and 8 British Academy of Film and Television Arts (BAFTA) awards.

13.5. Saraswati Samman 2021

- Noted poet and litterateur Prof Ramdarash Mishra will be awarded the prestigious Saraswati Samman, 2021, for his collection of poems 'Mein to Yahan Hun', the KK Birla Foundation announced. The recipient is chosen by a selection committee, whose current head is Dr Subhash C Kashyap.

Saraswati Samman:

- Instituted in 1991, Saraswati Samman is one of the most prestigious literary awards in the country. It is given every year to an outstanding literary work written in any Indian language by an Indian citizen and published within the last 10 years. It carries a citation, a plaque, and a cash prize of Rs 15 lakhs. The recipient is chosen by a selection committee, whose current head is Dr Subhash C Kashyap, former secretary-general of the Lok Sabha Secretariat.

13.6. Jnanpith Award

- Assam Chief Minister, Dr Himanta Biswa Sarma presented the country's highest literary award, the 56th Jnanpith for the year 2021 to one of the most celebrated poets of Assam, Nilamani Phookan.
- Nilmani Phookan is the third person to win the Jnanpith Award from Assam after Mamoni Roisom Goswami and Birendra Kumar Bhattacharya. The Award carried a Citation, a shawl, and Rs. 11 lakh.

14. Government Initiatives

14.1. Lessons From 'Food For All' Model of Chhattisgarh

Why in News?

- Despite the achievements some shortcomings persist. The NFSA model can ease the fiscal strain on the State.

Context:

- Chhattisgarh presents a unique case of the Information and Communications Technologies-enabled Universal Public Distribution System (UPDS) that ensures "food for all" and contributes to the various aspects of food security, such as availability, access, utilisation, stability, and agency. The technological fixes for food security programmes in Chhattisgarh are workable and relevant underlying the political logic of the context.
- The co-existence of the National Food Security Act, 2013 (NFSA), and the Chhattisgarh Food Security Act, 2012 has made the coverage of PDS universal in the State. The lessons we draw from the Chhattisgarh's model of 'food for all' would have implications to NFSA evaluation and Integrated Management of PDS.

Lessons from Chhattisgarh's model of 'food for all'

- First, the UPDS has become accessible and portable to the State beneficiaries as it had rolled out the ICTs-driven Centralized Online Real-time Electronic (CORE) PDS in 2011–12. CORE PDS is a predominantly online distribution system but allows limited offline transactions in the case of temporary connection problems at Fair Price Shops or 'salespersons' outlet.
- Second, beneficiaries in the CORE PDS are allowed to access their ration from any State notified FPS by authenticating themselves through any of the multiple instruments permitted. These include Smart Ration Card issued by the State Food and Civil Supplies Department, Rashtriya Swastha Beema Yojana card issued by the State health department, or a registered mobile number using a one-time password.
- Third, the FPS salesperson inserts the smart card in the electronic Point of Sales (ePoS) device that reads the ration card number and sends it to the server through GPRS to obtain the beneficiary entitlement balances.
- Fourth, the FPS salesperson enters the quantities issued to the beneficiary and submits the transaction details. The server updates the transaction and generates a success report. A receipt is then printed, and the commodities or foodgrains are issued to the beneficiaries.

Fair Price Shops of CORE PDS

- Fair Price Shops play a pivotal role in the technology-enabled food security net. The distribution of FPS as per ownership is presented in Figure 1. Coop societies, Self-help Groups and Panchayats, account for 99 per cent of ownership.
- The geo-referenced FPS includes 12,303 which is 93 per cent of the total FPS. 90 per cent of FPS are supplied with the ePoS machine and except for one, all are operational.
- According to the Directorate of Food and Civil Supplies, Chhattisgarh, 200 ePoS machines have been installed in urban FPS.
- In many places, ePoS was installed and ready for its first-time use. Most FPS in rural regions utilise tablets, and the ration has been distributed via clicking the photograph of beneficiaries.
- Such systems can obscure the transparency of UPDS in the State, which flaunts the promises of technology-enabled CORE PDS (Nasscom, 2022).
- Chhattisgarh's model of UPDS symbolises "food for all" and is a milestone when it comes

to the credibility and portability of the PDS. CORE PDS offers freedom and convenience to beneficiaries in selecting FPS or salespersons.

Shortcomings in Chhattisgarh's model

- However, this model or system has some shortcomings.
- First, the State Food and Civil Supplies Department's formula to calculate beneficiaries' entitlement for NFSA or UPDS is complicated. Beneficiaries with 1, 2, or 3 members are not sure whether they are eligible to receive the NFSA or UPDS entitlements. Even the officials of the Food and Civil Supplies Department are not on the same page when asked about it.
- A linear or straightforward formula to calculate the allocation per beneficiary would not only ensure equity of distribution. It can also ensure parity among cardholders irrespective of the number of registered members on a particular card.
- Second, beneficiaries often receive kerosene, sugar, and salt along with rice. On the downside, many beneficiaries, especially in urban regions, prefer to receive wheat and pulses. This makes sense as rice alone cannot be enough for dietary requirements and provide adequate nutrition to adults and children.
- Third, "food for all" is not in sync with a rational approach when the beneficiaries are way above the poverty line entitled to subsidised food grains under the State food security act. Instead of the State-adopted UPDS, the NFSA model can rationalise the distribution and reduce the fiscal strain for the State under TPDS.
- Fourth, while the CORE PDS mirrors the ONORC portability, an underlying theme of concurrent evaluation of NFSA Phase II (2020-23), beneficiaries under the State food security act (CGFSA) are not found eligible to avail ONORC portability.

Way Forward:

- To conclude, it is proposed that ePoS and digitisation can address the problem of ghost or bogus cards, and there should be a proper display of Information, Education, and Communication materials at the FPS outlet to discourage overcharging of foodgrains by FPS or salespersons.

14.2. e-DAR portal

Why in News?

- A web portal named e-DAR has been developed by the government.

e-DAR (e-Detailed Accident Report) Portal

- It has been developed by the Ministry of Roads, Transport and Highways (MoRTH) in consultation with the insurance companies.
- It is a web portal that will help provide instant information on road accidents and accelerate accident compensation claims, bringing relief to victims' families.
- Digitalised Detailed Accident Reports (DAR) will be uploaded on the e-DAR portal for easy access and the web portal will be linked to the Integrated Road Accident Database (iRAD).
- The portal will also be linked to other portals like "Vaahan" and will have access to information on driving licence details and registration of vehicles.
- The e-DAR portal will be conducting multiple checks against fake claims by conducting a sweeping search of vehicles involved in the accident, the date of the accident, and the First Information Report number.
- The portal will help in geo-tagging the accident location along with the site map.
- Various information such as photos, videos of the accident spot, damaged vehicles, injured victims, eye-witnesses, etc., will be uploaded immediately on the portal.

14.3. PROJECT SAJAL

Why in News?

- Government Based on the sharp shortage of drinking water, the ICD Patparganj & Other

ICDs Commissionerate took an initiative under **Swachhta project to provide safe drinking water facility to school students under the Project SAJAL**, meaning full of water.

- **Aim:** to provide **safe drinking water to school students**, this will **enable the schools to have a nurturing environment for students to have their studies and activities.**
  - With this goal, **20 government schools are identified** in different districts of Sonepat, Panipat, Faridabad, Palwal and Gurugram.
  - These schools are **located in rural areas with industrial belts where the ground water is contaminated due to industrial discharge** and as suggested by the Central Ground Water Board.

Need:

- Central Ground Water Board, in its report in October 2021 on state of ground water in Haryana, has highlighted that the **ground water offerings in different districts of Haryana are mostly saline, and not suitable for drinking purposes.**
- The report also highlighted that the **water has low potable rating as chemical parameters were much higher than permissible limits.**
  - The permissible pH limit of drinking water as per **BIS 10500 (2012) standard is 6.5 to 8.5.**
- However, the pH limit is exceeded beyond 8.5 in most districts, going up to 9.0. Calcium with a permissible limit of 200, as per the BIS standard, is up to 650.
- Magnesium with a permissible limit of 100, as per the BIS standard, is up to 700.
- Chloride with a permissible limit of 1000, as per the BIS standard, is up to 5000. So, considering the **salinity and dissolved solids and chemicals beyond permissible limits, the ground water is not safe for drinking.**

What will be done?

- For this enablement, two technologies are identified – **Reverse Osmosis (RO)** to lower dissolved solids within permissible limits and **Water Cooler** to provide drinking water during hot summer months when temperature exceeds 40 degrees Celsius in Haryana.
- In the **RO process**, the feed water enters the RO membrane under pressure, the water molecules pass through the semi-permeable membrane and the salts and other contaminants are not allowed to pass and usually more than 95% of the dissolved salts are removed from it.
- The RO **removes common pollutants** from water including **nitrates, lead pesticides, sulfates, fluoride, bacteria, pharmaceuticals, arsenic, chlorine and chloramines. RO filtration improves taste, odor and appearance of water by removing contaminants**.
- This facility will nurture students' health, helping their complete development in a clean environment.

14.4. Kisan Bhagidari Prathmikta Hamari Campaign

Why in News?

- Union Minister for Agriculture and Farmers Welfare will inaugurate the activities of Ministry of Agriculture & Farmers Welfare under 'Kisan Bhagidari Prathmikta Hamari' Campaign today.

More Details

- To ensure that all farmers get the benefit of the Kisan Credit Card (KCC) scheme, the district administration is set to launch "Kisan Bhagidari Prathmikta Hamari "
- The campaign is being organised under 'Azadi Ka Amrit Mahotsav' in association with various other Ministries and Departments.
- Under this the Department of Agriculture Research and Education would be organising a

Krishi Mela at each Krishi Vigyan Kendra and field exhibition on natural farming.

- Union Agriculture Minister will launch the country-wide workshop on crop insurance organised by common service centre (CSC). A National Atma Nirbhar Bharat Conclave of 75 selected farmers and entrepreneurs will be under the campaign.
- Under the campaign a special drive would be conducted by the banks in coordination with the district administration, NABARD and local self-government departments to mobilize the potential KCC beneficiaries and to sanction cards on the spot.
- A special gram sabha would be conducted in villages wherein the farmers who do not have KCC would be mobilised to fill the form.
- Milestones of agriculture development in 75 years of Indian Independence including Green Revolution: Self-sufficiency in food grain production will be highlighted during the campaign.
- More than one crore farmers and stakeholders are expected to participate in the Kisan Bhagidari, Prathmikta Hamari' campaign.

14.5. DACE SCHEME

Why in News?

- The Union Minister for Social Justice and Empowerment launched the Dr Ambedkar Centres of Excellence (DACE) Scheme.

More Details

- The Union Minister for Social Justice and Empowerment Dr Virendra Kumar and Smt. Anandi Ben Patel, Governor of Uttar Pradesh has launched the Dr Ambedkar Centres of Excellence (DACE) Scheme from Banaras Hindu University, Varanasi.
    - It was also started in 31 Central Universities across the country.
- It aims to provide high-quality free coaching facilities to the Scheduled Caste students for the UPSC Civil Services examinations.
- Under the DACE Scheme, a total of 100 seats will be sanctioned for each coaching centre.
    - Out of the total sanctioned of 100 seats per coaching centre, 33% of seats will preferably be given to the eligible female candidates of Scheduled Castes.
- One time coaching benefits regardless of the number of chances he/she is entitled to a particular competitive examination.
- The students will be selected through an entrance test conducted by the University as per merit.
- 75,000/- per annum/per student will be provided to the University for 100 students. The total amount of Rs. 75.00 lakh per year would be provided to the University for running the Scheme.

Challenges in Indian Education System

- India has achieved universal enrolment at the elementary level. This is a great achievement, but getting Students to School is only the beginning of human Capital formation.
- **Poor quality of facilities, Shortage of qualified faculty.**
- **Out of date Curriculum, Limited university-industry Partnership**.
- Indian origin Scientists have won the Nobel Prize, but post-independence work done in India has not led to a Science novel. If Indians Studying and working abroad can have a great impact, then obviously the problem has to do with our Systems of education and research.
- Broken governance System. There are few rewards for being a good teacher and few Punishments for being a Careless one. Need more effective and accountable governance Systems**.**
- The greed of Private Colleges to earn the maximum from every Student puts traumatic Pressure on Students which results in mental breakdown.
- **More girls than boys drop out of School.** While boys drop out to work, girls

usually Stay at home and help with domestic Work. Social Conception of gender roles is an important factor.

- **Learning loss due to pandemics and the digital divide.**

Steps by the Government

- **The 86th Constitution Amendment provides the Fundamental right to free and compulsory education under Article 21A** includes a Common education System where the "rich and Poor are educated under one roof".
- **Rashtriya Uchchatar Shiksha Abhiyan** provides funding to eligible State higher educational institutions.
- Declaration of Educational Institutions as **institutions of Eminence,** to provide world-class education to Indian Students within the Country.
- Creation of **Higher Education Financing Agency,** for high-quality infrastructure in Premier educational institutions.
- **National Institution Ranking Framework** for ranking our higher education institutions.
- **GIAN Initiative** to invite distinguished academicians, entrepreneurs, scientists, and experts from premier institutions across the world to teach in higher educational institutions in India.
- **SWAYAM Portal** for online Courses.
- **SWAYAM Prabha** Provide HD educational Channels through DTH on a 24X7 basis.
- Sodhganga to develop a national repository of universities in India, digital Study material for higher education.
- **Samagra Shiksha** Scheme to ensure inclusive and equitable quality education at all levels of school education.

14.6. BharatNet Project

In Context

- The implementation of **BharatNet** has slowed and is likely to miss the 2025 completion deadline owing to a number of factors.

Progress made so far

- As of February 2022, only about 1.72 lakh of the initially targeted 2.5 lakh gram panchayats had been connected to the central grid under BharatNet.
- Of these, 1.5 lakh gram panchayats had been connected by 2017, within the first three years of the project being **re-christened 'BharatNet'**.

About BharatNet Project

- It is a project envisioned by the Government of India to **digitally connect all the Gram Panchayats (GPs) and Villages of India.**
- It originally aimed to provide broadband services at 100 Mbps to around 2.5 lakh gram panchayats of the country.
- It is a **highly scalable network infrastructure** accessible on a non-discriminatory basis.
- It is the **world's largest rural connectivity scheme to** be connected by the Optical Fibre network.
- **Aim:** To provide on-demand, affordable broadband connectivity of 2 Mbps to 20 Mbps for all households of India especially in rural areas.
- **Implementing Agency:** The project is being implemented by Bharat Broadband Network Limited (**BBNL**) through a **Special Purpose Vehicle (SPV)**.
- **Funding:** The entire project is being funded by the Universal Service Obligation Fund (USOF), which was set up for improving telecom services in rural and remote areas of the country.
- **The scope of work under BharatNet PPP Project includes:**
    - **Connecting the remaining** unconnected GPs under BharatNet project (Phase 1 & Phase 2) and all the inhabited Villages beyond the GPs.
    - **Upgradation of the existing BharatNet** Network from Linear to Ring topology.

- **Operation and Maintenance (O&M)** and Utilisation of the existing as well as the newly deployed network.

- **Support:** Central Public Sector in Undertakings (CPSUs) BSNL, RailTel, and PGCIL are providing the optical fibre network for broadband connections for the BharatNet project.
- **Benefits:**
  - It would reduce the **cost of broadband services in India.**
  - It would have **advantages like easy maintenance, faster implementation,** and utilisation of the present power line infrastructure.
  - It would provide **internet connectivity** to **citizens especially in rural areas via Wi-Fi Hotspots.**
  - It would provide a **boost to the economy** and would generate around 10 crore man-days of employment during the rollout of the project.
  - It will help in the **expedition of government's initiatives** such as Make In India, Start-up India, Stand-up India etc
  - It is considered to be the backbone of **'Digital India'** aiming to reduce the digital divide between urban and rural India.

15. Persons & Appointments

15.1. Lt Gen BS Raju

- The Indian Army's Director General of Military Operations, Lieutenant General Baggavalli Somashekar Raju has been appointed as the Vice Chief of the Army Staff.
- He had commanded a battalion during Operation Parakram in the Western Theatre and J&K. He has been awarded the Uttam Yudh Seva Medal, Ati Vishisht Seva Medal, and Yudh Seva Medal.

15.2. Vinay Mohan Kwatra

- Vinay Mohan Kwatra took charge as India's new Foreign Secretary. A 1988-batch Indian Foreign Service (IFS) officer, Mr Kwatra succeeded Harsh Vardhan Shringla who retired from service.

15.3. Vishwas Patel

- Vishwas Patel has been re-elected as the Chairman of Payments Council of India (PCI) for the second time in 2022, previously he was elected as a Chairman of PCI in the year 2018.

15.4. Vinay Mohan Kwatra

- The Government of India has appointed IFS Vinay Mohan Kwatra as the new Foreign Secretary of India. He is currently serving as India's envoy to Nepal, from March 2020.

15.5. Andy Jassy

- Andy Jassy will officially become the CEO of Amazon, the company announced at a shareholder meeting. Amazon announced that Jassy, who is the current CEO of Amazon Web Services (AWS).

15.6. Manoj Soni

- Currently a Member of the Union Public Service Commission (UPSC), Dr Manoj Soni has been appointed the chairman of the country's premier government recruiting agency.
- He has been associated with the Swaminarayan sect's Anoopam Mission, at Mogri in Anand district, since a young age and

received diksha (initiation) as a nishkarma karmayogi (selfless worker)

15.7. Ajay Kumar Sood

- Ajay Kumar Sood, a member of the Science, Technology and Innovation Advisory Council to the Prime Minister, has been appointed to the post for a period of three years to succeed renowned biologist K VijayRaghavan

15.8. Krishnan Ramanujam

- The National Association of Software and Services Companies (Nasscom) announced that Krishnan Ramanujam, President, Enterprise Growth Group at Tata Consultancy Services, has been appointed as its Chairperson for 2022-23.

15.9. Vijay Sampla

- Former Union minister Vijay Sampla has been appointed as the chairperson of the National Commission for Scheduled Castes (NCSC) for a second time.

16. Important Days

16.1. World Autism Awareness Day

- Every year, UN member states commemorate World Autism Awareness Day on April 2. Measures will be taken that day to raise people's awareness of autism spectrum disorder.
- It is a day when member states of the United Nations are encouraged to raise awareness about people living with autistic spectrum disorders including autism and Asperger syndrome.
- The UN states autism to be a "lifelong neurological condition that manifests during early childhood, irrespective of gender, race or socio-economic status.
- This year, the theme of World Autism Awareness Day is 'Inclusion in the Workplace', which will feature a controlled roundtable discussion with individuals on the autism spectrum who have personally undergone the difficulties and witnessed these new probabilities in the workplace.

16.2. National Maritime Day

- The National Maritime Day of India is celebrated on April 5th each and every year.
- The theme of National Maritime Day 2022 is 'Sustainable Shipping beyond Covid-19'..
- It is celebrated to encourage the merchant shipping industry of India. Shipping contributes a lot to the country's economy.
- At present, 90% of India's international trade in terms of volume and 77% in terms of value is moved by sea.

16.3. World Health Day

- Every year, April 7th is designated as World Health Day. This day is to celebrate the role played by midwives and nurses in maintaining the safety and health of the world.
- Each year, the World Health Organisation (WHO) selects a theme highlighting a particular priority area of public health.
- The theme for this year's World Health Day is "Our Planet, Our Health". Amid the ongoing pandemic and pollution growing on the planet, diseases like cancer, asthma, and heart

diseases are increasing rapidly. World Health Organization aims to focus global attention on the urgent actions needed to "keep humans and the planet healthy."

16.4. Ambedkar Jayanti

- Every year India celebrates Ambedkar Jayanti or Bhim Jayanti on April 14. The day is also called Ambedkar Remembrance Day. Since 2015, April 14 is observed as an official public holiday in India.

About Ambedkar

- Ambedkar was born on April 14, 1891.
- He struggled for equality throughout his life. Thus, his birthday is also celebrated as "Equality Day". India has placed a demand to celebrate his birthday as International Equality Day to the United Nations.
- He was also known as Babasaheb Ambedkar.
- In 1956, he converted to Buddhism.
- In 1932, he signed Poona Pact with Madan Mohan Malaviya. Malaviya signed it on behalf of Gandhi. According to the agreement, reserved seats were provided for depressed classes. Because of the pact, the depressed classes received one hundred and forty-eight seats instead of seventy one seats.
- In 1936, Ambedkar founded Independent Labour Party.
- After Lahore resolution, in 1940, he wrote a book called "Thoughts on Pakistan". The book analysed the concept of Pakistan.
- In his other book called "Who were the Shudras?", Ambedkar wrote about the untouchables.
- Ambedkar was the Chairman of the Drafting Committee of Constituent Assembly.

16.5. World Haemophilia Day:

- Every year, the World Haemophilia Day is celebrated on April 17 by the World Federation of Haemophilia. This year, the World Haemophilia Day is celebrated under the following theme.
- This year, the theme of the day has been kept as 'Access for All: Partnership. Policy. Progress. Engaging your government, integrating inherited bleeding disorders into national policy.' The aim is to sensitize people and governments on the disease and achieve better diagnosis by providing people with access to healthcare.

What is Haemophilia?

- Haemophilia is a rare disorder where the human blood does not clot normally. This is because, the blood lacks sufficient blood clotting proteins.
- It is an inherited genetic disorder.
- Women rarely suffer from the disease.

16.6. World Heritage Day

- Every year, the World Heritage Day is celebrated on April 18. The day is also called the International Day for Monuments and Sites. This year, the World Heritage Day was celebrated under the following theme
- This year, the day will be dedicated under the theme "Heritage and Climate" through open, constructive and intergenerational dialogues.
- The World Heritage Day is promoted by the International Council on Monuments and Sites (ICOSMOS).
- The celebration of the day aims to preserve human heritage, vulnerability and diversity of the world monuments.
- The World Heritage Day was proposed by ICOSMOS in 1982 and was approved by the United Nations in 1983.

16.7. Civil Services Day

- Every year, 21st April is celebrated as the Civil Services Day by the Government of India.

- It is celebrated as an occasion for the civil servants to rededicate themselves to the causes of citizens and renew their commitments to public service and excellence in work.
- The date is chosen to commemorate the day when the first Home Minister of Independent India, Sardar Vallabhbhai Patel addressed the probationers of Administrative Services Officers in 1947 at Metcalf House, Delhi.
- He referred to civil servants as the 'Steel Frame of India'.

16.8. World Earth Day

- Every year, the World Earth Day is celebrated on April 22. The first World Earth Day was celebrated in 1970.
- In 1969, the Peace Activist John McConnell proposed to celebrate World Earth Day to honour the earth. It was first proposed to be celebrated on March 21, 1970, which is the first day of spring in the northern hemisphere.
- This year, US President Joe Biden has invited leaders of forty top economies of the world including Indian Prime Minister Narendra Modi and Chinese President Xi Jing Ping to the Leader's Summit on Climate. The virtual meet is to be held on World Earth Day.
- This year, in 2022, the World Earth Day is celebrated under the following the theme:
- THIS YEAR, earthday.org selected the theme, 'Invest In Our Planet'.

16.9. National Panchayati Raj Day

- Every year, the National Panchayati Raj Day is celebrated on April 24. The first National Panchayati Raj day was declared by Prime Minister Manmohan Singh on April 24, 2010. It is celebrated on April 24 as the Panchayati Raj System of India came into effect on April 24, 1993.
- Prime Minister Narendra Modi launched the SVAMITVA Scheme on National Panchayati Raj Day, 2020.
- This year the celebrations will be held without any specific theme. Every year, various village level functions, seminars, and other events take place. This year's highlight is going to be the award functions that will recognise the best work of panchayats in the country.
- There are more than 2.6 lakh Panchayats in the country.
- The Deen Dayal Upadhyay Pachayat Sashaktikaran Puraskar is awarded on National Panchayati Raj Day.
- Also, the Nanaji Deshmukh Rashtriya Gaurav Sabha Puraskar is awarded to Gram Sabha.
- Apart from these awards, Child friendly Gram Panchayat award and E-Panchayat award are also presented on this day.

17. Miscellaneous

17.1. Anti-Tank Guided Missile 'HELINA' successfully flight tested

Why in News?

- The anti-tank guided missile HELINA was tested.

'HELINA'

- HELINA is an Anti-Tank Guided Missile which is the helicopter-based version of the Nag missile.
- The missile is guided by an Imaging Infra-Red (IIR) Seeker operating in the Lock on Before Launch mode.

- The HELINA missile system has all-weather day and night capability and can defeat battle tanks with conventional armour as well as explosive reactive armour.
- It has been developed for integration with choppers in both the Indian Army and the Air Force.

17.2. Waterways Conclave

Why in News?

- The Waterways Conclave 2022 was held in Dibrugarh, Assam.

Waterways Conclave 2022:

- The Waterways Conclave 2022 was organized by the Union Ministry of Ports, Shipping and Waterways along with the Inland Waterways Authority of India (IWAI).
- It aims to deliberate on new possibilities for cooperation in the waterways sector between nations.
- The conclave is also taking forward the vision of the Prime Minister on 'Vocal for Local' by giving a platform to Assam's handicrafts, tea and artisans in the exhibition.

17.3. Sabka Vikas Mahaquiz

Why in News?

- The Union Government has launched the country's biggest-ever Quiz Contest Sabka Vikas Mahaquiz.

More Details

- MyGov under the Ministry of Electronics and Information Technology is organising the Sabka Vikas Mahaquiz Series.
- The quiz aims to promote awareness among the participants about the various government schemes and initiatives.
- The quiz contest was launched on the birth anniversary of Dr Babasaheb Bhimrao Ambedkar on 14th April 2022.
- The quiz contest was started with the Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY) under the Ministry of Consumer Affairs, Food and Public Distribution. Quiz details
- The PMGKAY quiz has been launched on 14th April 2022 and will be live till 28th April 2022.
- The quiz will be available in 12 languages – English, Hindi, Assamese, Bengali, Gujarati, Kannada, Malayalam, Marathi, Odia, Punjabi, Tamil, and Telugu.
- A maximum of 1,000 top scoring participants will be selected as winners per quiz. Rs. 2,000/- will be given to each of the selected winners.

17.4. Nehru Memorial Museum And Library (Nmml)

Why in News?

- Pradhanmantri Sangrahalaya, a museum in tribute to all former Prime Ministers, was inaugurated by PM Narendra Modi.

More Details:

- The Sangrahalaya, located at the iconic Teen Murti complex, was inaugurated as part of Azadi ka Amrit Mahotsav — a 75-week celebration launched to mark 75 years of Independence.
- The museum will become a source of inspiration for the youth who will be able to witness the hardships each PM faced and how they overcame them to lay the foundations of a new India.
- The logo of the Sangrahalaya, shows hands holding the dharma chakra, symbolising the nation and democracy.
- Museum design incorporates sustainable and energy conservation practices and no tree was felled or transplanted during the course of work on the project.
- The Sangrahalaya will also include the Nehru Museum.
- Nehru Memorial Museum and Library (NMML):
- It is a museum and library in New Delhi, India, which aims to preserve and reconstruct the history of the Indian independence movement.

- It was set up in his memory on its premises as an autonomous institution under the Union Culture Ministry.
- It was founded in 1964 after the death of India's first Prime Minister, Jawaharlal Nehru.
- It aims to foster academic research on modern and contemporary history.
- It is the world's leading resource centre for India's first prime minister.

17.5. FLIGHT STIMULATOR

Why in News?

- Pilots cannot be trained to fly Boeing 737 MAXs safely if the stick shaker in a simulator is faulty, the plane manufacturer has informed the Director-General of Civil Aviation.
- DGCA had recently barred 90 SpiceJet pilots from flying these planes following an inspection of a training facility of the airline.

About

- A flight simulator is a device that artificially re-creates aircraft flight and the environment in which it flies, for pilot training, design, or other purposes.
- It includes replicating the equations that govern how aircraft fly:
- How they react to applications of flight controls,
- The effects of other aircraft systems, and
- How the aircraft reacts to external factors such as air density, turbulence, wind shear, cloud, precipitation, etc.
- Flight simulation is used for a variety of reasons, including flight training (mainly of pilots), the design and development of the aircraft itself, and research into aircraft characteristics and control handling qualities.

17.6. All-India Household Consumer Expenditure Survey

In Context

- All-India Household Consumer Expenditure Survey is set to resume this year after a prolonged break.

About All-India Household Consumer Expenditure Survey

- It is usually conducted by the **National Statistical Office (NSO)** every **five years.**
- **It was used** to arrive at estimates of poverty levels in different parts of the country .
- It is used to review economic indicators like the Gross Domestic Product (GDP), since 2011–12.
- The Survey is conducted between July and June .
- This year's exercise is expected to be completed by June 2023.
    - **Estimates of household Monthly Per Capita Consumer Expenditure (MPCE)** and the distribution of households and persons over different MPCE classes may only **become available about a year after the field work is completed.**
    - The results will include **separate data sets** for **rural and urban parts,** and also **splice spending patterns** for each State and Union Territory, as well as different **socio–economic groups.**

17.7. Child Helpline

Why in News?

- The Union government announced the proposal to merge the child helpline with the national emergency helpline.

More Details

- The Ministry of Women and Child Development announced the proposal to merge the child helpline (1098) with the national emergency helpline (112).
- Child helpline is a 24x7 emergency, free phone outreach for children in distress.
- It is one of the world's biggest emergency helpline services dedicated to children.
- Nearly 50 lakh calls are received annually.
- The Union government in its new draft guidelines for Mission Vatsalya scheme for child protection services said the Child line to be "integrated" with the emergency helpline 112 of the Ministry of Home Affairs that provides assistance with services related to police, health and women's safety.

About Child line

- The Child line is operated by a private trust called Child line India Foundation, which receives funding from the Ministry of Women and Child Development under the Integrated Child Protection Scheme, which is now part of Mission Vatsalya.
- The Ministry of Women and Child Development stated that Child line's work not only involves rescuing children but also counselling them, identifying what is bothering them and then finding solutions to those problems.
- It deals with different kinds of problems children might face, from family discord, food shortage, medical assistance, help with enrolment in schools, etc.
- Child line works closely with police and district teams by supporting children in distress, helping them during medical examinations, taking them to Child Welfare Committees and linking them with shelters.

Mission Vatsalya

- The Ministry of Women and Child Development intended to provide 'integrated benefits to children and women' under Mission Vatsalya.
- Mission Vatsalya aims at ensuring a healthy and happy childhood for every child.
- Child Line (1098), the 24-hour toll-free helpline for children in distress, is managed by the Home Affairs Ministry under Mission Vatsalya.
- The objective of Mission Vatsalya is to ensure a healthy and happy childhood for every child in India.
- Focus under Mission Vatsalya;
    - Service delivery structures
    - Institutional care/services
    - Non-institutional community-based care
    - Emergency outreach services
    - Training and capacity building
    - Child Protection Services and Child Welfare Services
- Mission Vatsalya has a total financial cost of Rs 10916 Crore.

Other steps by the government for child protection

- Enactment of Commissions for Protection of Child Rights Act 2007 to ensure that all Laws, Policies, Programmes, and Administrative Mechanisms are in consonance with the Child Rights perspective as enshrined in the Constitution of India and also the UN Convention on the Rights of the Child.
- The Juvenile Justice (Care and Protection of Children) Act seeks to cater to their developmental needs through proper care, protection and treatment by adopting a child-friendly approach.
- The Prohibition of Child Marriage Act
- The Protection of Children from Sexual Offences Act 2012
- National Policy for Children to help in the implementation of programmes and schemes for children all over the country.
- The Right of Children to Free and Compulsory Education Rules for every child between the ages of 6 to 14 years.
- Integrated Child Protection Scheme (ICPS) in 2009.
- Restructured Integrated Child Development Scheme (ICDS), 2012.
- Child line and Track Child.
- Multi-sectoral programme to address Maternal and Child under-nutrition.
- Beti Bachao, Beti Padhao scheme.
- Rashtriya Bal Swasthya Karyakram (RBSK) launched in 2013.
- PENCIL portal aims at involving Centre, State, District, Governments, civil society and the general public in achieving the target of child labour free society.

17.8. Asian Badminton Championships

- In Asia Badminton Championships, India's P.V. Sindhu won her second Asian bronze medal after a heartbreaking three-game loss to top-seed and defending champion Akane Yamaguchi of Japan in the semifinal in Manila.
- She had won her first bronze in the Asia Badminton Championships 2014 Gimcheon edition.

17.9. Mission Karmayogi program

Why in News?

- The World Bank has approved a USD 47 million projects to support the Government of India's Mission Karmayogi, a national program to build civil service capacity.
- There are nearly 18 million civil servants employed across India, with approximately two-

thirds at the state government and local authority level

More Details:

- The Bank's financing aims to support the Government's objectives of enhancing the functional and behavioural competencies of approximately four million civil servants. It will focus on three components: the development and implementation of competency frameworks; the development of an integrated learning platform; and program monitoring, evaluation, and management.

About the project:

- The Project is aligned with the India Country Partnership Framework (CPF) FY18-22 which includes strengthening public sector institutions as one of the four areas of engagement for the World Bank in India.
- The project is also aligned with the World Bank's twin goals of ending extreme poverty and building shared prosperity, as building the capabilities of government officials to implement policy priorities and deliver effective services is critical to the achievement of these aims.

17.10. India's First Steel Slag Road

Why In News?

- Surat has become the first city in the country to get a **processed steel slag (industrial waste) road built** as part of a joint-venture project by the CSIR, CRRI, Union Ministry of Steel, NITI Ayog, and ArcelorMittal-Nippon Steel (AM/NS), at Hazira.

About the Road

- It is a **six-lane public road.** The **construction began** around a year ago by converting mounds of **steel waste into steel slag aggregate.**
- The road is now being used by **heavy-duty vehicles of multinationals** located in the industrial estate on the outskirts of Surat.
- This project falls under the initiative of the **Waste to Wealth and Clean India Campaign.**

Process:

- The **slag is generated from a steel furnace burning** at around **1,500-1,600 degree** centigrade in the **form of molten flux material as an impurity**.
- The **molten material** is poured into the **slag pits for cooling** as per the **customised procedure and further** processed to develop stable steel slag aggregates, with "**better material properties** in place of the natural aggregate commonly used in road constructions

Benefits:

- The utilisation of processed steel slag in road construction paves the way for **sustainable use of waste and reduces** the reliance on perishable natural aggregates.
    - The construction **cost of the processed steel slag** road is **30 per cent cheaper than roads built from natural aggregate**s.
    - The **thickness of the road is also 30 per cent** lesser than normal ones, while the durability is much longer due to the utilisation of steel slag.
    - The lifespan of a **cement or concrete road is over 30 years** while that of bitumen and steel slag road is around 15 years.
    - These roads are also much more **durable during the monsoon**.
    - It is in line with **India's commitment to the United Nations Sustainable Development Goal No. 9** for building resilient infrastructure through inclusive and sustainable industrialization and green technologies.

17.11. Familial Forestry

Why in News?

- About 2.5 million saplings have been planted in the past 15 years, with active participation of students and desert dwellers under Familial Forestry.

About Familial Forestry

- Familial Forestry means caring for the tree as a family member so that the tree becomes a part of the family's consciousness.

- This movement involved more than a million families from more than 15,000 villages of desert-prone northwest Rajasthan.
- Familial Forestry of Rajasthan is a unique concept that relates a tree with a family, making it a green "family member".
- This green or eco socialisation brings environmental sensitivity and empowerment.
- Land for life Award 2021 was conferred to the Familial Forestry of Rajasthan, India, by UNCCD in 2021.

Other related initiatives

- The Government has various schemes relating to afforestation/plantation leading to combating desertification and land degradation depending on the climatic and geographical condition of that particular area including schemes of MOEFCC under Twenty Point Programme (TPP) like National Afforestation Programme (NAP), National Mission for a Green India (GIM) etc.

17.12. Countercyclical Capital Buffer

Why In News?

- The Reserve Bank of India said it has decided not to activate the countercyclical capital buffer at this point in time as it is not required.

About Countercyclical capital buffer

Background:

- The RBI had proposed the CCCB for Indian banks in 2015 as part of its Basel-III requirements; it hasn't actually required the CCCB to be maintained, keeping the ratio at zero percent ever since.
- Basel III is an internationally agreed set of measures developed by the Basel Committee on Banking Supervision in response to the financial crisis of 2007-09. The measures aim to strengthen the regulation, supervision and risk management of banks.
- This is based on the RBI's review of the credit-GDP gap, the growth in GNPA, the industry outlook assessment index, interest coverage ratio and other indicators, as part of the first monetary policy of every financial year.

Meaning:

- Following Basel-III norms, central banks specify certain capital adequacy norms for banks in a country.
- The CCCB is a part of such norms and is calculated as a fixed percentage of a bank's risk-weighted loan book.
- The CCCB is supposed to be in the form of equity capital, and if the minimum buffer requirements are breached, capital distribution constraints such as limits on dividends and share buybacks can be imposed on the bank.

Significance:

- Creating a buffer: It requires banks to build up a buffer of capital in good times, which may be used to maintain the flow of credit to the real sector in difficult times.
- Restricting indiscriminate lending: It achieves the broader macro prudential goal of restricting the banking sector from indiscriminate lending in periods of excess credit growth that have often been associated with the building up of system-wide risk.

17.13. QS World University Rankings

Why In News ?

- The QS World University Rankings 2022 were released recently .
    - Five IITs, two IIMs, Jawaharlal Nehru University and Delhi University are among the 16 higher education institutes in India that collectively offer 35 programmes which globally rank among the top 100 in their respective subject categories.

About QS Rankings

- Quacquarelli Symonds(QS)is a **UK Based think-tank** .
- The QS World University Rankings is an **annual publication of university rankings** which comprises the **global overall and subject rankings** (which name the **world's top universities for the study of 51 different subjects**
- It is the most-widely read **university rankings in the world.**

- It currently leads the **higher education industry** with consistent innovation and growth, progressively affecting the way students and institutions engage.
- The QS rankings **provide methodical evaluations of key** areas of higher education institutions, ultimately offering potential students expert advice proven to align students with their chosen path.

Indicators:

- QS uses a number of academic indicators by which to measure institutions, depending on the specific ranking in question. These include:
    - **Academic Reputation** – A score based on the reputation of an institution.
    - **H Index** – An index that attempts to measure both the productivity and impact of the published work of a scientist or scholar.
    - **Citations per Faculty** – Citations, evaluated in some fashion to take into account the size of the institution, are the best understood and most widely accepted measure of research strength.
    - **Staff with PhDs** – The indicator is based on a simple proportion of each institution that holds a PhD or equivalent terminal degree.

17.14. Agra: Vacuum-based Sewer System

Why in News?

- Agra has become the first city in India to have a vacuum-based sewers system. These vacuum-based sewers will be used in the city's public places. 240 houses near the Taj Mahal have been connected with this vacuum-based sewer by the Agra Smart City corporation as conventional sewer systems cannot be used.

More Details:

- These homes have been connected to a vacuum-based sewer as they are in a low-lying area.
- In this area, around 112 chambers have been made, in which the sensors for this system have also been installed.
- This system will be automatically issuing an alert if there is a choke or any other problems.
- All the chambers of this system have been equipped with geographic information system (GIS) based sensors. This will help in pinpointing the area of the chamber along with any problem that comes up.

17.15. 'Azadi se Antyodaya Tak' Inter-ministerial Campaign

Why in News?

- Giriraj Singh, India's Rural Development Minister has launched the 'Azadi se Antyodaya Tak,' 90-day inter-ministerial campaign on 28th April 2022. This campaign has been launched keeping in line with the Azadi Ka Amrit Mahotsav.

More Details:

- Celebrating the year-long Azadi Ka Amrit Mahotsav, the identified districts under this campaign are aligned with them being the birthplace of one hundred Freedom Fighters, who made the ultimate sacrifice for the country during its struggle for independence from the British.
- This campaign is being implemented involving all rural stakeholders such as Panchayati Raj Institutions (PRIs), families of selected freedom fighters, youth groups, women networks, and students.
- This campaign will also be supported by public servants like local MLAs, MPs, Sarpanch, etc.
- This campaign is a joint effort of the Ministry of Rural Development, Department of Social Justice & Empowerment-Divyangjan, Department of Financial Services, Ministry of Women & Child Development, Department of Agriculture & Farmers Welfare, Ministry of Skill Development & Entrepreneurship, Department of Animal Husbandry and Dairying, Department of Health & Family Welfare, and Ministry of Labour & Employment.

Aim of the campaign

- This campaign has been launched with the aim of saturating 75 Districts across 28 States and Union Territories of the nation with beneficiary schemes of nine central government ministries.
- The campaign aims to take up 17 select schemes and provide direct assistance to the beneficiaries

in saturation mode, thus, reaching out even to those individuals who are at the bottom of the pyramid in rural areas by each of the participating departments.

17.16. India's First 'Carbon-neutral Panchayat'

Why in News?

- Palli village located in the Samba district of Jammu has become India's first panchayat to become carbon neutral, fully solar energy powered, and all its records have been digitized which will help in receiving all benefits of Central schemes easily.

More Details:

- Prime Minister Modi inaugurated the 500 KW solar plant at this carbon-neutral panchayat.
- With this inauguration Palli has become the country's first panchayat to become carbon-neutral.
- The 500 KW solar plant was set up at Palli in a record three weeks' time.
- Palli has played a major step towards the Glasgow goal of making the country carbon-neutral.
- Palli will now be looked at as a model panchayat, and this will motivate the other panchayats in Jammu and Kashmir, and India to become carbon-neutral.
- In Palli in a total area of 6,408 square metres 1,500 solar panels have been set up.
- These solar panels will be providing clean electricity to 340 houses that are located in the panchayat.
- The electricity that will be generated will be distributed by the local power grid station.

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