

VISION IAS

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PERSONALITY DEVELOPMENT PROGRAMME

CIVIL SERVICES EXAMINATION 2019

Programme Features

- ★ DAF Analysis Session with senior faculty members of Vision IAS
- ★ Mock Interview Session with Ex-Bureau - crats/ Educationists
- ★ Interaction with Previous toppers and Serving bureaucrats
- ★ Performance Evaluation and Feedback
- ★ Recorded Mock interview sessions to be provided



1. POLITY & CONSTITUTION

1.1. NATIONWIDE NRC

Why in news?

Recently, the Government of India has signalled its intent of carrying out a nationwide National Register of Citizens (NRC).

More on the news

- This signal was revealed by the statement issued by the Union Minister of Home Affairs.
- The National Register of Citizens is a list of all the legal citizens of the country, with necessary documents.
- Earlier, following the Supreme Court's order, the Government conducted the NRC updating exercise in Assam and as a result over 19 lakh applicants failed to make it to the NRC list.

Rationale behind the nationwide NRC

- **Ascertaining the identity of citizens:** NRC will provide a much-needed perspective on the extent of illegal migration. The fear that illegal immigrants will change the demography of the country and influence the politics of different states will also be done away with.
- **Demand from some stakeholders-** such as the NGOs like the Assam Public Works (APW), which had petitioned the Supreme Court for upgrading the previous NRC.
- **Statutory obligation of the state-** as the **Section 14A** in the Citizenship Act of 1955 provides in sub-section (1) that "The Central Government **may compulsorily register** every citizen of India and issue national identity card to him".
 - The procedure to prepare and maintain **National Register of Indian Citizens (NRIC)** is specified in the **Citizenship (Registration of Citizens and Issue of National Identity Cards) Rules, 2003**.
- **Move towards solving the immigration issue-** as it is expected to deter future migrants from entering the country.
 - It can also aid the agencies in effective border management, especially with Nepal and Bangladesh.

Issues with nationwide NRC

- **Existence of deportation provisions-** as immigrants are subject to laws like the Foreigners Act, 1946 and Passport (Entry into India) Act, 1920 and tribunals are already empowered to detect, detain and deport them.
- **Legal infirmities-** The last time the Central government tried to make an identity enrolment mandatory was the Aadhaar project and this was struck down as excessive (except in limited and justifiable cases). The NRIC scheme, as proposed, would thus be directly in violation of the K.S. Puttaswamy judgment on **right to privacy**.
- **Not learning from Assam's experience-** considering the complications that have cropped up in the previous NRC such as-
 - **No clarity over previous results-** on what the end results mean for the 19 lakh plus people who find them outside the NRC, potentially stateless and at risk of "deportation" to Bangladesh, which refuses to acknowledge the same.
 - **Wastage of public resources-** as many critics are questioning the expenditure of the taxpayers' money which were spent on the previous NRC.

Criteria for determining the citizenship

- The Citizenship Act, 1955 clearly states that anyone born in India on or after January 26, 1950 up till July 1, 1987 is an Indian citizen by birth.
- Anyone born on or after July 1, 1987 but before the commencement of the Citizenship (Amendment) Act, 2003 and either of whose parents is an Indian citizen at the time of his birth is an Indian citizen. And anyone born after the commencement of the Citizenship (Amendment) Act, 2003 and both of whose parents are Indian citizens at the time of his birth is an Indian citizen.
- The only exception to this was Assam where as per the 1985 Assam Accord foreigners who came to the state up to March 24, 1971 were to be regularised as Indian citizens.
- Seen in this context, only Assam was allowed to take in foreigners up to March 24 1971.
- For the rest of the country, those born outside the country after January 26, 1950 and residing in India without proper documents is a foreign, illegal immigrant.

- **Lack of capacity-** Assam's first detention centre is being constructed, but it will only house 3,000 people against the need for 19 lakh people excluded from the final NRC. Further, media reports have been stating that these detention camps are infamous for their inhumane living conditions.
- **Protests-** Many sections of Assam, like Bodoland students, have been protesting against the repetition of NRC in Assam.
- **Concerns of minorities:** There are fears that such an exercise could end up targeting minorities in the country.
 - **The Citizenship (Amendment) Act, 2019** which makes Hindu illegal migrants and those from certain other minority communities in Afghanistan, Bangladesh and Pakistan eligible for Indian citizenship further creates apprehensions about alienation of minorities in the process.
- **Implementation anomalies-** as the NRC will take a gigantic toll on people's **time, money and productivity**, especially of the **poor and illiterate** sections.
 - Under the Foreigners Act of 1946, the burden of proving whether an individual is a citizen or not, lies upon the individual applicant and not on the state. Also, the details of how such an exercise will be carried out are **not yet known**.
 - Further, there is **poor documentary culture** in India and here around 125 crore Indians will have to produce documentary proof of their ancestors up to a certain date to create a legacy tree.
- **No specific policy in ascertaining the fate of people:** The government has not prepared a post NRC implementation plan, as the possibility of deportation of illegal migrants to Bangladesh is bleak as the people excluded from the list should be proven citizens of Bangladesh, and that will require cooperation from that country.
- **Allegations of human rights violations-** as at a US Congress hearing on human rights in South Asia, not just Kashmir issue was raised but Assam's NRC also came up.
 - **Issue of Statelessness:** There are apprehensions that India will end up creating the newest cohort of stateless people, on the lines of Rohingyas who fled Myanmar for Bangladesh.

Way Forward

- **Set a common Cut-off date to maximum two generations** - which will ease up the process for citizens to show documentary proofs.
 - The problem in Assam was the cut-off year of 1971, which made it near impossible for many to get documents that went so far back in the past.
 - The NRC should attempt to prevent further arrivals of illegal migrants. Past arrivals cannot easily be wished away without causing needless human misery and also disrupting micro-economies in the states where the illegals reside and work.
- **Synchronize NRC with Census 2021-** as much as possible, as the Census 2021 will kick off from September 2020, there is enough time to tell people to get their documents ready and hand them over for verification to census workers, who can then remit them to the designated tribunals or benches that look into the validity of the documents.
- **Bring a fair process-** There were allegations that some sections had submitted false documents during Assam's NRC exercise. A nationwide NRC is expected to learn from this.
- **Tackle issue of illegal migration comprehensively-** by focussing on comprehensive border management, assistance from international organisations such as United Nations High Commissioner for Refugees (UNHCR) among others.
 - Government of India can work with other governments to get authenticated copies of their own voter and citizenship records. This can be done under a large SAARC convention too.
- **Maximize use of technology-** such as utilization of **digital lockers**. Citizens should be told get all their documents authenticated in digital lockers, so all they would need to do is provide access to this documentation when the NRC happens.
 - By appropriately using **artificial intelligence** and **data analytics**, governments can match residents suspected of being immigrants fairly easily using multiple databases.

1.2. CJI UNDER RTI

Why in news?

In **Central public information officer, Supreme Court of India vs Subhash Chandra Agarwal** case a five-judge Constitution Bench of Supreme Court declared that the **Office of the Chief Justice of India (CJI) is a 'public authority'** under the Right to Information (RTI) Act.

Background of the case

- In 2007, Subhash Chandra Agarwal, RTI activist had sought the information regarding a **'resolution passed by Supreme Court (SC) judges in 1997'** that said **"every Judge should make a declaration of all his/her assets in the form of real estate or investment"**.
- However, this declaration of assets **was made to the Chief Justice of India** and was not even voluntary in nature to put it out in public domain.
- Further in 2009, Agarwal had sought information regarding **details of correspondence between the Collegium and the government** on the appointment of three SC judges.
- In both the cases SC refused to share the information. Agrawal then moved to the Central Information Commission (CIC), which ruled that **the office of the Chief Justice of India falls under the ambit of the RTI Act** and the Supreme Court cannot deny information sought under the RTI Act.
- The **SC moved the Delhi High Court** in 2009 challenging the CIC ruling. The Supreme Court's argument was that declaration of assets to the CJI was **"personal information"** of the judges and hence not covered under the RTI Act. Also, it held that **"too much transparency can affect independence of judiciary"**.
- However, in 2010, **Delhi High Court upheld the CIC ruling** pronouncing that the CJI came under the ambit of the RTI Act.
- The **Supreme Court approached itself** by filing a petition against the Delhi High Court ruling, which was subsequently **referred to five-judge Constitution bench**.

RTI and Judiciary

- The relationship of the RTI with the judiciary has been fraught from the beginning.
- The **RTI Act conferred powers** on the Chief justice of the Supreme Court of India and the chief justices of high courts of states for carrying out its provisions, and all these courts framed their own rules.
- However, the **Supreme Court Rules undermined the RTI** in four key ways. Unlike the RTI Act, the Rules do not provide for:
 - a time frame for furnishing information
 - an appeal mechanism
 - penalties for delays or wrongful refusal of information
 - makes disclosures to citizens contingent upon "good cause shown"
- Moreover, several **high courts framed extremely unfriendly rules**, making it almost impossible to get any information. For example, the Allahabad High Court had wanted the citizen to deposit **Rs 500 for each piece of information** sought as against the Rs 10 fixed by the Supreme Court.
- In sum, the Rules allowed the judiciary to provide information at its **unquestionable discretion**, violating the text and spirit of the RTI.
- The **RTI Act does not permit any appeals** to be entertained by any court under Section 23. Nevertheless, the contradiction arises from the fact that the Indian Constitution gives powers to the Supreme Court and the high courts that override any statute.
- Further, SC has said that the decision of the Registrar General of the Court will be final and not subject to any independent appeal to Central Information Commission.

What the SC said?

On whether CJI is public authority?

- The judgement said that the Supreme Court of India and office of CJI are not two different public authorities. The SC includes the office of CJI and other judges as per **Article 124**. Hence, if the Supreme Court is a public authority (as per Section 2(h) of RTI Act), **so is the office of the CJI**.

On declaration of assets of judges

- It upheld the Delhi High Court judgment of 2010 that the CJI does not hold information on the personal assets of judges **in a fiduciary capacity** (Relationship of confidence and trust). Thus, disclosure of details of serving judges' personal assets was **not a violation of their right to privacy**.

- The information about assets of judges **does not constitute personal information** and thus cannot be exempted from RTI.

On disclosing personal information

- SC held that the **right to know under RTI was not absolute** and ought to **be balanced with the right to privacy** of individual judges.
- Thus, it asked Information commissioner to apply **test of proportionality, keeping in mind right to privacy and independence of judiciary.**
- The judgment mentions that marks obtained, grades and professional records, qualification, performance, evaluation reports, ACRs etc. are personal information. Such personal information is entitled to protection from unwarranted invasion of privacy. **(under section 8 of RTI Act)**
- In this context, the judgement gave list of **‘non-exhaustive factors’** to be considered by Public Information Officer (PIO) while **assessing public interest under section 8 of RTI**, which include: nature and content of information, consequences of non-disclosure, freedom of expression and proportionality etc.
- **What are the issues raised against this?**
 - This calls for great judicial acumen and most PIOs would choose to steer clear **and refuse disclosure by invoking Section 8(1)(j) of the RTI Act** and leave the information seekers to appeal against their orders.
 - Rather, the court should have **spelt out more clearly** those items of personal information, of the judiciary, which the PIOs could **disclose without adjudication** of its benefits for the general public.

Section 8 (1) (j) of the RTI Act says that personal information, which has no relationship to any public activity or interest, or which would cause unwarranted invasion of the privacy of the individual shall be disclosed only if the appellate authority is satisfied that the larger public interest justifies the disclosure of such information.

Regarding information relating to judicial appointments

- Here, SC drew distinction between **‘input’ and ‘output’**. Output is the final outcome of collegium resolution, while input is the observations, indicative reasons, inputs and data collegium examined.
- Here, only names of judges recommended by the Collegium (**output**) can be disclosed, not the reasons (**input**). SC said “Right to information should not be allowed to be used as a **tool of surveillance.**”
- Thus, while the government discloses its reasons for not accepting the collegium’s recommendations, **the judiciary’s defence remains absent from public debate.**
- Also, SC said the information relating to collegium deliberations is treated as **confidential third-party information.**
- In such cases, the PIO should follow the procedure mandated in **Section 11 of the RTI Act.** That is, a notice should be first issued to the third party — the judge concerned — about the RTI request for information. The view of the third party should be considered before the PIO takes a call.
- **What are the issues raised against this?**
 - This goes against SC assertion in **S.P. Gupta vs President Of India And Others** case in 1981, where it said documents consisting of the correspondence exchanged between the Law Minister or other high-level functionaries of the Central Government, the Chief Justice of the High Court, the State Government and the Chief Justice of India in regard to appointment and non- appointment etc **cannot be regarded as protected entitled to immunity** from disclosure.

Conclusion

- SC rightly observed that **“transparency and accountability should go hand-in-hand”**. Increased transparency under RTI was no threat to judicial independence. Thus, judgement goes long way enhancing trust of people in justice system.
- Despite certain limitations, the Supreme Court judgment paves the way for greater transparency and could now impinge upon issues such as disclosure by other institutions such as **registered political parties.**

1.3. SUPREME COURT STRIKES DOWN RULES ON TRIBUNAL POSTINGS

Why in news?

Supreme Court (SC) struck down Rules framed by the government under the Finance Act of 2017 to alter the appointments to 19 key judicial tribunals, including the Central Administrative Tribunal.

Background of the news

- **Finance Act 2017** introduced various provisions governing tribunals. The amendments in the Finance Act, 2017 were:
 - They provided that the **central government may make rules to provide for the qualifications, appointments, term of office, salaries and allowances**, resignation, removal, and other conditions of service for the Chairpersons and other members of the Tribunals.
 - Stated that the central government will have the **power to amend the list of Tribunals**, through a notification.
 - **Replaced certain existing Tribunals and transfer their functions to other Tribunals.** For example, the Airports Economic Regulatory Authority Appellate Tribunal has been replaced by the Telecom Disputes Settlement and Appellate Tribunal (TDSAT).
- These amendments **raised concerns** as they had following implications:
 - **Reducing parliamentary scrutiny** by allowing the government to determine the appointment, reappointment and removal of members through rules. Earlier these were done through **amendments to the respective acts** of the tribunals in which **Parliament was involved.**
 - **Dilution of judicial independence** as the amendments give more powers to the executive. The Supreme Court in 2014 held that **appellate tribunals have similar powers and functions as that of High Courts**, and hence matters related to their members' appointment and reappointment must be **free from executive** involvement.
 - **Unclear rationale** behind replacing certain tribunals. For example, it was unclear whether TDSAT, which primarily deals with telecom disputes, would have the expertise to adjudicate matters relating to the pricing of airport services.
- **Passage of the Finance Act in the form of a Money Bill** was also challenged.

Tribunals

- A tribunal is a **quasi-judicial body** established in India by an Act of Parliament or State Legislature under **Article 323A or 323B** to resolve disputes that are brought before it.
- Articles 323-A and 323-B were inserted through the **42nd Amendment Act of 1976** on recommendation of **Swaran Singh Committee.**
 - **Article 323A** deals with administrative tribunals.
 - **Article 323B** deals with tribunals for other matters.
- They play an important role in the sphere of the adjudication of disputes especially when the subject demand **technical expertise.**
- They **do not have to follow** any uniform procedure as laid down under the Civil Procedure Code and the Indian Evidence Act but they have to **follow the principles of Natural Justice.**
- They enjoy some of the powers of a civil court, viz., issuing summons and allowing witnesses to give evidence. Its **decisions are legally binding on the parties**, subject to appeal.

What SC said?

- SC struck down the **Tribunal, Appellate Tribunal and other Authorities Rules, 2017** in entirety, saying that the rules suffered from **"various infirmities"**. SC also held that they are **"contrary to the principles envisaged in the Constitution as interpreted by this Court"**.
- However, the Court **upheld Section 184 of the Finance Act** which had entitled the Central government to frame rules to determine appointment, service conditions, removal and other aspects of tribunals. It directed the government to **re-formulate the rules in conformity** with the principles delineated by the court.
 - The new set of Rules to be formulated by the Central Government shall ensure **non-discriminatory and uniform conditions of service, including assured tenure etc.**
- Until **the new rules are formulated**, the appointments, the Bench said, will be as per existing laws, and not under the Finance Act, 2017.
- The court ordered the Union Ministry of Law and Justice to conduct a **'Judicial Impact Assessment'** of tribunals to analyse the ramifications of the changes caused by the Finance Act, 2017.

- It directed centre to carry out an **appropriate amalgamation** of existing tribunals adopting the test of homogeneity of the subject matters to be dealt with and constitute number of Benches **commensurate with volume of work**.
- It also proposed that an overarching statutory organisation be constituted through legislative intervention to oversee the working of tribunals called the **National Tribunals Commission**. Also stressed the urgent need to set up an **All India Tribunal Service** in the interests of the effective functioning of the tribunal system.
- Judge also raised concerns that some of the **tribunals are virtually subjugated to the departments** as far as the administrative matters are concerned and this also **affects the independence of the judiciary**.
- **On the question whether Finance Act was passed as money bill:**
 - SC referred the question to seven judge bench.
 - It said that the majority in **K S Puttaswamy case (Aadhaar case)** did not substantially discuss the effect of the **word 'only' in Article 110(1)**.
 - In **Aadhaar case** SC upheld validity of passing Aadhaar Act as money bill.

1.4. ELECTORAL BONDS

Why in news?

Recently, the information received under the Right to Information revealed some startling facts on electoral bonds.

More on news

- Electoral bond scheme was announced in Union Budget 2017-18 in an attempt to “**cleanse the system of political funding in the country.**”
- Electoral bonds with denomination of Rs 1 crore accounted for more than 91 per cent of the Rs 5,896 crore raised till now. The dominant use of high value bonds clearly shows that almost the entire money came from the wealthiest section of the society. It can be further confirmed as-
 - Combined bonds of Rs 1 crore and Rs 10 lakh accounted for almost 99.7 per cent of the total value of bonds.
 - The other lower denominations i.e. Rs 1,000, Rs 10,000 and Rs 1 lakh, accounted for bonds worth just Rs 15.06 crore only.
- The four cities, i.e. Mumbai, Kolkata, New Delhi and Hyderabad, accounted for 83 per cent of all electoral bonds by value.
- Many critics had raised objections on transparency in electoral bonds, and these facts have to some extent confirmed the objections.

Rationale behind introduction of Electoral Bonds

- **To limit the use of cash in political funding-** as earlier, massive amounts of political donations were being made in cash, by individuals/corporates, using illicit means of funding and the ‘system’ was wholly opaque and ensured complete anonymity.
 - The donors would have no option but to donate by cash after siphoning off money from their businesses.
 - Electoral bonds were introduced to ensure that all the donations made to a party would be accounted for in the balance sheets without exposing the donor details to the public.

POLITICAL FUNDING CLEAN-UP

What is An Electoral Bond
An interest-free financial instrument for making anonymous donations to political parties; resembles a promissory note

Who May Purchase These Bonds
A Citizen of India or a body incorporated in the country

Bond Denominations
₹1,000, ₹10,000, ₹100,000, ₹1 million, ₹10 million; can be purchased from selected branches of SBI

When May Such Bonds Be Bought
Available for purchase for 10 days each in January, April, July, & October

Lifespan
Redeemable in the designated account of a registered political party within 15 days since issuance

Which Political Parties Are Eligible To Receive Donations Through Electoral Bonds?
Political parties who have at least secured 1% votes in the last Lok Sabha or state assembly elections and are registered under Section 29A of the Representation of the People's Act, 1951

Other Details

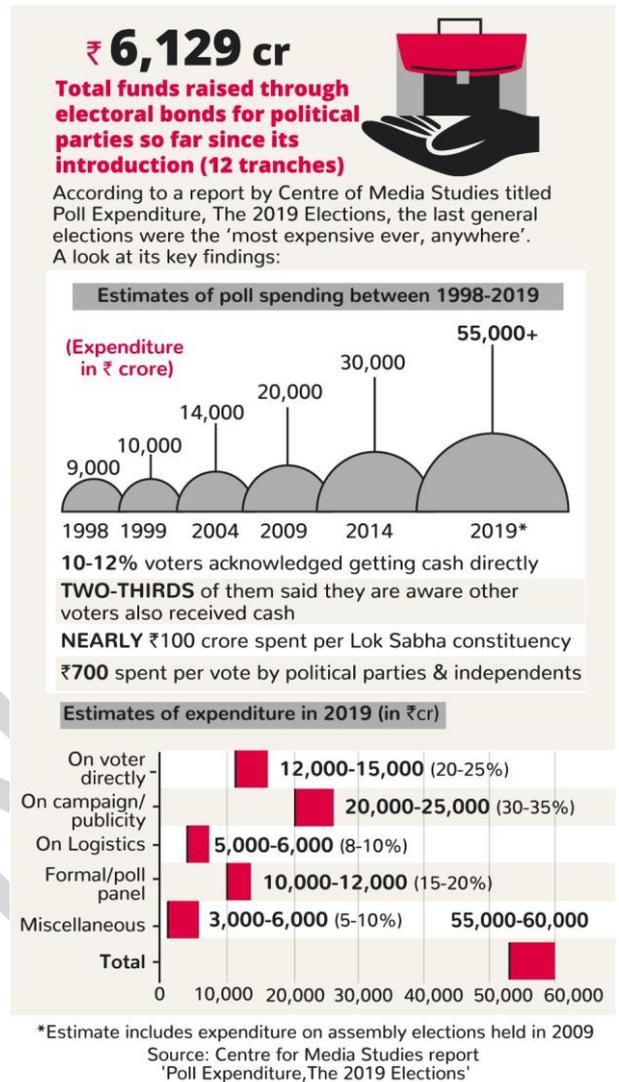
- Political parties will be required to file returns to the Election Commission of the quantum of money it receives through electoral bonds. Donors will be eligible for tax deduction while political parties will be eligible for exemption, provided returns are filed by the political party.
- SBI is the Sole Authorized Bank by the Government of India for selling Electoral Bonds.
- Electoral Bonds shall not be eligible for Trading on stock exchanges.
- They cannot be used as collateral for loans and are available only in physical form.

- **To curbs black money-** due to the **following features included in the electoral bonds-**
 - Payments made for the issuance of the electoral bonds are accepted only by means of a demand draft, cheque or through the Electronic Clearing System or direct debit to the buyers' account". Hence, no black money can be used for the purchase of these bonds.
 - Buyers of these bonds **must comply with KYC requirements**, and the **beneficiary political party has to disclose the receipt** of this money and must account for the same.
 - **Limiting the time** for which the bond is valid ensures that the bonds do not become a parallel currency.

- **Eliminate fraudulent political parties-** that were formed on pretext of tax evasion, as there is a stringent clause of eligibility for the political parties in the scheme.
- **Protects donor from political victimization-** as non-disclosure of the identity of the donor is the core objective of the scheme. Further, the records of the purchaser are always available in the banking channel and may be retrieved as and when required by enforcement agencies.

Analysis of use of electoral bonds on political funding

- **Still maintains opacity in political funding-** due to the following reasons-
 - Ordinary citizens are not able to know who is donating how much money to which political party, and the bonds increase the anonymity of political donations.
 - Prior to electoral bonds, political parties had to maintain records of donations **above Rs 20,000**. However, the electoral bonds were kept out of the purview of this requirement. Therefore, parties do not have to submit records of electoral bonds received to the Election Commission for scrutiny.
 - Further, political parties are legally bound to submit their income tax returns annually under **Section 13A** of the Income Tax Act, 1961. However, the **electoral bonds have also been exempted from IT Act**.
 - The electoral bonds were also opened for **foreign funding**, which has been highlighted in the recent dissent note of the RBI. It cautioned that this scheme could actually be used to increase black money circulation, money laundering, cross-border counterfeiting and forgery.
- **Allowed possibility of corporate misuse-** as revealed from the nature of transactions discussed above.
 - Earlier, no company could donate more than 7.5% of its profits to a political party. But this limit was completely removed under this scheme.
 - The requirement that companies must disclose details of their political funding was also removed.
 - It has also enabled companies to be brought into existence by unscrupulous elements primarily for routing funds to political parties.
- **Lack of level playing field in terms of political funding-** as
 - Government amended **Section 29B of the Representation of the People Act**, restricting the benefits of electoral bonds only to a few political parties.
 - Data revealed through the audit report of ruling party also showed that the ruling party has received 94.6% of all the electoral bonds sold in 2017-18.
- **Merely an urban phenomenon-** the data also highlights the fact, that electoral bonds have been used by the rich players in cities, rather it being percolating to the majority population, especially in rural areas.



Conclusion

To conclude, the early trends on electoral bonds attest to what political analysts have been fearing that the new channel would greatly undermine India's electoral democracy by inviting unbridled corporate influence. There is a need to carry out a thorough check on the way the scheme is being implemented otherwise it can undo the significant gains achieved in political finance reforms and transparency norms.1.5. Karnataka MLA's Disqualification.

1.5. KARNATAKA MLA'S DISQUALIFICATION

Why in news?

The **Supreme Court recently upheld former Karnataka assembly speaker's decision to disqualify 17 rebel lawmakers** but allowed the rebels to contest the bypolls.

Background

- In July, the **resignation of 17 MLAs from the Congress and JD(S) parties** eventually brought down the coalition government in Karnataka.
- The Speaker, at that time, **rejected their resignations** saying these were not voluntary or genuine, and **disqualified them on grounds of defection** till the end of the term of Legislative Assembly in 2023.
- Later, petitions were filed by these 17 ex-MLAs, which challenged their disqualification by the Speaker and requested the Court that **they be allowed to contest in the bypolls** held for 15 Assembly seats in Karnataka.

SC Judgement on Disqualification of MLAs

- **Judicial Review:** The SC Bench noted that as per the **Kihoto Hollohan vs Zachillhu And Others case (1992)**, the Speaker, while exercising the power to disqualify, acts like a Tribunal and hence, the validity of the orders is amenable to **judicial review**.
- **Acceptance of resignation:** The SC held that once it is demonstrated that a member is willing to resign out of his free will, the Speaker has no option but to accept the resignation.
- **Resignation vs. Disqualification:** Even if the resignation is tendered, the act resulting in disqualification arising prior to the resignation continues to remain a valid ground for defection; and the matter remains in the jurisdiction of the Speaker. Thus, **the SC upheld the disqualification of the MLAs**.
- **Period of Disqualification:** SC rejected the Speaker's order to disqualify these MLAs till the end of the assembly's term in 2023. In exercise of his powers under the Tenth Schedule, **Speaker does not have the power to either indicate the period for which a person is disqualified, nor to bar someone from contesting elections**. SC said that, a member disqualified under the Tenth Schedule shall be subjected to sanctions provided under **Articles 75(1B), 164(1B) and 361B of Constitution**, which provides for a bar from being appointed as a Minister or from holding any remunerative political post from the date of disqualification till the date on which the term of his office would expire or if he is re-elected to the legislature, whichever is earlier.

Anti-Defection Law

- The **Tenth Schedule** was inserted in the Constitution by 52nd Constitutional Amendment Act, 1985.
- It lays down the **process by which legislators may be disqualified on grounds of defection** by the Presiding Officer of a legislature.
- A legislator is deemed to have **defected if he either voluntarily gives up the membership of his party or disobeys** the directives of the party leadership on a vote.
- The law applies to both **Parliament and state assemblies**.
- Any question regarding **disqualification** arising out of defection is to be **decided** by the **presiding officer** of the House.
- **Exception under the law:** The law allows a party to merge with or into another party provided that at least two-thirds of its legislators are in favor of the merger. In such a scenario, neither the members who decide to merge, nor the ones who stay with the original party will face disqualification.

1.6. WOMEN PARTICIPATION IN POLITICS

Why in news?

Recently, **Lokniti-CSDS and Konrad Adenauer Stiftung released a survey report** which assessed the perception of women on different dimensions of political participation and representation in India.

Trends highlighted by the survey

- **Socio-economic class determining political participation:** Women belonging to the upper social (castes) and upper economic classes were found to be more active in electoral politics as compared to women placed at the bottom of the social and economic hierarchy.
- **Increased participation as voters:** Women's participation as voters has seen a sharp increase over the years. In many states of India, the percentage of turnout among women is higher than that of men.
- **Limited autonomy in taking decisions about politics:** Two-third women reported that they have no freedom at all with respect to their political participation. The limited autonomy is **directly linked to the restrictive practices that women encountered at their homes.**
- **More preference to male candidates:** Around 50% women agreed that parties always prefer a male candidate while giving tickets and over 40 percent women expressed a feeling that Indian voters are more likely to vote for men.
- **Patriarchy as the biggest obstacle:** More than one fifth of the women feel that patriarchal norms/structure of the society were the biggest obstacles that prevented them from taking part in politics followed by household responsibilities, individual barriers and cultural norms.
- **Increasing interest in politics but unwillingness for politics as a career:** The younger generation appears to be more plugged into politics as are those who have access to education. Women in rural areas have demonstrated a greater interest, especially in local politics.
 - However, 3/4th of the women respondents were not willing to make politics as their career if given the opportunity.
- **Exposure to media news:** It is a major source of political information, resulting in a higher level of interest. Women having higher exposure to news media showed more interest in politics compared to those with no or low exposure.

Need for more women participation in politics

- **Balanced views:** Full and equal participation of both women and men in political decision making **provides a balance that more accurately reflects the composition of society.** Moreover, there is documented evidence both at the international level and at the gram panchayat (village) level to suggest that a greater representation of women in elected offices **balances the process and priorities** that elected bodies focus on.
- **Addressing women related and other social issues:** There is a greater focus on issues like malnutrition, anemia, reproductive health, children's welfare, poverty etc.
- **Important role in parliamentary committees:** Department-related parliamentary committees play a crucial role in scrutinizing the decisions, legislation and working of the government in India. Therefore, participation of female MPs in these committees is of vital importance **to ensure that the legislation and policies formulated by Parliament are gender-inclusive.**

Other trends in women's participation in politics

- **Increased Participation in both houses since independence:** Between the First Lok Sabha (1952) and the Seventeenth Lok Sabha (2019) **women's representation has increased from 4.4 per cent to 14.4 per cent.** Women's representation in **Rajya Sabha has also increased from 6.9 per cent in 1952 to 11.4 per cent in 2014.**
- **Lower than the global average:** Global average is **22.9 per cent.** Considering the share of women (**49.5%**) in the total population of India, their representation in Parliament represents a skewed statistic. **India ranks 153 out of 190 nations in the percentage of women** in the lower house of world parliaments.
- **More women representation in local bodies:** There are approximately **13.45 lakh Elected Women Representatives (EWRs) in PRIs** which constitute 46.14% of total Elected Representatives (ERs). **Women sarpanchs accounted for 43 per cent of total gram panchayats (GPs)** across the country.

While the reservation for women in Gram Panchayats has led to a rise in their participation in politics, challenges still remains such as:

- **Lack of knowledge among the elected women themselves** regarding the Panchayati Raj Act and rules, and this was compounded by illiteracy.
- **Lack of experience** in political administration, gender prejudice from predominantly male staff who work in the system, restrictions around women's mobility, non-conducive work environments, and
- **Lack of agency** when elected women being represented by their male relatives. More often than not, the **power is hijacked by their husbands and other male family members**, who would have nudged them to contest elections in the first place.

- **Increased economic performance:** A recent study by the United Nations University found that **women legislators in India raise economic performance in their constituencies by about 1.8 percentage points per year** more than male legislators.
- **Empowerment:** Political empowerment **could lead to opening more opportunities for women** and as a result, create a level playing field for them. To eliminate the multi-faceted problem like gender inequality, a multi-pronged approach must be adopted; and among the various initiatives, political empowerment of women could act as a catalyst.

Steps that need to be taken to improve women participation

- **Quotas for women in Parliament:** The 73rd and 74th amendments to the Indian Constitution reserve one-third of local body seats for women. There is an urgent need to bring back to the table the Women's Reservation Bill guaranteeing 33 per cent reservation to women in Lok Sabha, and in all state legislative assemblies.
- **Reservation for women in political parties:** While this does not provide any assurance about the number of women parliamentarians, it does allow for a more meritocratic and less complex method of increasing participation. Sweden, Norway, Canada, the UK and France are examples.
- **Eliminate structural and legal obstacles** that hinder all girls' and women's participation in politics and decision-making, and hold those obstructing them accountable.
- **Promote community and sports programs** that foster leadership skills for girls and women and promote gender equality. Support women's leadership in the workplace through greater **inclusion in executive positions and on corporate boards**.
- **Fund grassroot organizations** that build the capacity of girls and women to participate both individually and collectively in social, economic, political, and public life.

Conclusion

Recognizing the significance of roles of women in decision making process in the society is critical to strengthen women's agencies for building a progressive society with equality of opportunities among all citizens.

1.7. SABARIMALA TEMPLE ISSUE

Why in news?

Recently, the Supreme Court has deferred its decision on review of "**2018 Sabarimala verdict**" until a Seven Judges' Bench examines broader issues such as **essentiality of religious practices** and **constitutional morality**.

Background of the issue

- Sabarimala temple's age-old practice **barred** women in their reproductive phases (when they were at the menstruating phase) from entering the temple on the ground that the **presiding deity** was a complete **celibate**.
- In the "**Indian Young Lawyers Association & Others vs The State of Kerala & Others**" case, 2018, a five-judge bench had delivered a landmark 4:1 ruling setting aside the decades-old restrictions on the entry of women of reproductive age inside Sabarimala Temple.
 - The judgment remarked that ban on the entry of women in Sabarimala **is a kind of untouchability, and thus violative of Article 17**.
 - However, **Sabarimala Temple Board** had argued that these were matters of "faith", "belief" and cannot be termed as regressive, anti-women and had therefore **urged the court not to interfere with the practice**
 - **Justice Indu Malhotra also had dissented against the majority verdict** on the ground that courts should not sit on judgement over harmless religious beliefs unless they were pernicious practices such as sati.
- Recently, review pleas were filed against above order. The petitioners contended that the 2018 judgments suffered from an error apparent since **constitutional morality** is a **vague concept** which cannot be utilised to undermine belief and faith.
- However, the court did not stay its earlier verdict which allowed women between the ages of 10 and 50 to visit Sabarimala temple.

- Now, the larger Bench would also consider the entry of women into mosques and the practice of female genital mutilation, prevalent among the Dawoodi Bohras Sect.

Implications of the Supreme Court's fresh examination of the Sabarimala Case

- **Will raise various key Constitutional questions:** The seven-judges' Bench will **examine:**
 - Question of balancing the freedom of religion under Articles 25 and 26 of the Constitution with other fundamental rights, particularly the Right to equality (Article 14).
 - Should "**essential religious practices**" or the "**doctrine of essentiality**" be accorded constitutional protection under **Article 26** (freedom to manage religious affairs)?
 - What is the "**permissible extent**" of judicial recognition a court should give to PILs filed by people who do not belong to the religion of which practices are under the scanner?
 - Whether a court can probe whether a practice is essential to a religion or should the question be left to the respective religious head?
- The **constitutional debate on gender equality** will be reopened with the larger issue of **whether** any religion can bar women from entering places of worship.

Understanding Doctrine of Essentiality and related debates

- **Doctrine of essentiality:** The doctrine of "essentiality" was invented by a seven-judge Bench of the Supreme Court in the 'Shirur Mutt' case in 1954 in which the court held that the term "**religion**" will cover all rituals and practices "**integral**" to a religion, and took upon itself the responsibility of determining the essential and non-essential practices of a religion.
- **Surrounding debates:**
 - **Essentiality vs right to freedom of religion:** The Supreme Court in '**Ratilal Gandhi vs the State of Bombay**' (1954) acknowledged that "every person has a fundamental right to entertain such religious beliefs as may be approved by his judgment or conscience". However, the Essentiality test impinges on this autonomy.
 - ✓ The apex court has itself emphasised autonomy and choice in its Privacy (2017), 377 (2018), and Adultery (2018) judgments.
 - **Issue of Judicial overreach:** The doctrine has been criticised by several constitutional experts as it has tended to lead the court into an area that is beyond its competence, and given **judges the power** to decide purely religious questions which should be decided by the theologians.
- **Issues with the conception:** The concept of providing constitutional protection only to those elements of religion, which courts consider "essential" is problematic. Such an approach assumes that one element or practice of religion is independent of the others.
- **Arbitrariness in its application:** Over the years, courts have been inconsistent on this question — in some cases they have relied on religious texts to determine essentiality, in others on the empirical behaviour of followers, and in yet others, based on whether the practice existed at the time the religion originated.
- **Group rights vs Individual Rights:** The Supreme Court has itself acknowledged that "every individual has a fundamental right to entertain such religious beliefs". However, the essential practices test is antithetical to the **individualistic conception of rights**. Under the test, the court privileges certain religious practices over others, thus protecting the group's rights.

Constitutional Morality

- The term 'morality' or 'constitutional morality' has **not been defined** in the Constitution.
- As per the Supreme Court, the **magnitude and sweep of constitutional morality** is not confined to the provisions and literal text which a Constitution contains, rather it embraces within itself virtues of a **wide magnitude** such as that of ushering a pluralistic and inclusive society, while adhering to the other **principles of constitutionalism**.
- In the 2018 Sabarimala verdict, the majority opinion defined '**morality**' in **Article 25** to mean **constitutional morality**.
 - Article 25 reads, "Subject to public order, morality and health and to the other provisions of this Part, all persons are equally entitled to freedom of conscience and the right freely to profess, practise and propagate religion".
- As per the Supreme Court, "when there is a violation of the fundamental rights, the term '**morality**' naturally implies **constitutional morality** and any view taken by the courts, must be in conformity with the principles and basic tenets of the concept of Constitutional morality."

1.8. AYODHYA VERDICT

Why in news?

Recently, the Supreme Court delivered its verdict on the long-running title suit at Ayodhya on appeals against the 2010 Allahabad High Court judgment.

Background

- The Babri mosque was built in Ayodhya in 1528. Hindu groups claim it was built after demolishing a temple.
 - In 1853, the first recorded communal clashes over the site took place. In 1859, the British administration put a fence around the site marking separate areas of worship for Hindus and Muslims, and it stood that way for nearly 90 years.
 - The property dispute went to court for the **first time in 1949** after idols of Lord Ram were placed inside the mosque.
- The mosque was demolished in 1992, which was followed by communal riots across India.
- **In April 2002**, a 3-judge Lucknow bench of the **Allahabad High Court began hearings on determining who owned the site**. The court pronounced its **verdict in 2010**, where it divided the disputed portion into three parts, each going to Nirmohi Akhara, Ram Lalla and the Sunni Central Waqf Board of Uttar Pradesh.
 - Ram Lalla i.e. Lord Ram himself was a party to the case as in 1989 a petition was filed in court in which the petitioner argued that the **Lord Ram is a juristic person** (a body recognized by the law as being entitled to rights and duties in the same way as a natural or human person).
- Within months, Hindu groups and Muslim groups moved Supreme Court challenging the High Court verdict. In 2011, the Supreme Court stayed the Allahabad High Court order.
 - After mediation proceedings by a Supreme Court-appointed three-member team failed to find an amicable solution to the dispute earlier this year, a five-judge constitution bench began day-to-day hearings on August 6, which went on for 40 days.

Key highlights from the Judgement

- The SC said that **archaeological evidence cannot be brushed aside** as conjecture and hypothesis.
 - Archaeological evidence supports that the **Babri Masjid was not constructed on vacant land** but on a Hindu structure.
 - However, **Archaeological Survey of India findings** did not say whether a Hindu temple was demolished to construct a mosque.
- The court also said that the destruction of the mosque in 1992 happened in **breach of SC orders**. The desecration of the mosque by placing idols in 1949 and its **demolition was contrary to the law**.
- **The SC has allotted the entire 2.77-acre disputed land for temple construction**.
 - The Centre to formulate a scheme in three months to set up a **board of trustees** for construction of a temple at the disputed structure.
- The court has also ordered that **suitable alternative land**, measuring five acres, will be allotted for setting up mosque.
 - The land will be given to the Sunni Waqf Board.
- The SC ruled that the Allahabad high court judgement on the case in 2010 was **wrong in dividing the disputed site into three parts**.
- The SC ruled that the Nirmohi Akhara suit was not maintainable and it has **no shebait rights** (priestly rights).
 - However, the court directed that in the Board of Trustees that will be set up, the Nirmohi Akhara should be given appropriate representation (**Refer the box**).
- The claim of Shia Waqf Board against Sunni Board to Babri Masjid was also dismissed.
- Supreme Court reiterated that **Secularism is part of the basic structure** of Indian Constitution.

Article 142 of the Indian Constitution

- Article 142 of the Constitution allows the Supreme Court to pass any order necessary for **doing complete justice in any cause or matter pending before it**.
- The Supreme Court exercised this Article to-
 - Direct that five-acre alternative land be allotted to setup mosque.
 - Direct that the Nirmohi Akhara, whose suit had been dismissed, will also get representation in the trust that the Centre must set up.
- In the past also, the court has used this Article to do justice in cases such as between Jaypee and homebuyers, Bhopal gas tragedy etc.

Significance of the Judgement

- **Consensus Building-** The court has given the judgment after hearing detailed arguments and giving an opportunity to all the major parties to sit and build consensus on various contentious issues.
- **Unanimous judgement-** There was unanimity of views of the **five judges** including the Chief Justice of India. Given the nature of the decades-long dispute, its political significance and religious overtones, the unanimous judgment serves to keep the temperature down.
- **Non-religious tone and tenor-** The judgement itself states that **constitutional values** have facilitated the lawful resolution of the **title dispute**. The court has delivered the judgement on the basis of evidence, not faith and belief. The court has also given strong criticism of the demolition of mosque in 1992. Such approach can be a template for such cases in future also.
- **Practical and Implementable-** The court while putting aside the Allahabad High Court judgement has made way to a solution, which is implementable on the ground.
- **Win-Win Situation-** Using the Article 142 and giving adequate relief and compensation to all parties, the court has tried to reach a complete verdict, which satisfies all parties.
- **Shut doors for other such cases-** Owing to exhaustion of all the avenues, possibilities, legal remedies and pronouncement of a complete verdict, this judgement has virtually closed door for other such cases relating to this matter.

1.9. REGULATING OTT MEDIA CONTENT

Why in news?

Recently, **government has decided to go for self-regulation of media content** shown by the Over-the-top (OTT) platforms instead of censorship or certification.

About OTT platform

- Over-the-Top (OTT) platforms **deliver audio, video, and other media content via the internet, eschewing the need for traditional platforms like cable, broadcast and satellite television.** These are also known as **Online Curated Content Providers (OCCP)**.
- These are **subscription-based video on demand platforms** and allows consumers to access a wide range of content from around the world.
- Recent past has seen proliferation of audio and video content provided by OTT services in India.
 - Popular OTT platforms in India include Netflix, Hotstar, Amazon prime etc.
 - According to the industry data, as of 2018, India is the 10th largest market for OTT in the world with an overall revenue of Rs. 4000 cr.
 - It is expected to grow by 23% in the next 5 years.
- OTT platforms contain contents which are
 - **certified by the censor board of India**
 - **certified by the censor board of the respective country of which the content belongs to**
 - **the content which is not certified by any board**
 - produced exclusively for apps such as Hotstar exclusive.

Regulatory Issue

- The mode of transmission for OTT platforms is substantially different insofar as the content travels through Internet service providers which are difficult to regulate. This makes the existing broadcasting laws inapplicable to OTT services.

Existing regulatory laws

- **IT Act** - prohibits obscene content, which punishes people who publish or transmit any such material. It also prohibits publishing or transmitting of material containing sexually-explicit acts.
- **Cinematograph Act of 1952** provides for the certification of cinematograph films for public exhibition.
- **Cable Television Networks (Regulation) Act, 1995** applies to content appearing on cable television.
- **Indian Penal Code, 1860**- prohibits anti- national content.
- **Protection of Children from Sexual Offences Act 2012** - prevents child pornography.

Attempt for self-regulation

- Internet and Mobile Association of India (IAMAI) drafted a code of self-regulation for video streaming OTT platforms in January 2019, titled '**Code of Best Practices for Online Curated Content Providers**',
- It curbs OTT platforms from streaming content which is banned by Indian courts, disrespect the national emblem, outrages religious sentiments, promotes violence against the states or terrorism, or depicts sexual acts committed by children.
- However, one of the major players i.e. **Amazon did not sign up this code** claiming that current laws are adequate for regulation.

Background

- Over time, there have been complaints and debates over the cases of vulgarity, obscenity, nudity etc. shown in OTT contents and demands have been raised for government regulation on them.
- In May 2019, Supreme Court **directed the Centre to regulate the content** featured on OTT media platforms.

Arguments against government regulation

- **Ensuring creative freedom:** Creativity that is involved in the production of content will be attacked if the content is subject to censorship or certification.
- **Boundaryless content:** The content is originating from all across the world thus it is technologically not feasible to censor/block the content.
- **User's discretion involved:** OCCP is pull content and hence users exercise substantial choice in the content they want to view. Thus, whatever is shown is based on users demand and censoring that would be equivalent to violation of freedom of choice.
- **Private affair:** Unlike cinemas and television, mobile is a private screen and users must be allowed to see whatever they want.
- **Preventing over exposure:** The major platforms classify and mark programmes according to age and provide a brief description of the content before it is played, thus they are already doing their bit to prevent exposure of the content to the vulnerable audience.
- **Empowering people:** The rapid growth of OTT industry is benefiting small-scale content producers and artistes and these platforms are making regional films available around the country as well as globally.
- **Helping in global integration:** Through OTT Global content with regional languages are coming on one platform.

Arguments in favour of regulation

- **Regulation will not hamper creativity:** Cinema is an art from the beginning itself and art has always been creative. There is nothing new with the OTT content. But anything coming in the public platform has to be measured in various aspects like gender caste etc. A content showing sentiments of any kind of public thoughts needs to be regulated.
- **Cannot be left on the discretion of the viewer:** The argument that regulation is not required as the content is what users demand is flawed in itself as what if the users are demanding violence and objectionable content.
- **Parity required:** There has to be parity among all the art forms and if cinema and television are censored and regulated, why not OTT contents.
- **Fear of spread of fake news:** With technology, any objectionable content may go viral and lead to spread of fake news. Also, any content hurting religious sentiments, showing obscenity, can outrage public riots or tensions.
- **Affecting children:** With the increasing accessibility of mobiles and computers to children they become exposed to the obscene content at a very young age which is affecting their cognitive and emotional development.

Way forward

- **Mixed model:** Self-regulation with some sort of guidelines and monitoring by the government is required. Government should intervene only when it appears as if intervention is necessary.
- **Wait and watch approach:** Government must give OTT players some time to regulate themselves and follow the guidelines ensuring that government has a voice if they do not follow the guidelines.
- **Responsibility of OTT players:** OTT players should aim to offer content that is within the existing legal framework and cultural milieu. Additionally, all OTTs should take effective measures to emphasize on viewer discretion and caution
- **Ensuring best usage of technology:** Ensuring the usage of best sort of technology for child protection and over exposure problem. Child lock technology can be incorporated in the larger guidelines.
- **Need to evolve:** Censorship doesn't just affect the content we consume, but also affects the definition of dominant culture and art. Public culture should evolve and shape public opinion. It should not function as a dictation of the state. Regulating it for the viewers is equivalent to questioning the audience's intelligence.

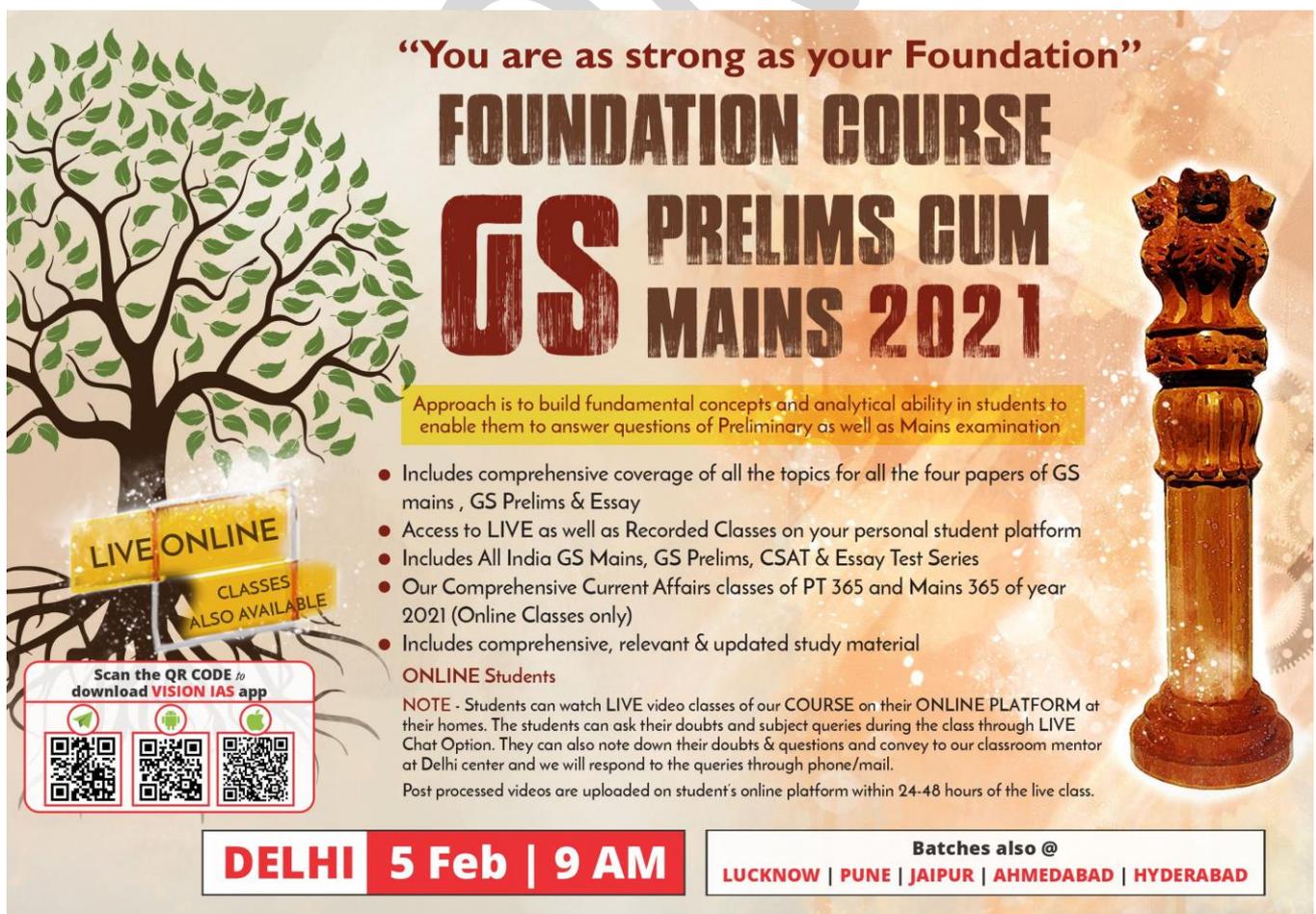
1.10. IMPEACHMENT OF US PRESIDENT

Why in news?

Recently, US House of Representatives Speaker announced that the **House would initiate a formal impeachment inquiry against US President Trump**, charging him with betraying his oath of office and the nation's security by seeking to enlist a foreign power to tarnish a rival for his own political gain.

Impeachment in USA

- The US president, under the Constitution, **can be removed from office for "Treason, Bribery, or other high Crimes and Misdemeanors."**
- **Process of impeachment**
 - First, the **House of Representatives has to vote for the articles of impeachment** (that is, the charges) to be brought against the President.
 - Once this is **passed with a simple majority**, the President is impeached but not necessarily removed from office.
 - Next, the **Senate (upper house) is convened like a court**, with both sides presenting evidence.
 - At the conclusion of these hearings, the **President can be removed from office only if two-thirds of the Senate votes for it.**
- **Difference with India's President impeachment**
 - When a President is to be impeached for violation of the Constitution, **the charge shall be preferred by either House of Parliament.**
 - The president may also be removed before the expiry of the term through impeachment for **violating the Constitution of India by the Parliament of India** unlike US president for treason, bribery etc.



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2. INTERNATIONAL RELATIONS

2.1. INDIAN FOREIGN POLICY IN A CHANGING WORLD

Why in News?

Recently, Minister of External Affairs, S. Jaishankar, gave a lecture on the topic “**Beyond the Delhi Dogma: Indian Foreign Policy in a Changing World**”.

More on News

- He has provided an **assessment of the last 70 years** of India’s foreign policy choices and gave insights on the **diplomatic position of India currently**.

Different phases of Indian diplomacy were discussed-

- **1947-1962: Phase of optimistic non-alignment** where India resisted the constraining of its choices and dilution of its sovereignty in a bipolar world. It saw **energetic Indian diplomacy** from Korea and Vietnam to the Suez and Hungary. However, India’s focus on diplomatic visibility sometimes led to overlooking the harsher realities of hard security. E.g.
 - **Going to UN** regarding J&K.
 - Rejecting the offer “**east west swap deal**” of China where India would recognise Chinese claims on Aksai Chin and China would give up its claims on the eastern sector.
 - **The anticipated 1962 war**, yet, the reluctance to attach overriding priority to securing borders.
- **1962-1971: Phase of recovery and realism:** India looked beyond non-alignment making pragmatic choices on security and political challenges E.g. concluding a defence agreement with the US in 1964.
 - Also, domestic challenges were acute, with political turbulence and economic distress.
 - India faced a tense situation with **Pakistan** in 1965 and finally lead to **creation of Bangladesh** in 1971.
 - India became more realistic as it signed **Indo-Soviet Treaty of 1971**.
- **1971-1991: Phase of greater Indian regional assertion and phase of complexity:**
 - E.g. Creation of Bangladesh, but ended with the Indian Peace Keeping Force (IPKF) misadventure in Sri Lanka.
 - **Sino-US rapprochement of 1971** and role of Pakistan as the **interlocutor** meant India had to face the **US-China-Pakistan axis**.
 - India’s **optimistic outlook on Pakistan in 1972** at Shimla, resulted in a hostile Pakistan and a continuing problem in Jammu & Kashmir.
- **1991-1999: Phase of unipolarity** made it a challenging task to retain India’s **strategic autonomy**.
 - India responded with upgradation of **diplomatic relations with Israel**, **outreach to Americans** were done.
 - India **opened up economically** more to the world but fell behind ASEAN and China which opened up a decade earlier.
 - In 1998, India declared itself as Nuclear weapon power which led to US sanctions.
- **2000-2013: Vajpayee-Manmohan phase:**
 - **India gained the attributes of a balancing power**, as China began to emerge as the 2nd pole in world geopolitics and moreover the centre of gravity of world geopolitics shifts towards Asia-Pacific region.
 - USA moved away from sanctions to Nuclear deal and in **Kargil war and Operation Parakaram** world community weighted in favour of India as India was a balancing power now.
 - India also used rising power of Russia and Japan to balance the complex geopolitical scenario.
- **2014-till now: Phase of Energetic engagement:**
 - India’s **rising global stature** is evident from the overlooking posture of global community on the issue of abrogation of **Article 370**.
 - **India’s Act East policy-** emphasising a **multi-polar Asia at the core of a multi-polar world**.

Suggestions to Indian diplomacy moving forward

- **Greater realism:** The purposeful pursuit of national interest in shifting global dynamics may not be easy but it must be done.

- **Economic drivers to guide diplomacy a lot more than earlier**, instead of old dogmas like economic autarky, self-reliance, import substitution.
 - The recent decision to get out of RCEP should not define our diplomacy as India wants to be pro-trade but RCEP was a bad deal for India.
- **Multi-polar world has emerged** and all the pillars (e.g. US, China, Russia Japan etc.) have to be managed **without compromising with anyone**.
- **Need of calculated risk-taking** to take a quantum jump in global positioning. E.g. Uri and Dokhlam issue.
- **Need to read the global discourse right**: E.g. growing multipolarity, weaker multilateralism, need of larger economic and political rebalancing needs to be carefully analysed.
- **Giving up the dogmas**: India cannot be dogmatic in approaching a visibly changing global order. For instance,
 - India cannot continue with unsettled borders, an unintegrated region and under-exploited opportunities.
 - India needs to have a willingness to look beyond dogma and enter the real world of convergences to deal with contradictory approaches and objectives like-
 - ✓ RIC (Russia-India-China) with JAI (Japan-America-India)
 - ✓ Quad with the SCO (Shanghai Cooperation Organization)
 - ✓ Iran with the Saudis
 - ✓ Israel with Palestine

India's rising stature in the world

- India is being looked at, by the countries of global south for diplomatic and geopolitical help. For example-
 - Indian navy has been deployed in Gulf region since the attacks on oil tankers.
 - India was re-elected to the UN's International Narcotics Control Board (INCB) with the highest margin beating China's candidate.
- **International infrastructure projects are moving faster-**
 - In Afghanistan, India completed Salma dam, Parliamentary building etc. Not even western countries were ready to take up these projects.
- **Multilateralism-**
 - India is a part of **Alliance for Multilateralism** and advocates for having rules, even if imperfect, rather than no rules.
- **Climate change-**
 - India is engaging actively with world community to mitigate its effects.
 - **International Solar Alliance** is headquartered in India.

2.2. RCEP AND INDIA'S EXPERIENCE WITH FREE TRADE AGREEMENTS

Why in news?

Recently, India **decided not to join the Regional Comprehensive Economic Partnership (RCEP)**.

More about news

- RCEP was **Free Trade Agreement (FTA)** involving 16 countries, including the 10 ASEAN countries and China, Japan, South Korea, Australia, New Zealand and India.
 - Now, 15 other countries excluding India are set to enter into the **trade agreement in February 2020**.
- According to government, RCEP **neither reflected its original intent nor addresses India's key concerns**.
- India had been **raising the issue of market access as well as protected lists of goods mainly to shield its domestic market** as there have been fears that the country may be flooded with cheap Chinese agricultural and industrial products once it signs the deal.
- Joining RCEP would have meant **incurring a greater trade deficit with China** which has great competence in the manufacturing sector.
- Various sectors like agriculture, dairy, solar industry, seeds, garments, etc have protested against the deal. Now, decision will **ensure support to India's farmers, MSME sector, dairy and manufacturing sectors, among others**.

Related News

- Recently, Prime Minister attended the **16th ASEAN-India Summit** held at Bangkok, Thailand.
- The Summit was chaired by the Prime Minister of Thailand and was attended by all Heads of State/Government of ASEAN Member States and the Indian Prime Minister.
- **The discussions were held on**
 - **political-security cooperation**,
 - **economic cooperation** (amid RCEP),
 - **ASEAN-India connectivity-** cooperation between Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS) and the Mekong-Ganga
 - **Socio-cultural cooperation**.

- It is an **important development for India** owing to above concerns of different sectors that **the benefits for India have been very limited from FTAs**.
- Also recently, India had **decided to commence the review of India-ASEAN FTA** which is pertinent to **examine the progress of trade between India and its key FTA partners**.

India's experience with FTA

- A free trade agreement is a pact between two or more nations **to reduce barriers to imports and exports among them**.
- India has viewed FTAs as an **important tool to enhance its trade and investment**, and signed a number of trade agreements with various countries or groups.
 - In fact, **India is one among top countries in Asia** with the maximum number of FTAs either in operation or under negotiation or proposed.
- India's exports to **FTA countries has not outperformed** overall export growth or exports to rest of the world.
- **Major FTAs** that India has signed and implemented so far include
 - South Asia Free Trade Agreement (SAFTA)
 - India-ASEAN Comprehensive Economic Cooperation Agreement (CECA)
 - India-Korea Comprehensive Economic Partnership Agreement (CEPA)
 - India-Japan CEPA.
- **Rationale for joining FTAs:**
 - With tariff liberalization commitments under FTA, **the additional market access** propels a process of scale expansion in the domestic manufacturing which help reaping economies of scale
 - It **enhances price-competitiveness** which translates trade diversion ultimately into trade creation. It also leads to **greater employment generation**.
 - Due to **inter-sectoral linkages**, a further process of greater economic activity in other sectors is unleashed because of backward and forward linkages of the firms.
 - It generate opportunities that **opens up Global Value Chain (GVC)** which brings investments and technology besides the other benefits of domestic manufacturing and services.
 - FTA members **co-exist with WTO and help achieve the objectives of liberal trade** of the WTO through their building block role.
- However, according to NITI Aayog report, in 2017, had **pointed out that free trade agreements have not worked well for India**.
- **Problems of India with FTA**
 - **Widening of India's Trade Deficit with FTA Partners:**
 - ✓ The **issue of complete tariff elimination remained critical for India** as it has already an existing trade deficit of over \$106 billion with RCEP negotiators, of which, over \$57 billion is alone with China in 2018.
 - ✓ India has also **witnessed a growing trade deficit with ASEAN, Japan, and South Korea** after the agreement is signed, particularly due to the surge in metal and capital goods into the country.
 - ✓ **India's trade deficit with ASEAN** from less than US\$ 8 billion in 2009-10 to about US\$ 22 billion in 2018-19.
 - **Rules of Origin:** It is the criteria that is used to determine the national source of a product which is a serious concerns for exporters.
 - **Improper Standards of import:** For example: Concerns had been raised by food processing sector about the near absence of quality norms for import of processed food products from ASEAN countries resulting in import and consumption of cheap ASEAN processed food products at the cost of domestic food processing sector.
 - **No major impact of FTAs on exports:**
 - ✓ If import duty in the partner country is high, there is a likelihood of an increase in exports by 10% when this duty becomes zero (on joining FTA). But **chances of exports increasing are low** if import duty of the partner country is low at 1-3%.
 - ✓ **India's exports are much more responsive to income changes** as compared to price changes and thus a tariff reduction/elimination does not boost exports significantly

- **Difference in economic efficiency of a country:** If a country is not the most efficient economy, some level of an import wall helps in getting external investments. Without an import wall, many firms may shift production to the more efficient FTA partner.

Way forward

- **Integrated Approach under FTAs** recognizing interdependence between trade in goods, trade in services and investment which is also necessitated by global and regional value chains.
- **Going beyond Tariffs:** This will involve going into subsequent layers of nontariff policies, regulatory mechanisms and legal frameworks.
 - India must implement an **extensive programme on technical regulations based on international standards.**
 - A **stronger framework for intellectual property law enforcement** is necessary in view of its growing relevance due to the focus on technology products and the need to curb imports of cheap low-quality products
- **Circumvention of rules of origin** should be strictly dealt with by the authorities, as Rules of Origin (ROO) norms can easily be circumvented by simple accounting manipulation.
- **Go beyond Mode IV:** E.g. Mode III i.e. setting up commercial presence has acquired equal importance for us as India's trade in services has increased via Mode 3 with the FTA partners viz. Japan, Singapore, Malaysia and Korea etc.
 - Mode IV covers **natural persons who are either service suppliers (such as independent professionals)** or who work for a service supplier and who are present in another WTO member to supply a service.
- **Using Trade Remedies under FTAs:** Like anti-dumping and countervailing duties. For this, the ongoing efforts by the **Directorate General of Trade Remedies** must be strengthened.
- **Data on Trade under FTAs:** Having a database on the utilization of agreements helps to assess India's FTAs especially in trade in goods. This is important to negotiate agreements better and for preparedness to maximizing the export gains from increased market access and minimizing adverse effects of imports.
- **Institutionalize the process of Stakeholders' Consultation** for getting timely feedback, including on industry-wide sensitivities, for negotiations as well as informing the industry well in time for any steps that would like to take during the period of transition with the aim of minimizing their adjustment costs.
- **Reducing compliance cost and administrative delays** is extremely critical to increase utilisation rate of FTAs.

Refer to article on RCEP in July, 2019 Monthly Current Affairs.

2.3. INDIA - GERMAN RELATIONS

Why in news?

Recently, German Chancellor Angela Merkel along with a business delegation and cabinet colleagues came to India for the fifth round of the **biennial Inter-Governmental Consultations (IGC)**.

More about the news

- Inter-Governmental Consultations are at the **level of Head of Governments** which allows for a comprehensive review of cooperation and identification of fresh areas of engagement, started in 2011.
- India and Germany signed **17 agreements and five joint declarations** of intent in various fields including space, civil aviation, maritime technology, medicine and education etc.

Key outcomes of the visit

The joint statement highlighted following areas of cooperation

- **Taking Action for Climate and Sustainable Development:**
 - **Joint Declaration of Intent on the Indo-German Partnership on Green Urban Mobility** under which Germany will provide **additional finance of 1 billion euros.**
 - Countries decided to dedicate a part of the **35 million euros under the framework of the bilateral call of the International Climate Initiative** to grid expansion and storage systems for renewable energy and a part to forest landscape restoration.

- **Bringing people together:**
 - "Indo-German Partnerships on Higher Education" (IGP) was signed as part of the overall programme "A New Passage to India" (ANPti) to increase the number of Indian students studying in Germany.
- **Sharing Global Responsibility:**
 - Both countries called for **cooperation of all countries in uprooting terror infrastructure, disrupting terrorist networks.**
 - Germany will **facilitate export of military equipment as well as technology sharing with India.**
 - Maritime projects between the Indian and German naval industries (e.g. submarines) are encouraged in view of the **shared interest in the stability of the Indian Ocean region.**
- **Expanding trade and investment cooperation:**
 - Countries called to **restart negotiations between the EU and India** on the Bilateral Trade and Investment Agreement (BTIA).
 - They also stressed for restoring the full functioning of the WTO dispute settlement system and reform the WTO without undermining its fundamental principles.
- **Cooperation in the Field of Artificial Intelligence and Digital Transformation**

Over view of India German relations

- **Economic & Commercial Relations:**
 - Germany is **India's largest trading partner in Europe** with bilateral trade was worth \$21.98 billion in 2017-18.
 - Germany is the **seventh largest foreign direct investor in India** with investments \$11.7 billion during 2000-2019.
 - Under '**Make in India Mittelstand**' (MIIM) Programme aiming to facilitate investment by German SMEs into India, over 135 German Mittelstand and family-owned companies (SMEs) declared investment of more than 1.2 billion Euros.
 - **German Indian Start-up Exchange Program** (GINSEP) in promoting the exchange between both start-up ecosystems.
- **Science & Technology:**
 - Germany is one of the most important global partners for S&T cooperation. India Germany have **High Technology Partnership Group (HTPG)** for identifying specific opportunities for high technology collaboration under the "Make in India" programme.
 - The jointly funded **Indo-German Science & Technology Centre** was set up in 2008 in Gurgaon with an annual contribution of 1 million from each side.
- **Cultural relations:**
 - There are about **1,69,000 people of Indian origin** (2017 figures) in Germany including both German and Indian Passport holders.
 - About **20,800 Indian students** are pursuing various courses in Germany and around 800 German students are studying or doing internships in India.
 - Promotion of teaching **modern Indian languages in German** educational institutions as agreed in 2015.
- **Defence and security Cooperation:**
 - India-Germany **Defence Cooperation Agreement** was signed in 2006.
 - Both sides are finalising Mutual Legal Assistance Treaty in Criminal Matters (MLAT). MLAT is an agreement between two or more countries for the purpose of **gathering and exchanging information** in an effort to enforce public or criminal laws.
- **Global cooperation:**
 - Germany and India cooperate on the issue of **UNSC expansion within the framework of G-4.**
 - Both countries **consult each other in G-20** on global issues such as climate change, sustainable development, etc.
 - Germany supported **India's bid for NSG membership** and is important participant in International solar Alliance.

Reasons for recent uptick in relationship

Recently, the **German Parliament passed a resolution on boosting ties with India** before Merkel arrived in Delhi. This shows increased importance of India in Germany's larger geopolitical calculus. The reasons for this are:

- Germany, as the natural leader of Europe, is struggling to cope with **deepening uncertainties – economic, political and security** – in its own neighbourhood and the world. It is under pressure to take larger responsibilities for regional stability and contribute more to the maintenance of the global order.
- Amidst the **current unpredictability** of the US security policies, the increasing assertiveness of the Sino-Russian political axis, **Germany is looking to diversify its global partnerships** beyond the Euro-Atlantic space. India is inevitably at the top of its list of potential strategic partners.
- Germany's **concerns about China's threat to the liberal international order**, including through its **state-driven Belt and Road Initiative**, are rising. It is beginning to pay serious attention to the expansion of China in the Indian Ocean. Thus, strategic cooperation with India is necessary.
- India too, is ending its prolonged strategic indifference towards Europe, willing to elevate engagements with Europe. In this context, **engaging Germany is not just about bilateral relations with Berlin**. It is about collaboration with the Germany-led European Union as a whole.
- In recent meet, unlike in the past, **defence and security have acquired a prominent place** in Indo-German discussions.

Conclusion

With Brexit, Germany has become more central to the process of rejuvenating Europe, and this therefore requires that we have stronger partnership with it. The complementarities between two in economic, security and other fields will lead cooperation as **'win-win situation for both'**. Also, Indian PM noted that technological and economic power house like Germany would be useful in the path of building a **'new India' by 2022**.

2.4. INDIA- SRI LANKA RELATIONS

Why in news?

Recently elected President Gotabaya Rajapaksa visited India, signalling Sri Lanka's intent to deepen bilateral ties with India.

More about news

- During the visit discussion were held on various issues such as
 - infrastructure development,
 - fishermen issue,
 - situation in the Indian Ocean region,
 - boosting trade,
 - neutrality doctrine (i.e. Sri Lanka will work closely with both India and China) etc.

Contemporary driving forces in Indo-Lankan Relations

Indian interests in Sri Lanka are driven by important factors, including post-war reconciliation and respect for the dignity of the Tamil minority in Sri Lanka and its cultivation of ties in its immediate neighbourhood and the wider Indian Ocean.

- **Commercial/Trade Relations:**
 - India is Sri Lanka's largest trading partner globally, while **Sri Lanka is India's second largest trading partner in the SAARC**.
 - In the investment field, India is among the top five foreign investors in Sri Lanka.
 - Trade between Sri Lanka and India has grown rapidly after the entry into force of the **Indo-Sri Lanka Free Trade Agreement in March 2000**.
- **Developmental Cooperation:**
 - Sri Lanka is one of the major recipients of development credit given by India. For e.g. Under a line of credit of \$167.4 million, the tsunami-damaged Colombo-Matara rail link has been repaired and upgraded.

- **Economic and Infrastructure cooperation:**
 - India signed MoUs to develop **Trincomalee port** and oil tank farms, and LNG terminals in Kerawalapitiya near Colombo.
 - **Joint India-Japan agreement** to develop the East Container Terminal at Colombo harbour, and other projects like the offer to operate the **Mattala Airport**.
 - Building infrastructure in the Northern and Eastern Provinces, including upgrading the **Jaffna-Colombo rail track** and other railway lines, providing electricity transmission lines for power imports from India, and rebuilding the **Kankesanthurai port**.
 - **Defence Co-operation:** through exercises like Dhosti, SLINEX etc.

Major challenges in Indo-Sri Lanka relations

- **China factor in India-Sri Lanka relation:** In terms of being the platform for India-China strategic competition, Sri Lanka has endorsed China's flagship connectivity project, the Belt and Road Initiative (BRI).
 - It is also, one of the important nodes for China's maritime strategy.
 - India-Sri Lanka ties soured precipitously when Mahindra Rajapaksha leased the strategically significant port of Hambantota to China, an issue highly sensitive to India.
- **Ethnic issue:** It is the prolonged conflict between the Sinhala majority and Tamil minority in Sri Lanka that has severely undermined bilateral ties in recent decades. The issue also involves war-crimes probe and accountability issues in Sri Lanka.
- **Fishing Disputes:** Given the proximity of the territorial waters of both countries, especially in the Palk Straits and the Gulf of Mannar, incidents of straying of fishermen are common.

Conclusion

- Gotabaya's assurances on some issues of special interest to India, is a **good occasion to build mutual trust**. India-Sri Lanka are ready for a fresh start - looking at a more balanced and productive relationship.
- The challenge for Sri Lanka is to be mindful of the sensitivities of its larger neighbour, while for India, it is about **respecting the sovereignty of its smaller neighbour**.
- These steps could include Sri Lanka's confidence building measures with the Tamils, greater cross-border economic cooperation as well as between northern Sri Lanka and Tamil Nadu, and political investment in resolving the fisheries dispute.

2.5. INDIA AND JAPAN 2+2 MINISTERIAL MEETING

Why in news?

Recently India and Japan held the meeting of India-Japan Foreign and Defence Ministerial Dialogue (2+2), in New Delhi.

More about news

- The 2+2 ministerial dialogue is seen as an upgrade of the meeting between foreign and defence secretaries of the two countries, the first round of which took place in 2010.
- The ministerial level meeting was held after the decision during the **13th India-Japan Annual Summit held in Japan in October 2018** to institute a **Foreign and Defence Ministerial Dialogue** for further deepening bilateral security and defence cooperation.
- 2+2 meeting aimed to give further momentum **to their special strategic partnership, particularly in the maritime domain**.
- The two sides **exchanged views on the situation in the Indo-Pacific region** and resolved to work for achieving shared objective of peace, prosperity and progress in the region.

India's 2+2 Mechanism

- Japan is the second country with which India has such a dialogue format.
- So far, only India and the US had the 2+2 ministerial mechanism, although India and Australia also have the 2+2 at the official level.
- With this, India has 2+2 mechanism with all the Quad countries.

2.6. BRICS

Why in news?

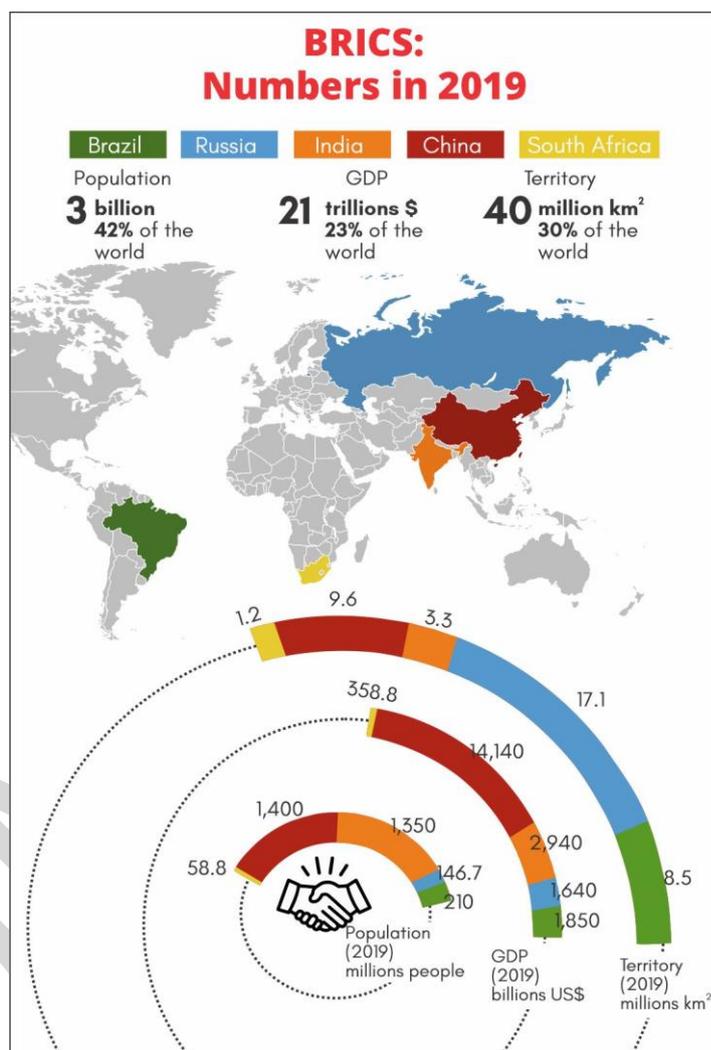
Recently 11th BRICS Summit was held in Brasilia, Brazil with the theme "Economic Growth for an Innovative Future."

What is BRICS?

- A British economist **Jim O'Neill** had coined the acronym "BRIC" in 2001, identifying four high-growth economies that could dominate the world by 2050.
- The idea of forming a group, to translate this economic potential into political influence, came from Russia in 2007.
- Russia hosted a BRIC foreign ministers' meeting in 2008 and the **first BRIC summit in 2009**.
- Later in 2010, **South Africa became the 5th member of the grouping making it BRICS**.

Achievements of BRICS so far

- To overcome the unipolar influence on world affairs, the BRICS countries have addressed a major task of establishing a **world economic governance system** that would be fully independent of the United States. E.g.
 - **New Development Bank (NDB)** is BRICS most tangible achievement. Every BRICS country contributes equally to its capital and has equal voting rights. This sets the bank apart from other international financial institutions. In three years, NDB has approved projects with a **total value of \$12.5 billion**. NDB is considering to include new members.
 - The **Contingent Reserve Arrangement** as an alternative to the IMF; the **Global Financial Messaging System (GFMS)** created by the Bank of Russia as a safeguard against entire states being weaned off from SWIFT.
- **Multi-layered pragmatic cooperation** has been established through platforms for agriculture research and energy research cooperation, collaborative research on tuberculosis, on science and technology, culture etc.
 - **Operationalisation of the Partnership on New Industrial Revolution** focuses on cooperation in digitalisation, industrialisation, innovation, inclusiveness and investment. This partnership will be concretised by establishing industrial and science parks, innovation centres and business incubators.
 - Over the years, BRICS has established an **elaborate dialogue architecture**. The Brasilia declaration lists **116 meetings, conferences and other events in 2019**, at ministerial, official, technical, business, judicial, legislative and people-to-people levels.
- **Diverse agendas under BRICS** like Global governance reforms (UN, UNSC, WTO, IMF etc.), climate change, terrorism etc.
 - India was successful in strengthening the **commitment of BRICS to counterterrorism**. Its **working group on countering terrorism** has expanded its activities through five thematic subgroups that deal with **terrorist financing, use of Internet for terrorist purposes, countering radicalisation, issue of foreign terrorist fighters**, and capacity building.
- **Focus on Intra BRICS trade**: A BRICS Business Council, established in 2013, has made recommendations on trade in national currencies, visa liberalisation and standards harmonization. A **Women's Business Alliance** was launched at Brasilia, to bring a new perspective on business issues.



- **Addressing bilateral issues:** E.g. recently India China used the BRICS platform for continued talks on bringing India back into the RCEP fold and focused on resolving their trade issues through the recently launched mechanism led by Finance Ministers.
 - China's larger interest on the success of the **BRICS Summit in Xiamen in 2017** did help expedite an end to the **Doklam standoff**.

Challenges to BRICS

- **Lack of commonality among the members:** While Brazil, India and South Africa are democratic, China and Russia are not. Structure of financial systems, levels of income, education, inequality, health challenges also differ substantially within BRICS which makes it hard for them to speak with a unified voice and to co-ordinate action
- **No common geo-political agenda:** The **Brasilia declaration** notes shared perceptions on global economic and financial governance. However, their **interpretation by each country depends on its national interest in specific circumstances**.
 - E.g. on **expansion of the UN Security Council**, **BRICS exposed its disunity** yet again by sticking to the formulation that refuses to go beyond China and Russia supporting the **"aspiration" of Brazil, India and South Africa "to play a greater role in the UN"**.
- **Diverging long-term economic trajectory of member countries:** Though the five nations have greatly increased their combined economic heft since the turn of the century, the share is imbalanced. E.g. **Brazil, Russia and South Africa's shares of global output have actually shrunk since 2000**.
 - Despite their combined population accounting for 40% of humanity, **intra-BRICS trade still makes up just 15% of world trade**.
- **No concrete achievements on key agendas:** BRICS nations are, still, like in 2001, **outsiders in the global financial system**. That is still run by the U.S. and Europe, despite their shrinking share of global output.
 - Democratization of United Nations and expansion of UNSC remain work in slow progress.

Way forward

- It is important that BRICS work together to **facilitate concrete trade and investment mechanisms** within themselves and become a bloc to reckon with.
- BRICS needs to establish a **permanent Secretariat** for continuous discussions on matters of common interest, draft resolutions, and monitor the implementation of decisions. Also, there is need to establish other coordinating agencies, such as a Committee of Foreign Ministers, an Assembly of Parliamentary Representatives, a Committee of Central Bank Heads etc.
- The international system is in transition. The sovereign states have markedly fewer opportunities for regulating the entire set of relations between countries. Thus, the future is the **forum format rather than the habitual intergovernmental organizations** that will be best fit for coping with the rapid change in the international environment, the emergence of new forms of transboundary interaction. BRICS is confirmation of this trend.

2.7. WTO RULING AGAINST INDIAN SUBSIDIES

Why in news?

World Trade Organisation (WTO) dispute settlement panel recently **ruled against India in a trade dispute** over its **subsidies to exporters** under various schemes, stating that the subsidies given are not compliant with the WTO's norms.

More on news

- **US challenged export subsidies** provided by India **under 5 sets of schemes**:
 - Export-Oriented Units, Electronics Hardware Technology Park and Bio-Technology Park (EOU/EHTP/BTP) Schemes
 - Export Promotion Capital Goods (EPCG) Scheme

Organizational Structure of WTO

- **Ministerial Conference** - It is the **topmost decision-making body** of the WTO and includes all members. It **meets once in 2 years**.
- **General Council** – It has the authority to act on behalf of the ministerial conference and **meeting are held regularly** to carry out the functions of the WTO. It acts a **Dispute Settlement Body** and Trade Policy Review Body.

- Special Economic Zones (SEZ) Scheme
- Duty-Free Imports for Exporters Scheme (DFIS)
- Merchandise Exports from India Scheme (MEIS)
- US alleged that these schemes **violated certain provisions of WTO's Subsidies and Countervailing Measures (SCM) Agreement** that prohibits subsidies that are contingent upon export performance.
- According to the **Special and Differential Treatment (S&DT) provisions** in the WTO's Agreement on Subsidies and Countervailing Measures, when a member's per capita gross national income (GNI) exceeds \$1,000 per annum (at the 1990 exchange rate) for a third straight year, it has to withdraw its export subsidies.

What are export subsidies?

- Export subsidies are foreign trade policies undertaken by the governments to **encourage export of goods and discourage sale of goods on the domestic market** through direct payments, low-cost loans, tax relief for exporters, or government-financed international advertising.
 - It reduces the price paid by foreign importers.
- Export subsidies are seen as trade-distorting as they intend to increase the share of the exporter in the world market at the cost of others.
 - They may make the world market prices more unstable because decisions on export subsidy levels can be changed unpredictably.
- It is a protectionist measure that is seen to promote inefficiencies and leads to high costs to consumers in the subsidizing country.
- Most of the export subsidies in India consist of exemptions and deductions from customs duties and other taxes.
 - Subsidies under MEIS consist of government-issued notes (also known as scrips) that can be used to pay for certain liabilities vis-à-vis the government and are freely transferable.
- WTO prohibits most of the export subsidies directly linked to the volume of exports, except for the least developing countries (LDCs).

- **Agreement on Subsidies and Countervailing Measures**- it provides for the following-
 - **Disciplines the use of subsidies**- a country can use the WTO's **dispute-settlement procedure** to seek the **withdrawal of the subsidy or the removal of its adverse effects**.
 - **Take actions itself to counter the effects of subsidies**- the country can launch its own investigation and ultimately charge extra duty (**countervailing duty or antidumping duty**) on subsidized imports that are found to be hurting domestic producers.
- **Agreement on Special and Differential Treatment (S&DT)**- it includes special provisions which give-
 - **Special rights to Developing countries**, for example, longer time periods for implementing Agreements and commitments or measures to increase trading opportunities for developing countries.
 - **Developed countries**- the possibility to treat developing countries more favourably than other WTO Members.

Rationale behind export subsidies

- **Domestic Industrialization & Employment:** Subsidizing exports may push domestic manufacturing which in turn will provide greater local employment.
- **Protecting Infant Industry:** Export subsidies protect the "infant industry" while it matures and develops to be able to compete with foreign imports.
- **Support to least developing countries:** Export subsidies benefit countries where there is little corresponding production of the subsidized products or their close substitutes.
 - Subsidies represent income transfers from the subsidizing country to consumers in the importing countries and hence, have overall welfare gains for importing countries with low levels of self-sufficiency.
- **Low Foreign Wages:** By subsidizing the exports of domestic production, the developed countries tend to "level the playing field" in international market compared to compete with the goods from countries with lower labour wage costs.
- **Unfair trade:** Foreign imports might be sold at lower prices in the domestic economy because foreign producers may engage in unfair trade practices, such as "dumping" imports at prices below production cost. Export subsidies intend to counter these.

WTO ruling and its impact on India

- WTO panel recommended that India **withdraw certain “prohibited subsidies”** under the DFIS scheme within 90 days; under the EOU/EHTP/BTP, EPCG and MEIS schemes within 120 days and under the SEZ scheme within 180 days from the adoption of its report.
- The panel ruled that **India had already graduated from the special and differential treatment provision** that was originally under SCM Agreement and now, prohibition on export subsidies was applicable on it.
- It **also denied any further ‘transition period’** available to India to stop these subsidies.
- **Impact on India**
 - The ruling would put at risk India’s subsidy programme worth \$7 billion and could impact producers of steel products, pharmaceuticals, chemicals, etc., who were the major beneficiaries of the subsidy programme.
 - This ruling would further push countries to question India over its policies on sugar, pulses and skimmed milk. For e.g. Countries have raised concerns on India offering soft-loans to sugar mills and doubling import duties on sugar. This might aggravate the farm income crisis in India.

Way Forward

- India will appeal against the ruling, which may prevent the adoption and implementation of the panel’s decision.
- Moreover, with the dispute panel’s appellate mechanism becoming dysfunctional after December 11 (when two of the three remaining members of the body will retire), India may not be obligated to implement the panel’s current ruling.
- Moreover, India can also tweak schemes to support exports while making them more WTO-compliant. E.g. by providing tax concessions (like concessions on GST) on parts & components used in the production of the exported product.

2.8. RUSSIAN LED RESOLUTION ON CYBERCRIME TREATY

Why in news?

Recently, India voted in favour of a Russian led UN resolution to set up a separate convention on **cybercrime**.

About Russian led resolution on Cybercrime

- The Russian proposal entitled **‘Countering the use of information and communications technologies for criminal purposes’** passed by a committee in the United Nations General Assembly.
- The proposal creates a committee to convene in August 2020 in New York to establish a **new treaty through which nation-states can coordinate and share data to prevent cybercrime**.
- This treaty is seen as an **alternative to the Budapest Convention**. This Draft Convention proposes going far beyond the Budapest Convention, regarding cross-border access to data and limiting the ability of a signatory to refuse to provide access to requested data.
- **Also, U.S. and European officials and human rights groups view the resolution as an opportunity for authoritarian states such as Russia and China to create global norms that endorse state control of the Internet.**

About Budapest Convention on cybercrime

- The **Council of Europe’s (CoE) Cybercrime Convention** — also known as the **Budapest Convention** came into force in 2001, is the only binding international instrument that addresses Internet and computer crime by harmonizing national laws, improving legal authorities for investigative techniques, and increasing cooperation among nations.
- It deals with issues such as infringements of copyright, computer-related fraud, child pornography and violations of network security.
- It aims to pursue a **common criminal policy**, especially by adopting appropriate legislation and fostering international police as well as judicial co-operation.
- It is supplemented by a **“Protocol on Xenophobia and Racism”** committed through computer systems.
- The Convention has 56 members, including the US and the UK. **India is not yet a member.**

- India argued about **national sovereignty issues** with Budapest Convention and also said that it will not sign onto the treaty since it was **drafted without India's participation**.

2.9. GLOBAL MIGRATION REPORT 2020

Why in news?

Recently 'Global Migration Report 2020' was published by the **International Organisation for Migration**.

Findings of the report

- Number of migrants:** In 2019 international migrants are estimated at 270 million where more than half of all international migrants (141 million) live in Europe and North America. Top destination remains the United States at nearly 51 million.
- Reason of migration:** An estimated 52 per cent are male and nearly two-thirds of all migrants around 164 million are looking for work.
- Origin countries:** India continued to be the largest country of origin of international migrants (17.5 million) followed by Mexico (11.8 million) and China (10.7 million).
- Remittance:** International remittances increased to \$689 billion in 2018. The top three remittance recipients were India (\$78.6 billion), China (\$67.4 billion) and Mexico (\$35.7 billion). The United States remained the top remittance-sending country followed by the United Arab Emirates and Saudi Arabia.

International Organisation for Migration

- The IOM is an **intergovernmental organization** that provides services and advice concerning migration to governments and migrants, including internally displaced persons, refugees, and migrant workers.
- It was **established in 1951**, and in 2016, became a related organization of the United Nations.
- It is headquartered in **Geneva, Switzerland**.
- IOM works in the **four broad areas of migration management**:
 - Migration and development
 - Facilitating migration
 - Regulating migration
 - Forced migration.
- IOM has **173 members and 8 observers**. India is also member country.

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3. ECONOMY

3.1. DIGITAL FINANCIAL INCLUSION

Why in news?

The Economist Intelligence Unit's 2019 Global Microscope on Financial Inclusion report has pointed that digital financial services in India have improved.

Benefits of digital financial inclusion

- **Access to formal financial services:** Digital financial inclusion can be defined as **digital access to and use of formal financial services by excluded and underserved populations.**
 - It has the potential to provide affordable, convenient and secure banking service to poor individuals in developing countries.
 - It can also **promote economic empowerment** by enabling asset accumulation and, for **women in particular**, increasing their economic participation.
- **Increase in GDP:** Digital finance can provide convenient access to diverse range of financial products and services for individuals as well as businesses. This can boost aggregate expenditure thereby improving GDP levels.
- **Reduced risks:** Digital finance adoption can reduce the circulation of fake currency and also reduces risks of loss, theft, and other financial crimes posed by cash-based transactions.
- **Reduced costs:** It leads in reduction of costs associated with transacting in cash and using informal providers. McKinsey estimates that Indians lose more than US\$ 2 billion a year in forgone income simply because of the time it takes travelling to and from a bank.
- **Improve banking performance:** Digital financial inclusion promises to help banks lower costs by reducing queuing lines, reduce manual paperwork and to maintain fewer bank branches.
 - With digital financial inclusion, large number of depositors can easily switch banks thus forcing banks to provide quality services or risk losing depositors to rival banks.

EIU Global Microscope on Financial Inclusion report 2019

- According to the report, **the overall environment for financial inclusion has improved globally** with India, Colombia, Peru, Uruguay and Mexico having the most favourable conditions for inclusive finance.
- Within the overall framework for promoting digital financial inclusion, **the report identified four basic enablers** –
 - allowing non-banks to issue e-money
 - presence of financial service agents
 - proportionate customer due diligence
 - effective financial consumer protection
- The report says, in India, **regulations control for some of the risks inherent in digital financial services**, and **clear rules mark out spaces appropriate for innovation to achieve greater financial inclusion.**

Reasons for growth of digital financial inclusion in India

- **Leveraging mobile phone and smartphone penetration:** The extensive reach of mobile phones in the country offers an innovative low-cost channel to extend the reach of banking and payment services.
- **Government initiatives:** Over the last several years, many initiatives have been progressively launched for propagation of digital financial inclusion such as Digital India initiative, DigiShala, Digital Jagriti etc.
- **Direct Benefit Transfers (DBT) and Government-to-Person (G2P) payments:** Receipt of DBT payments into a bank account was the a major initiative where marginalised sections used digital financial service.
 - According to the government's own figures, more than 75 million Pradhan Mantri Jan Dhan Yojna accounts are receiving DBT.
- **Demonetization:** Demonetization contributed as an immediate trigger to growth in digital payments by necessitating people to engage with digital payments for the first time, learning how they work and encouraging trust in the system.
- **Limitations of traditional banking systems:** Brick and mortar businesses are proving to be an uneconomical proposition for banks in rural or remote areas. Conventional banking models are not feasible for low ticket size of transactions, deposits, loans, etc. in such regions.
- **Fintech revolution:** It is led by a host of players, including commercial banks, telecommunication firms, payment banks, small finance banks and financial technology companies.

Issues with digital financial Inclusion

- **Can decrease financial inclusion:** Digital finance services providers may focus their marketing towards high-income customers rather than towards low-income customers if they believe the latter cannot afford the associated fees. This could lead to lower financial inclusion for poor and low-income customers.
- **Regulatory Framework:** The regulation of payments and digital finance in India can be a complex web of institutions and rule-setting bodies. This regulatory uncertainty could potentially hamper development.
- **Literacy and understanding:** Digital finance providers moving into lower income markets will continue to face challenges around literacy (financial, digital and general) and the ability to comprehend the concepts and practical implications of using digital finance products.
- **Lack of digital infrastructure:** Digital service providers can also choose to withdraw or discontinue the provision of specific digital finance services to high-risk rural areas or communities that do not have the supporting infrastructure to sustain specific digital finance services (such as electricity, telecom network etc).
- **Fear of being brought into the tax net:** There is a perception among some merchants that moving out of the cash economy into the digitized financial sector means that people and small businesses who currently exist outside of the taxation system will be forced to pay taxes.

Digital financial regulator in India

- RBI is responsible for regulating payments and banks and for overall financial stability
- Ministry of Finance (in particular the Department of Financial Services) has traditionally run the government's financial inclusion programs and is responsible for PMJDY.
- TRAI, the communications regulator advises on data, KYC and digital payment systems.
- Ministry of Electronics and Information Technology coordinates the government's Digital India initiative.

Way forward

- **Develop the regulatory framework for digital finance:** Regulatory and legal reforms are essential to enable the sustained development of a digital financial industry for the future. This require to introduce a new unified payments regulator.
- **Ensure that digital consumers are protected:** Government needs to ensure that consumer protection frameworks are appropriate and future-proof for new models of digital finance.
- **Support for local level innovation:** More support for local level innovation can also encourage entrepreneurs and institution outside of metro cities to build products and services that respond to more regional or localized issues.
- **Ensure digital financial literacy:** Digital financial services requires higher levels of digital financial literacy to make effective use of them and to avoid miss-selling, frauds such phishing, hacking attacks, unauthorized use of data and discriminatory treatment.

3.2. DRAFT E-COMMERCE RULES 2019

Why in news?

- The Ministry of Consumer Affairs recently introduced draft E-commerce guidelines for consumer protection, 2019.
- They aim to prevent fraud, check unfair trade practices to ensure level playing field for e-commerce firms & their brick-and-mortar counterparts and protecting the legitimate rights and interests of consumers.

Model Framework for Guidelines on e-Commerce for consumer protection

The guidelines have been issued for Business-to-Consumer (B2C) e-commerce companies, including companies offering digital content.

Liability of E-Commerce Firm	<ul style="list-style-type: none"> • An e-commerce entity shall not directly or indirectly influence the price of the goods or services and shall maintain a level playing field • It is prohibited from adopting any trade practice that is deceptive and influences transactional decisions of consumers <ul style="list-style-type: none"> ○ falsely represent themselves as consumers to post reviews about goods and services in their name
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	<ul style="list-style-type: none"> ○ misrepresent or exaggerate the quality of goods and services in advertisements ○ action against sellers of counterfeit products <ul style="list-style-type: none"> ✓ Amazon has launched Project Zero initiative in India, using artificial intelligence to eliminate counterfeit products. ● Provide clear terms relating to return, refund, exchange, warranty / guarantee, delivery / shipment, mode of payments, grievance redressal mechanism etc. to enable consumers to make informed decisions ● Mention safety and health care information of the goods and service advertised for sale ● Provide information on available payment methods & security of those payment methods ● Ensure that personally identifiable information of customers is protected and that such data collection, storage and use comply with provisions of Information Technology (Amendment) Act, 2008 ● Accept the return of products in cases of delay or defect and process refund within a fixed timeline
Liability of Seller	<ul style="list-style-type: none"> ● Require sellers to be responsible for warranty and guarantee of the goods and services sold and also provide upfront information on the exchange, returns and refund process. ● Display single-figure total & break up price for the goods or service, inclusive of all compulsory charges
Consumer Grievance Redressal	<ul style="list-style-type: none"> ● Appointment of a Grievance Redressal Officer who shall dispose complaints in a time bound fashion ● Provide facility to consumers to register their complaints online and track their status

Issues with the draft rules

- **Impact ease of doing business:** The new rules will increase the compliance burden on e-Commerce entities, and hence will negatively impact the ease of doing business in India.
 - Draft rules have generated a perception that the government is attempting to put pricing curbs on e-commerce entities with foreign equity.
 - Bias against foreign companies may become a drag on the investment and adversely impact employment scenario in India.
- **Against principles of free market:** Government intervention in checking prices (even if they are not predatory) is against the principles of free market.
 - Delivery timelines and refunds must be left to the individual seller.
 - There is no clarity on the level of government control on the discounts by the e-commerce platforms.
- **Ambiguous definitions:** Some clauses of the draft rules are ambiguous, short on definitions and open to interpretation. E.g. an e-commerce entity has been defined in the draft rules, but e-commerce as a business has not been defined.
- **Putting goods and services in same basket:** The draft rules put goods and services in the same umbrella, despite latter being harder to measure and regulate.

Predatory Pricing

- **Predatory pricing** is the act of a **market leader lowering its prices below its costs** to gain an unfair advantage.
- Though the predator incurs **short-term losses**, it hurts other players and drives them out of the market.
- Later, with fewer competitors, the predator can **raise prices to recoup losses**. The market's **entry barriers should be high** enough to deter new entrants when the predator tries to recoup its losses. Such behaviour is considered **anti-competitive**.
- However, a firm which reduces the costs below that of its competitors (price war) would not be considered as predatory. E.g. Walmart.

Other Steps taken by the Government to regulate E-Commerce

- **Draft e-Commerce policy** was released by the Government proposing to set up a legal and technological framework for issues like data ownership, cross-border data flow, anti-counterfeiting measures, digital economy, taxation etc.
- Government laid down **FDI rules for e-commerce** to regulate the operations of online marketplaces:
 - E-commerce firms were prohibited from selling products through companies, and of companies, in which they hold equity stake
 - They were barred from entering into exclusive deals for selling products on their platforms
 - Not more than 25% of the inventory on an e-commerce platform can be from a single vendor
 - It also disallows deep discounts offered by e-commerce marketplaces. Government seeks to appoint a dedicated regulator to oversee the same and settle disputes related to e-commerce.

- The Government is planning to expand the purview of these guidelines to include services such as video streaming, online ticket booking etc.
- Also, how these rules apply to social media commerce like products sold on Facebook pages/WhatsApp groups is not known.

Way Forward

- **A single legislation should be enacted to address all aspects of e-commerce** so that the legal fragmentation seen across the various laws is reduced, viz. the Information Technology Act, 2000, Consumer Protection Act 1986 etc.
 - This would ensure uniformity in definition of the various e-commerce players and levels of obligation imposed on them
- **An independent regulator must be set up** to deal with FDI implementation issues, consumer protection issues, central registry/ repository dealing with promoting domestic production, full disclosure by e-commerce entities of purpose and intent etc.
- Setting up an **accreditation system for vetting e-commerce platforms** which adhere to good business practices is the need of the hour.

3.3. STRATEGIC SALE OF PSUS

Why in news?

Centre has given in-principle approval for the strategic disinvestment of the government shareholding in 5 PSUs, along with management control.

More on news

- These PSUs include: Bharat Petroleum Corporation Ltd (BPCL); Shipping Corporation of India; Container Corporation of India; Tehri Hydro Power Development Corporation (THDCIL) and North Eastern Electric Power Corporation Ltd.
- Based on current market prices, the sale of stakes in these three firms will fetch the government about ₹78,400 cr, taking it close to **the disinvestment target for the fiscal year 2019-20 (1.05 lakh crore)**.

Strategic Disinvestment

According to the **Disinvestment Commission**, strategic sale is defined as the sale of substantial portion of government shareholding of a central public sector enterprise (CPSE) of upto 50% or higher, along with transfer of management control.

- Unlike the simple disinvestment, where Govt retains majority & management control, strategic sale implies some sort of privatization.
- A strategic sale is also different from cases where the Government transfers the majority stake but only to another PSU over which it has control.

Rationale behind strategic sale

- **Role of government:** The major ideology behind strategic disinvestment is that **“the government has no business being in business”**.
 - That is, the government’s role is to facilitate a healthy business environment rather than participating as a player.
- **Source of income:** Disinvestment proceeds have been a source of additional income. This is especially important at a time when private investment is falling and government is unable to meet its fiscal deficit targets.
 - The Government can utilize the money gained from disinvestment process to improve services in public goods like infrastructure, health and education.
- **Better management:** Many Government units often suffer from poor management and aggressive trade unionism and have become umpire-less playgrounds for political parties. It often leads to halting of PSU projects thereby hampering the efficiency in long run.
 - Providing employment was also one of the major objectives of Government’s holding in PSUs. Post LPG reforms, the vacancies in PSUs have done down substantially. Moreover, the problem of disguised unemployment and outdated skill in PSU employees are the major cause of inefficiency.
 - Economic potential of such entities may be better discovered in the hands of the strategic investors due to various factors e.g. infusion of capital, technology upgradation, better accountability and efficient management practices etc.

- The financial performance of many PSUs has improved drastically in many cases. E.g. Hindustan Zinc saw its net profits shoot up from ₹67 cr at the time of its sale in FY03 to ₹9,698 cr in FY19.
- **Transferring of public debt:** Disinvestment allows the transferring of the Indian government's enormous public debt of its PSUs to the Indian private sector.

Issues

- **Privatization may not ensure efficiency:** As per Rangarajan Committee 1993 report, mere change of ownership from public to private does not guarantee the efficiency.
 - Success of privatization depends upon **the transparency of the process and the effectiveness of the regulators.**
 - In absence of independent and effective regulator, it might lead to monopoly and oligopolistic practices by corporates
- **May lead to unemployment:** It might lead to the retrenchment of workers on a large scale, depriving them of their means of livelihood.
 - Private ownership might overlook developmental region disparity in order to cut the cost of operation.
 - E.g. Private sector has the tendency to use capital intensive techniques, which could be further detrimental to India's unemployment scenario.
- **Loss to public exchequer:** Disinvestment exercise often had been done by undervaluation of public assets and favouritism bidding, thereby, leading to loss of public exchequers.
 - A CAG audit of the nine PSU strategic sales published in 2006 has flagged specific shortcomings in the sale process like undervaluation of assets on their balance sheets in the form of surplus land, facilities and intangibles.
- **Sale of well performing PSUs:** Loss making units generally fail to attract easy buyers, especially with non-disclosure of full financials and the government attaching too many conditions to the sale.
 - Because of short term exigencies such as shrinking liquidity/fiscal pressure disinvestment is resorted to as an option to generate additional resources even in the case of well performing PSUs (e.g. NavRatna company like BPCL).

Way Forward

- The disinvestment must be **based on well-defined policy** and appropriate yardsticks for PSU privatisation.
- Given that these PSUs had potential, it would be important to evaluate the right pricing for the taxpayers by rightly pricing their assets (land, facilities & intangibles).
 - The centre must provide sufficient time to the valuers for a complete exercise, while ensuring that PSUs maintain a detailed record on their assets.
 - Also, potential buyers should be presented with complete and clean set of books by the Government before the actual bidding process begins so to minimise post-sale claims.
- Moreover, greater focus should be given to the monetization of PSU assets rather than outright privatisation.
- Both **domestic and foreign buyers** should be allowed to bid freely for the states.
- Government must ensure that any investment in PSUs has to be only for the generation of adequate social and strategic returns such as defence, natural resources etc.
- The Government should look into **strengthening the regulatory framework to ensure efficient market conditions.**

Therefore, it is important that PSU strategic sale process looks beyond disinvestment targets and fiscal year deadlines and is dealt with in a more systematic manner.

3.4. LAND LEASING

Why in news?

The Prime Minister's Office has set up a Group of Ministers (GoM) to resolve differences over the proposed Model Agricultural Land Leasing Act, 2016.

Background

- **Land leasing** means a **contract between the landowner and cultivator**, who uses the landowner's land for agriculture and allied activities for a mutually agreed specified period.
- In India, land leasing was allowed only in some states and there too, the market is poorly developed. It leads to the following issues-
 - Landowners do not lease out land for **fear of losing possession** and thus keep changing the tenants.
 - Tenant farmers cannot avail the benefits of government schemes like credit and insurance.
- To review the existing agricultural tenancy laws of various states, the NITI Aayog had set up an **Expert Committee on Land Leasing** headed by **T Haque**.
 - It drafted a **Model Land Leasing law** which seeks to create security among landowners to lease-out agricultural land.
- However, land being a **state subject** many states are yet to adopt the model law. Also, some central departments had some reservations on it.
- The GoM, which includes ministers from Home, Agriculture and Rural development, will push to resolve the issues that exist against the Model law. It will also recommend the way forward in the light of necessity, practicality and desirability of encouraging land leasing.

Key provisions of the Model Land Leasing Act, 2016

- **Legalise land leasing** in all areas to ensure complete security of land ownership right for landowners and security of tenure for tenants for the agreed lease period.
- **Remove the clause of adverse possession of land** in various states' land laws as it interferes with free functioning of land lease market.
- **Automatic resumption of ownership** to the landowner, after the agreed lease period without requiring any minimum area of land to be left with the tenant even after termination of tenancy, as laws of some states require.
- **Terms of land lease** determined mutually by the landowner and the tenant without any fear on the part of the landowner of losing land right or undue expectation on the part of the tenant of acquiring occupancy right.
- **Access to institutional support** to all tenants including sharecroppers to access insurance bank credit and bank credit against pledging of expected output.
- **Promote investment in land improvement** by incentivizing tenants and entitling them to get back the unused value of investment at the time of termination of tenancy.
- **Resolution of Conflicts**- The cultivator and the owner can settle disputes between them using third party mediation or local governments.
 - The State governments would also constitute a **special Land Tribunal**, which shall be the final authority to adjudicate disputes under the model Act.

Issues with the Model Land Leasing Act 2016-

- **Lack of application by the states**- Only a few states such as Uttar Pradesh, Madhya Pradesh, Rajasthan and Telangana have made moves to amend their tenancy laws.
 - Many state governments still have restrictions on agricultural land leasing that have forced tenancy to remain informal, insecure and inefficient.
- **Asymmetry between the landowner and the tenant** as landowner has been given protection in terms of ownership, but not many responsibilities in terms of land improvement or crop failure.
- **Does not place responsibility on state governments** to provide recognition to the cultivator and ensure they receive support, rather it merely puts onus on the cultivator to get into an agreement.
- **Lack of acceptability with farmers** has been feared by many states. As per the Alliance for Sustainable and Holistic Agriculture, the model Act ignores the ground realities in terms of implementation of this goal.

Potential of Land Leasing Framework in India

- **Productive use of land** as it could put to use millions of hectares of fallow land in the country.
 - It will reduce the pressure of population on agriculture and enable small farmers to augment their size of operational holdings by leasing in land.
- **Social security to tenants** as it will provide landless poor, small and marginal farmers a means of livelihood and protection through bank credit and insurance cover.
 - Beneficiaries of agricultural support services have been the landowners and not the actual tillers. It has fuelled problems of farmer suicides, default on agricultural loans among others.

- **Improve agricultural efficiency** as it will balance the family labour availability, debt situation on one hand with land availability and cash resources on other hand.
- **Occupational Diversification**- Currently share of agriculture in the gross domestic product (GDP) is only about 14%, but it employs 49% of the country's total workforce and 64% of the rural workforce.
 - There is a limit beyond which agriculture cannot productively absorb any additional workforce. It is therefore, absolutely necessary that there is **transfer of population** from agriculture to non-agriculture.
 - Legalisation of land leasing would encourage **large landowners** to lease out land without fear of losing their land ownership rights and invest in non-farm enterprises (with appropriate capital and technology support).
- **Inclusive Development** as the growth of an active land lease market would be helpful for the rural poor to get out of poverty trap.
 - It will also help achieve the target of **doubling farmer's incomes**.
 - E.g. the tenant farmer would also be able to avail the benefits of the contract farming by entering into a contractual agreement, especially for the marketing part, like if they want to sell their produce to some particular group.

Conclusion

The introduction of transparent land leasing laws that allow the potential tenant or sharecropper to engage in written contracts with the landowner is a win-win reform. The tenant will have an incentive to make investment in improvement of land, landowner will be able to lease land without fear of losing it to the tenant and the government will be able to implement its policies efficiently.

3.5. EDIBLE OIL DEFICIENCY

Why in News?

The Commerce ministry has asked the Agriculture ministry to prepare a **road map for India to attain self-sufficiency in edible oil production**.

Background

- India imports most of its edible oils from **Indonesia and Malaysia**. Moreover, Malaysia has a duty advantage over Indonesia under the India-Malaysia Free Trade Agreement.
- Under the government's plan to **double farmers' incomes**, achieving **self-sufficiency in oilseeds production by 2030** is a major target.
- Also, the need for a "**zero edible oil import**" plan was discussed at an inter-ministerial meeting.

Challenges in meeting the edible oil demand domestically

- **Stagnation in oilseed production**, at around 33 million tonnes over the last five years.
 - **Low remuneration for farmers**- despite huge domestic supply deficit, **large imports** results in undue pressure on oilseed prices which often slips below the minimum support price (MSP).
 - **Reduction in area under cultivation**- due to relatively lower profitability as against competing crops like maize, cotton or chickpea.
- **Import dependence**- processing industry prefers to import refined oil for blending directly with the oil for repacking and distribution for local consumption.
 - Further, because of lesser taxes on refined oil as compared to crude oil, share of imported refined oil in overall imports has surged to 18% from 12% few years back.
 - The average capacity utilisation of edible oil refineries has fallen to 46%, down from 65% five years ago.
- **Agricultural conditions**- Annual cultivation was about 26.7 million hectares, around **70 per cent of which is rain-fed**.
 - **Agricultural yield**, although increasing, but is **heavily dependent on monsoon** and lesser than global standards.
 - **Lack of resources**- Majority of oilseed growers (more than 85%) are small and marginal farmers having poor resource base coupled with non-availability of quality seeds of varieties and hybrids.
- **No cohesive policy**: The lack of any clear policy on how procurement agencies are expected to liquidate their acquired oilseed stock has created more problems.

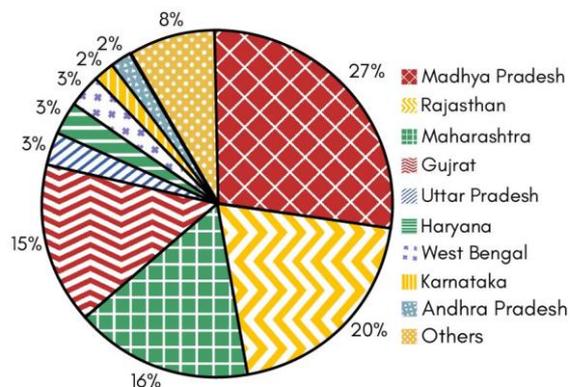
Way Forward

- **Diversification:** Extending oilseed cultivation to underutilized farming locations such as the rice fallows of eastern India and in some coastal region.
- **Under the ambit of PDS:** Including cooking oils in the PDS may provide a fillip to procurement operations while ensuring affordable supplies.
- **Impetus to domestic varieties:** Consumer awareness efforts may be needed to showcase the benefits of indigenous varieties.
 - To revive distressed processing capacity, import tariffs need to be united with domestic MSPs and refining costs, with no ad-hoc tinkering with the tariffs.
- **Control the imports:** There is a need to fix an annual ceiling on import; and the import trade should be monitored strictly.
- **Improved resources:** The key to improve oilseeds production lies in ensuring the availability of quality seeds, bridging the awareness gap in farmers regarding better techniques, developing supportive infrastructure facilities and ensuring an efficiently managed market for better price recovery.

Status of edible oil in India

- Currently, total **edible oil production** is just 7.31 million tonnes (mt). Estimated **demand** of edible oils in India is 24.5 mt.
- So, total edible oil **import** account for 65-70% of the domestic requirements. In early 1990s, it was less than 5%.
- India is third largest consumer of edible oil.
- Total edible oil **requirement by 2022** is estimated at 33.2 mt, assuming **per capita consumption** of about 22 kg per person a year, from 19 kg during 2015-16.
- **Palm oil forms a major share** of the edible oil imported as well as consumed by Indians. Other major oils are- Soybean Oil and Mustard oil.
- India is the **fourth largest oil seed-producing** country in the world after USA, China and Brazil. Currently, annual **oilseed production** from primary sources in India is around 34 mt.
- The **oilseeds accounts for 13% of the gross cropped area, 3% of the Gross National Product and 10% value of all agricultural commodities.**
- Major Oilseed producing states in India:
 - **Groundnut:** Gujarat (leading), Andhra Pradesh, Karnataka, & Tamil Nadu
 - **Mustard:** U.P (leading) Haryana, West Bengal &
 - **Soybean:** M.P (leading) & Maharashtra

% Contribution in Production



Steps taken by government

- **Ministry of Agriculture** has set the following **targets** to be achieved by 2022-23-
 - to take annual production of **edible oils** from current 7.31 mt to 13.69 mt.
 - increasing **oilseed** production from primary sources from the current 34 mt to 45.64 mt.
- **Group of Secretaries (GoS)** was constituted recently for launching a nationwide oil seed mission to minimise oil imports.
 - Government may levy a 2-10% cess on import of crude and refined edible oil to fund the mission.
- **Ashok Dalwai committee**, Committee on Doubling Farmers Income was setup. Some of its recommendations are-
 - The **strategy for self-sufficiency in oilseeds production** should encompass all three sources of oils
 - ✓ 9 primary sources of oilseed crops (seven edible (soybean, rapeseed-mustard, groundnut, sesame, sunflower, safflower and niger) and two non-edibles (castor and linseed))
 - ✓ secondary sources (rice bran, cotton seed, solvent extracted oils)
 - ✓ tree borne oils (TBOs), namely, palm oil, coconut, other tree and forest origins
 - **To incentivize palm tree cultivation-** it has suggested a price incentive mechanism for farmers through creation of an **Edible Oil Development Fund (EODF)**, with contributions coming from a specially levied cess of 0.5% on the imports of crude and refined palm oil.
- **ISOPOM (Integrated Scheme of Oilseeds, Pulses, Oil Palm and Maize)**
 - Under this, four schemes related to oilseeds, pulses, oil palm and maize have been merged into one Centrally Sponsored ISOPOM.

- Financial assistance is provided to farmers for purchase of breeder seed, production of foundation seed, production and distribution of certified seed etc.
- **National Mission on Oilseeds and Oil Palm (NMOOP)**
 - It is implemented under three Mini-Missions (MM) namely; MM I – Oilseeds, MM II – Oil Palm, MM III – TBOs (Tree Based Oil).
 - The mission targets increasing production of oilseeds to 42 mt by FY2022 from estimated 34 mt.
 - The strategy and guideline for NMOOP includes:
 - ✓ Increasing Seed Replacement Ratio (SRR) with focus on Varietal Replacement; increasing irrigation coverage under oilseeds from 26% to 36%. SSR is a measure of how much of the total cropped area was sown with certified **seeds** in comparison to farm saved **seeds**.
 - ✓ diversification of area from low yielding cereals crops to oilseeds crops; inter-cropping of oilseeds with cereals/ pulses/ sugarcane;
 - ✓ use of fallow land after paddy /potato cultivation
 - ✓ expansion of cultivation of Oil Palm and tree borne oilseeds in watersheds and wastelands;
 - ✓ increasing availability of quality planting material enhancing procurement of oilseeds and collection;
 - ✓ Processing of tree borne oilseeds.
- **Pradhan Mantri Annadata Aay SanraksHan Abhiyan (PM-AASHA):** It is aimed at ensuring remunerative prices to the farmers for their produce as announced in the Union Budget for 2018.
 - In this initiative, the third part is the pilot of **Private Procurement & Stockist Scheme (PPSS)**.
 - In the case of oilseeds, States will have the option to roll out PPSSs in select districts where a private player can procure crops at MSP when market prices drop below MSP.

3.6. CONTRACT FARMING

Why in news?

Tamil Nadu has become the **first State to enact a law on contract farming based on the lines of Model Contract Farming Act, 2018 of the Central Government.**

More about news

- The law called **Tamil Nadu Agricultural Produce and Livestock Contract Farming and Services (Promotion and Facilitation) Act** has got the assent of President as well.
- This act ensures that **farmers are paid at a pre-determined price, as per registered agreements**, safeguarding their interests during times of bumper harvest or fluctuating market prices.
- As per the law, **farmers would get support from purchasers for improving production and productivity** by way of inputs, feed and fodder, technology.
- The Act **covers output of agriculture, horticulture, apiculture, sericulture, animal husbandry or forest activities**, excluding those products that are banned or prohibited by law.
- To ensure proper implementation of this Act, a six-member body called the **Tamil Nadu State Contract Farming and Services (Promotion and Facilitation) Authority** would also be formed.
- The Act also provides for the setting up of a **Dispute Settlement Committee** at the level of revenue sub-division.

About Contract farming

- It involves **agricultural production** (including livestock and poultry) being carried out on the basis of a **pre-harvest agreement** (or forward contracts) between the **buyers** (such as food processing units and exporters) and **producers** (farmers or farmer organisations).
- It is **under the Concurrent List**; however, Agriculture is under State list.
- Government has also exempted firms engaged in contract farming from the existing licensing and restrictions on stock limit and movement of foodstuff under the Essential Commodities Act, 1955,
- **Legislation related to Contract Farming in India**
 - In order to protect the interests of producers and sponsors of Contract Farming, the Ministry of Agriculture drafted **Model APMC Act, 2003**, which provided provisions for registration of sponsors, recording of agreement, dispute settlement mechanism.
 - ✓ Consequently, **some states had amended their APMC Acts** to provide for it but Punjab had a separate law on contract farming.

- Central government has put in place a **Model Contract Farming Act 2018**, which encourages state governments to enact clear contract farming laws in line with the model act.
 - ✓ It has been drafted as a **promotional and facilitative act** and is not regulatory in its structure.

Benefits of Contract Farming

- **Protects farmer's interests:** It reduces farmers' risks by creating an assured market for their produce and protecting them from fluctuating market prices.
 - Predetermined prices provide an opportunity to cover post-harvest losses, if any.
- **Private participation in Agriculture:** As envisaged by **National Agricultural Policy**, it encourages the private sector investment in agriculture to promote new farming technology, developing infrastructure, etc.
- **Improving Farmers' Productivity:** It enhances productivity and efficiency of farming sector, by improving access to better inputs, scientific practices and credit facilities, leading to increased farmer incomes, new employment opportunities and food security at large.
- **Better Price discovery:** It breaks the **monopoly of APMCs** and makes farming an organized activity thereby improving quality and quantity of production.
- **Increasing Export:** It encourages farmers to grow crops required by the food-processing industry and link Indian farmers to global supply chains, particularly in high-value horticulture produce and reduce food wastage significantly.
- **Consumers benefit:** Increasing marketing efficiency gains, elimination of intermediaries, reduction in regulatory compliances etc. can significantly reduce artificial shortages of produce and control food price inflation.

Model Contract Farming Act, 2018

- The act lays special emphasis on **protecting the interests of the farmers**, considering them as weaker of the two parties entering into a contract.
- It **ensures buying of entire pre-agreed quantity from producer at fixed pre-agreed price** and quality standards as per the contract.
- It includes **all categories of agronomic and horticulture crops, livestock, dairy, poultry and fishery**.
- **All services in the agriculture value chain**, including pre-production, production (including extension services) and post-production services, **are under its ambit**.
- It seeks to setup a **Contract Farming (Development and Promotion) Authority at state level** to ensure implementation and popularize contract farming among stakeholders.
- It provides for **Contract Farming Facilitation Group (CFFG) at village/Panchayat level** to take quick and need based decisions relating to production and postproduction activities.
- It provides for a **Registering and Agreement Recording Committee at local level** to register contracts.
- It provides for a **dispute settlement mechanism** at the lowest level possible for quick disposal of disputes arising out of the breach of contract or any provision of the Act.
- It promotes **Farmer Producer Organization (FPOs) / Farmer Producer Companies (FPCs)** to mobilize small and marginal farmers to benefit from scales of economy in production and post-production activities.
- It **bars the transfer of ownership of the farmer's land** to sponsor companies under all circumstances. It prohibits sponsors from raising permanent structures on farmer's land.
- It provides **farmers an alternative in cases where the procurement mechanism is ineffective**.
- Contract farming will remain **outside the ambit of respective Agricultural Produce Marketing Act** of the states/UTs. Buyers are also exempted from market fee and commission charges.
- **Limits of stockholding of agricultural produce will not be applicable** on produce purchased under contract farming.

Challenges

- **Lack of uniformity or homogeneity** among states law regarding kinds of produce, conditions etc. which is needed for allowing contract farming. States have been reluctant to carry forward reform for the fear of loss of revenue.
- **Promote Regional Inequality:** Currently it is practiced in agriculturally developed states (Punjab, TN etc.) while States with highest concentration of small and marginal farmers are not able to reap its benefit.
- **Landholding Pattern:** Buyers have no incentive for contract farming with a large number of small and marginal farmers due to high transactions and marketing costs, creating **socio-economic distortions** and preference for large farmers.

- As per **Agriculture census 2015-16**, **86% of landholdings** are **small and marginal** and **average size of landholdings in India was 1.08 hectare**.
- It **increases dependency of farmers on corporate** for inputs, making them vulnerable.
- Predetermined prices can **deny farmers the benefits of higher prices** prevailing in market for the produce.
- **Capital-intensive and less sustainable pattern of cultivation**: It promotes increasing use of fertilizers and pesticides which have detrimental impact on natural resources, environment, humans and animals.
- **Encourages Monoculture Farming**: This will not only impact soil health but also possesses risk of food security and import of food grains.

Way Forward

- **Tax exemption** can be given food processors involved in contract farming, in lieu of which they can be asked to invest in rural infrastructure, farmer welfare, etc.
 - Tax duties on farm equipment imported for contract farming can be removed.
- The government should focus on **providing an enabling environment** by fostering competition and bridging information asymmetries between farmers and buyers.
- Finally, all **states** should **adopt** and implement **Model contract farming act** to ensure uniform protection for farmers, as well as provide an enabling ecosystem for buyers.

3.7. COMMERCIAL COAL MINING

Why in News?

India will now offer coal mines to private companies 'only for commercial mining and sale purpose', thereby moving away from the earlier regime of offering mines for captive use.

More on news

- The coal ministry will auction coal blocks for commercial mining on a **revenue sharing basis** and proposes to announce incentives for faster production. To incentivize bidders to begin early, the government proposes to offer up to 20% deduction in its revenue share.
- This will be the first auction **outside the reverse bidding model** since the mass cancellation of blocks by the Supreme Court. The revenue sharing model is based on recommendations of an expert committee headed by former Central Vigilance Commissioner **Pratyush Sinha**.
 - In a reverse auction, the buyer puts up a request for a required good or service. Sellers then place bids for the amount they are willing to be paid for the good or service, and at the end of the auction the seller with the lowest amount wins.

Background

- Coal accounts for around **70% of the country's power generation**, and the move for energy security through assured coal supply is needed.
- To ensure this, coal mining was **nationalised in 1973** by Coal Mines (Nationalisation) Act, 1973.
- Following nationalisation, **only state-owned CIL was allowed to sell coal**. And even till recently, private sector firms were only allowed to mine coal for use in their cement, steel, power and aluminium plants i.e. for their **captive (own) use**. So, CIL, was so far the lone commercial miner in the country and accounts for 84% of India's coal output.
- **From 1993-2014, 204 coal mines/blocks were allocated** to the various government and private Companies under the provisions of Coal Mines (Nationalisation) Act, 1973. However, these allocations were often **tainted with corruption and large kickbacks**. So, in the backdrop of **C&AG report**, alleging loss of 1.85 lakh crore to exchequer, Supreme Court of India **cancelled these allocations in 2014**.

Problems with captive coal mining

- Captive coal blocks produced **only 25.1 million tonne (MT) in 2018-19**, much lower than the peak output of 43.2 MT in 2014-15 when the Supreme Court had cancelled the licences of 204 such coal mines.
- **Captive mining could not achieve desired results** as it presumed that power producers, steel makers and others have the expertise and inclination for mining.
- Also, it prevented **economies of scale**.

Recent step taken in this regard

- In Feb 2019, the **Cabinet allowed private companies to sell up to 25% of production from captive coal mines in the open market**, thereby raising domestic output.

- Enabling provisions have been made in the **Coal Mines (Special Provisions) Act, 2015** for allocation of coal mines by way of **auction and allotment** for the sale of coal.
- **Prior to the enactment of Coal Mining (Special Provisions) Act in 2015**, coal mines were **never given out through bidding**. Companies in sectors like steel, cement, power, coal-to-gas and coal-to-liquid used to apply for coal blocks and rights were given to them after scrutiny by an inter-ministerial committee.

Intended benefits of commercial coal mining

- **Increased production and energy security:** It will help the country come closer to its vision of producing 1.5 billion tonnes of coal annually by 2022.
- **Reduced imports:** India still meets a **fifth of its annual coal requirement through imports**, which costs about Rs 1 lakh crore. CRISIL estimates that substitution of imported **non-coking coal** with domestic production could save roughly Rs 30,000 crore of coal imports.
- **Benefit to power sector:** It would help stressed power plants to attempt a turnaround through better fuel management. Also, **cement and steel sectors** will gain the most being the largest consumers and importers of non-coking coal.
- **Improved efficiency:** Participation of private miners would increase much-needed **competition, enhance productivity and efficiency** by facilitating the use of latest equipment, technology and services through higher investments.
- **Development of coal bearing states:** especially in the eastern part of the country, as the entire revenue from these auctions will accrue to them. Also, revenue may increase as the coal blocks will be allocated to the highest bidder.
- **Attract foreign investment:** as it provides a great opportunity to overseas companies in countries where coal mining is either on the wane or has been stopped completely.

Challenges in Commercial coal mining

- **Restrictive norms for auctioning:** The last two auction-tranches had to be cancelled due to the shortage to sufficient bidders because private industry remained impassive to the set norms.
- Factors such as delays in **land acquisition, multiple approvals at the state and the Central government levels**, as well as issues with coal transportation account for stagnant or decreasing coal production and consumption. Coal India Limited (CIL), had the advantage of being a government-owned company on the above accounts. Without resolving these issues, increasing coal production via commercial mining may not bring the desired results.
- **Increase in cost of production:** As estimated by CIL, only about 21 billion tonnes (BT) could be extracted technically and economically. Thus, India may run out of easily extractable coal down to the depth of 300 metres in the next few years. This will mean that companies will need to mine deeper, **which would require increased mechanisation with an increase in the cost of production.**
- **Shift to renewable energy:** In current times there is an increasing **shift to renewable resources** both in terms of investment in technologies and creating physical assets and capacity. In such scenario it is **difficult to attract investors.**
- **Shrinking and uncertain market:** As against a large market for coal industry in industries, railways, defence, power etc. earlier, the market has now **shrunk only to power and cement sectors.** Unless a private investor is able to tie up with captive power utilities, it is extremely unlikely for them to venture into an uncertain market.
- The **ascending forward auction** route is expected to be adopted for coal block allocation where the companies will pay the bid price to the state government on actual production as revenue. While private players would like to keep the auction price lower, the government would prefer a higher bid price to garner increased revenue. This means, commercial mining **may not necessarily lead to a decrease in the cost of coal.**
- The final cost of coal consists of **taxes, duties, cess and transportation charges;** each of these components has been increasing steadily over the past few years. Therefore, even if the actual cost of production comes down due to commercial mining, the net landed cost of coal at the consumer end is unlikely to be impacted too much.

- **No independent regulator:** For the coal sector, there is no structure for independent regulation. Thus, there is **no redressal mechanism** in place for resolution of problems arising due to commercial mining or to protect the interest of consumers.

Way Forward

- **Removal of private sector’s disadvantageous position-** by doing away with the direct coal allotment to PSUs
 - Coal Bearing Areas Act, 1957, should be amended to give private companies a level-playing field in land acquisition.
 - Besides, provisions in the Minerals & Mines Development Regulation Act and Coal Mining Special Provisions Act that give preference to government companies should be removed.
- **Regulatory body-** an independent regulatory body is needed for the coal sector to carve out coal blocks, oversee investments and also carry out valuation.
 - The Directorate General of Hydrocarbons, which handles bids for coal-bed methane, can be suitably empowered for coal. The US also has a single energy regulator.
- **Marketing linkages-** functional market for coal is needed, so that efficient producers can gainfully increase their supply as per effective demand.

3.8. CODE ON INDUSTRIAL RELATIONS BILL

Why in news?

Recently, the Labour Code on Industrial Relations 2019 was introduced in Lok Sabha.

More on news

- The labour ministry has decided to amalgamate 44 labour laws into four codes - on wages, industrial relations, social security, and safety, health & working conditions.
 - **Codes on Wages** – Already received Presidential assent
 - **Occupational Safety, Health and Working Conditions Code** – Introduced in Lok Sabha and referred to Standing Committee
 - **Code on Social Security** – Introduced in Lok Sabha
 - **Industrial Relations Code** – Introduced in Lok Sabha
- The **Labour Code on Industrial Relations** will combine Industrial Disputes Act, 1947, the Trade Unions Act, 1926, and the Industrial Employment (Standing Orders) Act, 1946.
- It aims to create **greater labour market flexibility** and **discipline in labour** to improve upon **ease of doing business** and also to encourage **entrepreneurs** to engage in labour intensive sectors.

Significance of the code

- **In sync with global standards-** as now Indian companies are competing with global players so there should be a level playing field. This code will protect employment as much as possible, when there is commercial viability.
- **Balances employer-employee concerns-** The **threshold** required for government permission for retrenchment has been kept unchanged at 100 employees, as against the proposal for 300 employees in an earlier draft of the Bill, which was opposed by trade unions.
 - The Code also proposes setting up of a “**re-skilling fund**” for training of retrenched employees. The retrenched employee would be paid 15 days’ wages from the fund within 45 days of retrenchment.
 - An industrial establishment will have to **contribute an amount equal to 15 days’ wages** or such other days as may be notified by the central government, to this fund for every worker retrenched.

RELATION BUILDING

Industrial Relations Code Bill seeks to improve ease of doing business

KEY ELEMENTS		
Fixed-term employment allowed under law	Termination after fixed term will not be retrenchment	
Fixed-term workers will get all statutory benefits		HOW WILL IT HELP? Codification to remove multiplicity of definitions Paves way for requirement-based hiring Would bring transparency & accountability 
Mass casual leave will be under ambit of strike	Trade union with support of 75% workers will be recognised	
14-day notice before any strike or lockout	Negotiating council will be formed in absence of 75% support	
Re-skilling fund will be set up to train retrenched employees	Govt to have power of litigations involving minor disputes	

- **Balances reform with flexibility-** To ensure that all such states do not have to go to their legislative Assemblies to follow the central law, the government has given safeguard measures to ensure that some provisions do not override the changes brought in by the states.
- **Uniform application of fixed-term employment-** The central government has proposed to bring fixed-term employment as part of the labour law, instead of administrative rules, so that it comes into effect **across India**.
 - **Fixed-term employment** means a worker can be hired for any duration, three months or six months or a year depending on season and orders.
 - Currently, companies hire contract workers through contractors. Now they will be able to hire workers directly under a fixed-term contract, with the flexibility to tweak the length of the contract based on the seasonality of industry.
 - These workers will be treated on a par with regular workers during the tenure of the contract. It will help in the flow of social security benefits to all workers along with making it easier for companies to hire and fire.
- **Better Industrial relations-** could be achieved owing to the provisions of **mass casual leave** and majority-based **recognition of trade unions**. It could also improve the productivity of **labour**.
- **Speedier Disposal of Cases-** as the code also provides setting up of a **two-member tribunal** (in place of one member) wherein important cases will be adjudicated jointly and the rest by a single member.
 - Besides, it has vested powers with the government officers for adjudication of disputes involving penalty as fines, thereby lessening the burden on tribunal.

Issues

- **Inadequate provisions for migrant workers-** As per a 2016 survey, there were 10 crore migrant workers in the country, which was around 20 per cent of the labour force. Their concerns and requirements have not been placed effectively in the code.
- **Lack of clarity in terms retrenchment-** could lead to uncertainty, and discretionary behaviour during implementation by the central or state government.
- **Doesn't address the issues concretely-** as the critics allege that the code is kind of appeasement to both sides, which will not actually provide relief to either of them.
 - Such as definition of worker, which expressly excludes apprentice and similarly, different dates for implementing different provisions, exclusion clauses are against the spirit of Codification and simplification.
- **Need for safeguards-** such as in the fixed-term employment, otherwise it runs the risk of encouraging conversion of permanent employment into fixed-term employment.

3.9. STEEL SCRAP RECYCLING POLICY

Why in News?

Recently, Ministry of Steel issued the Steel Scrap Recycling Policy.

Need of steel scrap recycling policy

- **Useful waste: Steel scrap is a recyclable material** left- over from steel manufacture or fabrication or at end of life of the product.
 - Steel scrap is unique in that it is **100 per cent recyclable**. It can be used, reused and recycled infinitely.
 - While **iron ore remains the primary source of steel making**, used or re-used steel in the form of Scrap is the secondary raw material for the steel industry.
- **To regulate scrap industry:** Interventions are required to accord Industry / infrastructure status to the **unorganized scrap recycling sector** so as to **ensure statutory compliance with respect to safety, health and environmental norms** in collection and processing of scrap.

Steel Production Processes

- **Blast Furnace (BF)–Basic Oxygen Furnace (BOF):** Most of the major steel producers operate through the BF-BOF route. Blast furnaces **convert iron ore into hot metal (when further processed in liquid stage to steel) or pig iron (when solidified)**.
- **Electric Arc Furnace:** The furnace can be operated with **100% scrap as input metal along with lime and dolomite, which are slag formers**. This greatly reduces the energy required to make steel when compared with primary steelmaking using iron ore.
- **Induction furnace (IF):** Initially IFs were **used for melting stainless steel scrap**. Since mid-eighties, these furnaces are used for mild steel production also. IF is one of the most cost-effective technique but the process lack in refining the steel.

- There is very limited adherence to policies on safe dismantling and also low investment in infrastructure for safe disposal of waste materials.
- **To Improve steel production and reduce import bill:** The current supply of scrap is 25 MT from the domestic unorganized scrap industry and 7 MT from import of scrap. There is potential to harness this 7 MT of scrap that is currently being imported from the domestic market itself.
 - Most of the major steel producing countries like Japan, USA, and China are continuously increasing scrap-based steel production with proportionate reduction from primary route.
 - National Steel Policy 2017 (NSP-2017) also aims to develop a globally competitive steel industry by creating 300 Million TPA Steel production capacity by 2030
 - There is also **higher scrap availability due to increasing per capita steel consumption** (doubled from 2004- around 33kg to around 60 kg).
- **Environmental Benefits:** Recycling steel requires 56 percent less energy than producing steel from iron ore, and reduces CO₂ emissions by up to 58 percent.

Key feature of Steel Scrap Recycling Policy

- **Environment friendly:** It promotes collection, processing and recycling of products in an organized, safe and environment friendly manner.
 - The policy also proposed to create a mechanism for treating waste streams and residues produced from dismantling and shredding facilities in compliance to **Hazardous & Other Wastes (Management & Transboundary Movement) Rules, 2016**.
- **Promote circular economy:** The policy envisions promoting circular economy in the steel sector. The steel scrap shall be recycled to produce high grade steel. This can be used in the industries such as equipment manufacturing, automobiles and other downstream industries.
- **High quality steel:** The scrapping policy ensure that quality scrap is available for the steel industry. If quality scrap is provided as the charge to the electric furnaces, then the furnaces can produce high grade steel.
- **Authorise Steel scrapping centre:** It promote 6Rs principles of reduce, reuse, recycle, recover, redesign and remanufacture through scientific handling, processing and disposal of all types of recyclable scraps including non-ferrous scraps, through authorized centers / facility.
- **Hub and the spoke model:** To address the issue of collecting scrap and to structure the informal recycling sector based on environmental and scientific fronts, a hub and the spoke model has been suggested.
 - A 4+1 hub and spoke model is suggested where 4 collection and dismantling centres are to cater to the 1 scrap processing centre. Around 400 jobs would be created by one such composite unit.
- **Inter-Ministerial Coordination Committee:** An Inter-Ministerial Coordination Committee has been set up with Secretary, Ministry of Steel as Convener and Secretaries of Ministry of Road Transport & Highways (MoRTH), Department of Heavy Industry (DHI), Ministry of Environment, Forest & Climate Change (MoEF&CC), Department Revenue and Ministry of Labour & Employment as members. The mandate of the Committee is
 - Policy changes required for creating an organized steel scrapping eco system;
 - Monitoring the operationalization and enforcement of relevant laws/regulations in this regard.

4. SECURITY

4.1. ANTI-TERROR LAWS IN THE COUNTRY

Why in news?

Recently, the President gave his assent to the Gujarat Control of Terrorism and Organised Crime (GCTOC) Bill.

More on the news

- The Bill has been passed by the Gujarat assembly and brought to presidents three times since 2004, but was sent back, owing to lack of clarity regarding certain provisions of the bill.

Need of Anti-terror legislations

- **Complete the anti-terror infrastructure-** which includes three main elements
 - A **law** governing all aspects of terrorism
 - A **single investigative agency** to single-minded pursuit of terrorism cases in a time-bound manner
 - An agency to **collate, analyse and disseminate intelligence inputs** relating to terrorism.
- **Inadequacies of existing acts-** Over the years, as acts of terror became more frequent, intense and geographically widespread, aided and abated by external forces, the inadequacies of the general laws, treating them as law and order matters, started getting exposed.
- **Deal with terror effectively-** that could effectively deny operating space and manoeuvrability to terrorist groups and their support structures that would deter them from executing any acts of terror.
 - **Counter federal gaps-** to ascertain inter-operability of the investigating agencies, which fall under the ambit of State as well as the union governments.
 - **Counter cross border terror-** with special focus on the issue of gathering of evidence located abroad.
- **Bring clarity over various aspects related to terror-** including its definition, acts, evidences and procedures, which can be followed while dealing with terrorism.

Over the years this resulted into various anti-terror laws as described in the box.

Factors behind the evolution of anti-terror laws

- **Incoherence and Misuse-** The haste in legislating anti-terror laws led to a significant amount of incoherence, without substantial thought being given to the unintended consequences of the **slight tweaks in language**.
 - Various other state laws have been made without studying the misuse and impact of TADA and POTA, thus increasing the suspicion of their misuse. This has led to their amendments and changes.
- **Judicial Scrutiny-** The court recognising the fact that acts of terrorism constitute an '**extraordinary crime**', have been carefully scrutinising the processes and procedures prescribed under the new legislations, with due consideration to protecting personal liberties and individual human rights of the citizen.
 - Based on the **judicial guidelines and recommendations** by the courts, some Union and State legislations were enacted along with suitable amendments in the existing laws tackle terrorism and related issues.
- **Complexities of Indian federalism-** Various state laws have faced hurdles in getting Presidential assent and similarly, legal attempts to bring a National Counter Terrorism Centre were thwarted by the state governments.

However, at a broader level, it has been observed that **same basic statutory approach** to terrorism has been followed since TADA, resulting in the language and structure of subsequent statutes. This is in spite of the fact that the nature of terrorism and counter terrorism efforts has undergone changes in the recent decades.

Why different terror laws for state?

Despite the Central legislations (mentioned in the box above) in place, there have been various state legislations to deal with terrorism. The reasons behind this are-

- **Constitutional competence-** The state legislatures are competent and feel the need to enact separate anti-terror legislations as the constitution gives the responsibility of **police and public order** to the states under the seventh schedule.

- **Legislative gap between Union laws-** such as there was a long gap of four years (since repeal of POTA in 2004 till the amendments in UAPA in 2008) when India did not have any special federal anti-terror legislation, forcing the state governments to enact alternate enabling laws.
- **Border management-** The states sharing international borders like Gujarat, Kashmir and North-Eastern states feel the requirement for more stringent act like GCTOC, AFSPA to deal with cross border terrorism.
- **Specific state specific problems-** such as the presence of underworld and organised crime networks in Maharashtra, Arunachal led to the enactment of legislations against organised crime like MCOCA, APCOCA.

Conclusion

There needs to be a consensus at the state and national level in dealing with the menace of terrorism in a synergetic manner, where both federal and state legislations can complement each other.

Evolution of major anti-terror legislative architecture in the country

- In the earlier stages, incidents of terrorism in India were generally dealt with as **law and order issues** and therefore investigation and prosecution in such cases largely followed the penal provisions enshrined in major laws such as the **Indian Penal Code, Indian Explosives Act, Indian Arms Act**, and such others, while procedurally, the provisions of the **Criminal Procedure Code** were followed.
- **Unlawful Activities Prevention Act (UAPA), 1967-** It was enacted as general law encompassing unlawful activities.
 - However, after the repeal of POTA, it was **amended in 2008** to incorporate the **definition of a 'Terrorist Act'**.
 - It was further amended in 2013 to cater to the specific need of the hour by incorporating **economic and financial offences**. It also enabled prosecution of offences punishable under this Act even if committed outside India.
- **Terrorist and Disruptive Activities (Prevention) Act (TADA), 1985-** It was enacted in the backdrop of the assassination of then Prime Minister Indira Gandhi in 1984. It remained in force till 1995 and then it was allowed to lapse due to grave and widespread of allegations of misuse.
- **Prevention of Terrorism Act (POTA), 2002-** It was enacted after the attack on Indian Parliament in 2001. It also remained the political punching bag and faced severe criticism for alleged widespread human right abuses. It was repealed in 2004 after a very short span of legal existence.
 - After the repeal of POTA, no court was permitted to take cognizance of any offence under POTA after one year of the expiry of this Act.
- **Armed Forces Special Power Act [AFSPA]-** It was enacted in view of the rise in insurgency in certain areas. This law classified those areas as '**disturbed areas**', providing special operational, legal cover along with certain additional powers to the armed forces.
 - In classical terms however, AFSPA should not be seen as an anti-terror specific legislation but more as an enabling provision for the armed forces to deal with situations in the disturbed areas.

4.2. THE BODOLAND DISPUTE: BAN ON NDFB EXTENDED

Why in news?

Union Ministry of Home Affairs (MHA) has extended ban on the National Democratic Front of Bodoland (NDFB) by five more years, under provisions of **Unlawful Activities (Prevention) Act, 1967**.

More on the news

- NDFB is an **ethnic insurgent organization** demanding an independent state for the Bodo ethnic group in Assam, formed in 1986.
- It shares close ties with the **United Liberation Front of Assam (ULFA)**.
- According to the MHA, NDFB poses a threat to the sovereignty and territorial integrity of India and has been involved in illegal and violent activities like: extortion, terrorism, obtaining assistance from anti-India forces, ethnic killing, secessionist activities etc.



About Bodoland

- It is a state demanded by a **tribal community called Bodos** in Assam, who comprise of 5%-6% of the state's population.
- It consists of regions located extreme north of north bank of Brahmaputra river in the state of Assam, by the foothills of Bhutan and Arunachal Pradesh.

Timeline of the Bodoland dispute

- 1929- Bodo leader Gurudev Kalicharan Brahma submits a memorandum to the Simon Commission asking for reservations in the Legislative assembly, and for a separate political entity for his people. His efforts go in vain.
- **1960s and 1970s** - There are calls from Bodos and other tribes for a separate state of '**Udayachal**' as immigrants are accused of illegally encroaching on Bodo-inhabited lands. Demand was raised under the banner of the **Plains Tribals Council of Assam (PTCA)**, a political outfit.
- **Late 1980s** - Demands for Assam to be divided "50-50" are raised by **All Bodo Students Union (ABSU)** which adopted a peaceful approach.
- At the same time **armed separatist groups** like the **Bodoland Liberation Tigers (BLT)** and the **NDFB** are founded.
- **February 1993** - The **Bodoland Autonomous Council (BAC)** is constituted after the Centre, the Assam government and the ABSU sign a tripartite agreement. However, BAC failed due to non-implementation of various provisions of the Accord.
- **February 2003** - The **Bodoland Territorial Council (BTC)** is formed after the Centre, the Assam government and the BLT sign a tripartite agreement. The BLT is disbanded.
- **2005** – NDFB agrees to a ceasefire with the Assam government and the Centre. After the treaty is signed, the group splits into three factions. One of those factions, the NDFB (S) continued to carry out violent attacks.

Bodoland Territorial Council (BTC)

- It has legislative, administrative, executive and financial powers over 40 policy areas in the **Bodoland Territorial Area District (BTAD)**.
- **BTAD** comprises four districts (**Kokrajhar, Baksa, Chirang and Udalguri**) of Assam.
- It functions under the provision of the **Sixth Schedule of the Constitution** of India.

Reasons for the demand

- **Massive Illegal Immigration from Bangladesh:** It has led to certain concerns among the Bodos-
 - **Changing Demography:** It might turn them into a minority in their own land.
 - **Inclusion of illegal migrants in the voters list:** It is viewed as a deliberate ploy to empower an outside group, so that the Bodos lose their political power.
- **Threat of loss of distinct language and culture:** Due to forced assimilation.
- **Growing Unease:** Due to the political empowerment of the minority communities in the BTAD in recent years.
- **Failure of The Bodo Territorial Council (BTC):** Weak administrative institutions and divisive politics of the members of the BTC have also added to their insecurity.

Way Ahead

- The government should **strengthen the autonomous, administrative** divisions in Assam established on the basis of the Sixth Schedule of the Constitution.
- Establish a **land record system** that is computerised and accessible to the local people, and which can address the fear of loss of land to the outsiders.
- **Improve** the presence of both the **state civil administration and the law enforcement agencies** in areas that are identified as highly susceptible to ethnic violence.
- The government should take measures to **improve the other economic sectors** of the region like development of agro-based industries, tourism and hydroelectricity etc.
- **Measures** to protect their **language and cultural identity** should be taken.

5. ENVIRONMENT

5.1. DELHI AIR POLLUTION

Why in news?

Recently there has been debates over the contribution of various sources of air pollution in Delhi.

Introduction

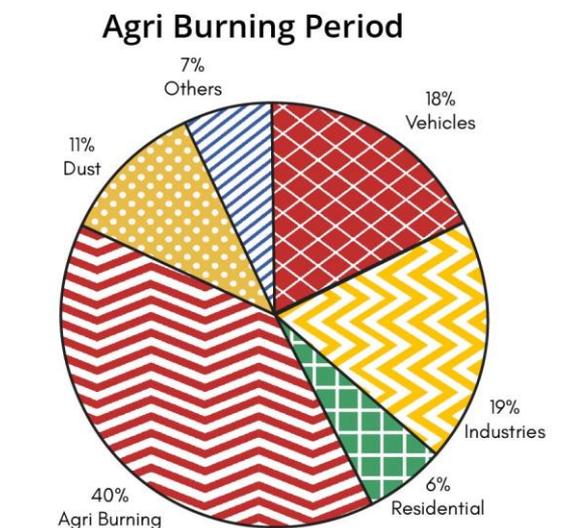
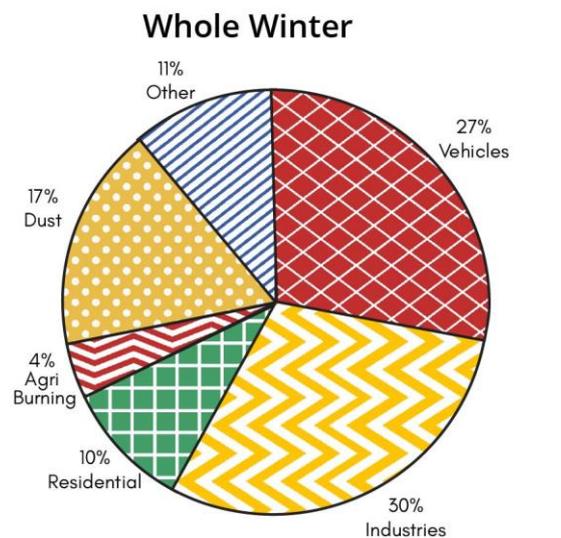
- Increasing air pollution is one of the most important environmental issues engaging the attention of one and all.
- The situation of **air pollution peaks with the onset of winters every year** especially in the months of November, December and January when the levels of air pollution reach much beyond the specified norms which results in hazardous pollution related issues for the population of Delhi and NCR.

Key sources of air pollution in Delhi: There are 5 key sources of pollution-

- **Vehicles** – grossly polluting vehicles like trucks and diesel vehicles as well as growing numbers that negates the impact of cleaner fuel and emission technology.
- **Combustion in power plants and industries** using dirty fuels, like pet coke, coal and biomass.
- **Garbage burning**, both in landfills and other places where there is no collection, processing or disposal.
- **Dust management** on roads, construction sites etc., which adds to the particulate pollution.
- **Crop residue burning** because farmers do not have alternatives for use of straw.

Analysis of various sources of pollution

- **The Prime Suspect – Crop stubble burning in Punjab, Haryana and western Uttar Pradesh**
 - Just before the onset of winters paddy is harvested in these states. Paddy, when harvested by hand, is cut close to the ground. However, decreasing labour supply, increasing wages and factors like subsidies have led to higher mechanisation level and harvester sales. **Combine harvesters leave more crop residue. There are better machines, but their usage is low.**
 - **Adding to the problem, Punjab Preservation of Subsoil Water Act** was passed in 2009. According to this Act, farmers can no longer sow rice in April, but have to wait until the middle of June (the notified dates) to do so. **Haryana too has followed Punjab** and passed a similar law. So, the **paddy sowing and harvesting cycle has been artificially shifted by about 2 months**. Since 2009, farmers have **only 15 days** to ready their land for wheat sowing.
 - Higher Crop residue due to mechanization, and Government policy to allow sowing of rice only after middle of June, together have become a **lethal combination for Delhi's air**. With just 15 days to prepare their farms, the farmers are forced to burn the crop residue.
 - ✓ **Wind Pattern:** Most of the time wind in Delhi is from North West and sometimes from West. Wind mass as it travels over Punjab, Haryana and parts of Rajasthan before entering in Delhi may pick up



Sources of Air Pollution in Delhi during the entire winter season (above) and during the period of peak fires of Agricultural wastes in the upwind states

the pollutants on the way especially from large sources (e.g. crop residue burning) and tall emitting sources.

Thus, stubble burning during winter is one of the chief causes for rising air pollution levels in Delhi. However, it is **largely a temporary spike**. Based on the **TERI & ARAI source apportionment study 2018**, the sources of pollutants over the entire winter season, and specifically during the days when agricultural burning is prominent, are shown below.

- **Vehicular Emissions:** The number of registered vehicles in Delhi was nearly 11 million in 2018. The **66% of these are two-wheeler that are known as major air polluters** due to poor emission standards. Also, more than 3.6 Million vehicles are more than 10-years old, with older emission norms and pollution controls.
 - **TERI's study** shows that vehicle pollution causes **28% of PM2.5 emissions in Delhi-NCR**. Amongst the sources within Delhi, the share of the transport sector is significant (39%) in PM2.5 emissions.
 - A **source inventory and source apportionment study by IIT Kanpur** in 2015 has observed that vehicles are the most consistent and dominant source of pollution throughout the year, while most other sources are variable.
- **Industries:** With as many as 3,182 industries located across the Delhi-NCR, industrial pollution adds about 18.6% to the bad air quality. **As per TERI study**, Industries contribute 30% to PM2.5 levels, with 14% from small industries.
- **Dust:** IIT Kanpur study reveals contribution of soil & road dust towards PM10 as 14.4% during winters & 26.5% during summers. Similarly, for PM2.5 it is 4.3% during winters and 27.1% during summers. Dust mostly come from construction sites as well as the windblown dust from the western desert regions.
- **Municipal Solid Waste:** Approx. 8370 tonnes of Municipal solid waste is generated in Delhi every day and on an average 3,240 tonnes per day is being incinerated in quantity Solid Waste Treatment plants. Both thermal power stations and waste management plants are some of other highly emitted zone, contributing to 3.9% of the pollution load.
- **Brick Kilns:** Outskirts of Delhi have roughly 360 brick kilns majorly scattered in Jhajjar, Faridabad and Ghaziabad region. Since, their peak business month starts from December to June, the emissions from these brick kiln also rise during the winter months.

Steps taken to tackle the Air Pollution in Delhi

- **Environmental Pollution (Prevention and Control) Authority (EPCA) enforces Graded Response Action Plan (GRAP)** which comprises the graded measures for each source framed according to the Air Quality Index categories.
- **National Clean Air Programme (NCAP)** is a **pollution control initiative to cut the concentration of particles (PM10 & PM2.5)** by 20-30% by 2024. It is a nationwide programme including Delhi.
- **Advancing Bharat Stage-VI norms** to April 2018 from April 2020. Delhi became first city running on BS VI fuels.
- Delhi is scheduled to run **hydrogen-CNG (H-CNG) fuelled buses** to curb emission.

Overall based on five emission inventory studies (CPCB 2010; IIT Kanpur 2015; TERI 2018; SAFAR 2018; Guttikunda 2018) on Delhi NCR, **Transport sector is the largest emitter of PM2.5 particles** (17.9% to 39.2%) and **road dust is the largest contributor of PM10 particles** (35.6% to 65.9%).

Reasons for limited success of Pollution Control Actions-

- **An efficient governance mechanism is central to the success of any anti- pollution effort.** Unfortunately, the Graded Response Action Plan notified by EPCA is being implemented by at least 16 different agencies. Some are under the control of Union Government, some under the Delhi government and some are under the administrative control of neighbouring states. In general, there are no political and executive level coordination among them.
- **Delhi's air pollution is a regional problem.** A study conducted by International Institute of Applied Systems Analysis (IIASS) and the NEERI showed that about 60% of PM2.5 burden in Delhi is due to the neighboring states. No Policy is likely to work unless it takes regional considerations into account. Inter-agency efforts need to be controlled and coordinated by a central source.
- **Delhi needs to search for sources of emissions.** During the past decade there have been 16 source apportionment studies. While sources of emissions remain same in all the studies, the contribution from different sources to Delhi's pollution varies greatly. This only underscore both the **unreliability of existing**

studies as well as **difficulty in making accurate estimates**, which is partly due to Delhi's complex meteorology and the changing nature of sources of emissions, both in space and time.

- **Finally, Delhi lacks infrastructure.** It has only half the buses it needs for public transport. This means that private automobile use continues to grow, adding to the air pollution problem. The Delhi Pollution Control Committee which has a mandate to enforce compliance with the air pollution rules in the city, suffers from a serious scientific and technical manpower shortage (operating at about 3/4th since 1990). These gaps in public infrastructure undermine the public confidence in the city's ability to address the worsening air pollution problem.

Assessment of Odd Even scheme: Delhi government has implemented the odd- even scheme to tackle the air pollution in the city. However, recently the Supreme Court questioned the utility of this policy in controlling the pollution levels and asked for relevant data on its impact on pollution control.

The odd-even policy seeks to reduce pollution levels by halving vehicle usage on Delhi's roads. Even though it's targeting the biggest source of PM2.5- is it doing this effectively? **Different studies delivered different verdicts on odd-even implemented previously.**

Journal/publication/study by	Results
Environmental Science & Policy	In three pockets of Delhi, PM2.5 levels fell by 8-10% but in other parts it decreased only by 2-3%. Restricting traffic volume alone cannot control the PM2.5 concentration over Delhi.
Central Pollution Control Board	Odd-even scheme may have reduced pollution, but a single factor or action cannot substantially reduce air pollution levels in Delhi.
Current Science	Odd-even actually increased traffic emissions. This was because more commuters travelled before odd-even kicked in or commuters shifted to other forms of transport (such as motorbikes and three-wheelers)
NCAER India Policy Forum 2017	PM2.5 levels were lower by 14-16% on average during the day in the January 2016 odd-even scheme, but no impact was detected at night or when the scheme was repeated in April 2016.

Though studies differ in their verdicts of odd-even, they are unanimous in their overall conclusion: Delhi needs a longer-term holistic approach to tackling air pollution. **Delhi can learn from Beijing to tackle the air pollution menace.**

- **China's Success Story:** In order to address the **pollution crisis in Beijing**, the Chinese government has adopted the approach of **unified planning, unified monitoring and alerting, and unified standards in multiple contiguous regions.**
 - In 2017, a combined work plan was adopted for Beijing, Tianjin etc. that demanded **"2 + 26" cities to decrease average PM 2.5 concentrations** and the number of heavy-pollution days by more than 15% from the previous year.
 - For **combined monitoring and inspection system**, Beijing Environmental Protection Inspection team is responsible for 15 provinces (autonomous regions and municipalities) contiguous to Beijing.

Conclusion

To improve air quality, we need to design effective emissions inventories and, in turn, harmonise the inventories. To create better emissions inventories, we need to improve data transparency, quantify uncertainties, develop multiple-year inventories, common guidelines, and reconcile various methodologies.

5.2. ACTION PLAN FOR CLEANER INDUSTRY

Why in news?

Recently, NITI Aayog released the report on **Clean Industry** prepared by a Task Force led by both **NITI Aayog and the Confederation of Indian Industry (CII).**

Background

- NITI Aayog along with CII launched the joint initiative **"Clean Air, Better Life"** in 2016 with an objective to address the issue of air pollution in **Delhi National Capital Region (NCR)** with active participation of the Government agencies, industries and academia, research organization and civil society.

Confederation of Indian industry (CII)

- It was **founded in 1895.**
- It is a non-government, not-for-profit, industry-led and industry-managed organization.
- Its primary goal is to develop Indian industry and to ensure that government and society as a whole, understand both the needs of industry and its contribution to the nation's wellbeing.

- Subsequently, four task forces were constituted to recommend suitable interventions for Clean Fuel, Clean Transport, Clean Industry and Biomass Management.
- The report identifies sources of Industrial Pollution in Delhi NCR and recommend action plan for clean Industry.

Objectives of Cleaner Air Better Life Initiative

Developing an integrated approach that brings together policy makers, industry and academia

Building consensus amongst stakeholders on the options for improving air quality in NCR

Catalysing voluntary commitments from stakeholders towards reducing air pollution

Promoting adherence to existing policies and advocating better policies

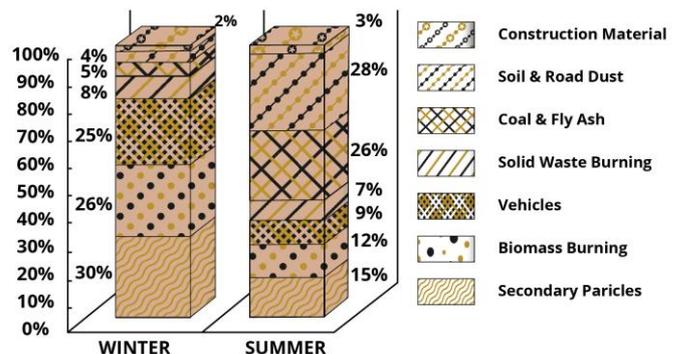
Sources of Industrial Air Pollution in Delhi NCR

The Task Force considers three key air pollutants: road/soil dust, fly ash and secondary particles. Different industrial activities contributing to emission of these pollutants are broadly classified as-

- **Fugitive Particulate Matter (PM) Emissions:** Air pollutants originating from spatially distributed sources and wide array of activities (non-point sources) as opposed to specific discharge point such as exhausts and stacks (such as a chimneys, pipe, vent, or duct) (point sources) are called fugitive emissions.
 - Fugitive emissions **have the potential for much greater ground-level impact** since they are **discharged and dispersed close to the ground.**
 - **Allied construction industries** (Such as Ready-Mix Concrete batching plants, Stone crushers, Brick kilns) which are concentrated in the periphery of Delhi NCR are also a source of **fugitive PM emissions.**
- **Energy-related Emissions:** Energy related emissions originate from diverse industrial subsectors and are related to-
 - Use of DG (diesel generator) sets in various subsectors such as Telecom, IT, hospitality, real-estate, construction etc.
 - Gaseous (SO_x and NO_x) and particulate matter emissions from Coal-based thermal power generation units within 300 km of Delhi.
 - Use of coal and wood for firing tandoors in hotel and restaurant industry.

Air pollution in summers and winters

- The report addresses sources of air pollution and their contribution in summers and winters.
- The relatively large contribution from road/soil dust and fly ash in summer is because of dry weather conditions and high wind speeds including occasional dust storms which make dust and fly ash particles airborne.



Recommended Action Plan for Clean Industry

The report recommended two different sets of strategies for tackling these two broad categories of sources.

Prevention and Control of Fugitive PM Emissions

- **Mandatory contractual obligations for clean construction** need to be specified for individuals/ organisations under the mechanism of 'building permits/approvals' by local bodies/authorities and 'environmental clearances' by Ministry of Environment Forest and Climate Change.
- **Linking of green incentives to clean construction practices:** Currently there are multiple incentives which are conferred to projects which are provisionally rated to be green by buildings rating systems such as GRIHA, IGBC, LEEDS etc.
- **Mandatory funds allocation for ambient air quality management:** It is recommended that for cities/towns which are non-compliant to National Ambient Air Quality Standards (102 cities as per CPCB in 2018), **Corporate Environmental Responsibilities (CER) funds** are spent for air quality improvement in the airshed.
 - Airshed is a common area where prevalent meteorological and geographical conditions limit dispersion of pollutants, therefore requiring a comprehensive strategy for the entire area.

- **Strengthened building code and building byelaws for ambient air quality:** It is recommended that unified building code is adopted at national level for addressing various aspects of building and promoting adherence to code across all commercial and urban residential buildings.
- **Developing Capacity of Urban Local Bodies:** Local bodies need the required resources and equipment in order to monitor and enforce the environmental compliance in NCR.

Mitigation of Energy- related Emissions

- **Prioritizing Clean Fuels and Technologies:** It is required in NCR region and other dense urban areas suffering from severely degraded air quality. The report recommended usage of:
 - Gas-based thermal power units
 - Coal- based thermal power units with advanced emission controls for SO_x, NO_x and PM.
 - Incentives for **biomass co-firing** in existing coal power units.
 - Leapfrogging to advanced (up to 50%) biomass co-firing in coal power plants in North West region.
- **Fuel switch in diesel generators, hotels & restaurants:** Fuel injection kits or gas-powered generator are commercially feasible option in places with availability of gas. The use of gas or electricity-based tandoors at locations where electricity and Piped Natural Gas infrastructure is available.
- **Emission norms for all Diesel Generators:** Adoption of best available technology and emission standards strict in-use emission norms for all diesel generators along with minimum performance requirements for retrofit devices.
- **Pollution-under-control (PUC) regime:** It recommends a strengthened real-time Pollution-under-control (PUC) regime involving innovative and cost-effective monitoring/compliance measures such as **random checks using portable emission measurement system (PEMS), and crowdsourcing of compliance (citizen helpline for reporting visibly polluting diesel equipment).**

Biomass co-firing

- Biomass co-firing stands for adding biomass as a partial substitute fuel in high efficiency coal boilers.
- Co-firing is a low-cost option to convert biomass to electricity, in an efficient and clean way, and to reduce GHG emissions of the power plant
- Existing policy from Ministry of Power recommends co-firing up to 5-10% biomass in existing coal thermal power units.

5.3. ROADMAP FOR ACCESS TO CLEAN COOKING ENERGY IN INDIA

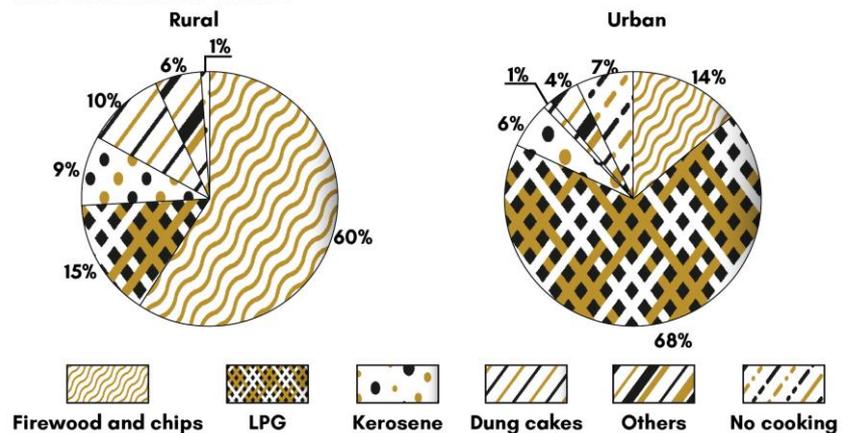
Why in news?

Recently a report titled 'Roadmap for Access to Clean Cooking Energy in India' was released.

More on news

- Report was developed in collaboration with **NITI Aayog**, GIZ (a German development agency) and Council on Energy, Environment and Water (a Delhi-based not-for-profit policy research institution).
- The report prescribes strategies to **eliminate the use of all cooking arrangements that cause household air pollution (HAP) in India by 2025.**
- The 68th round of the NSSO (2011–12) revealed that over **two-thirds of households in rural India** still relied on firewood and cow dung for their primary cooking fuel needs.

Use of LPG as the primary cooking fuel was four times higher in urban areas than in rural areas in 2012



Ministry of New and Renewable Energy (MNRE) is implementing various programmes with a view to provide **alternate cooking solutions:**

- **The Unnat Chulha Abhiyan** launched in June 2014 for promotion of improved biomass cook stove to reduce consumption of fuel wood with higher efficiency and low emissions.
- **National Biogas and Manure Management Programme (NBMMP)** for setting up of family type household biogas plants for meeting cooking energy needs of rural and semi urban areas and to save the use of firewood.
- **Promoting solar cookers** to reduce the indoor air pollution.

- Burning biomass for cooking results in HAP, which causes, **at least 800,000 premature deaths** across the country every year. Women and children are disproportionately affected as they are exposed to high levels of HAP, and the tedious task of gathering fuelwood is often left to them.
- As of April 2019 about **94 per cent of Indian households** have an LPG connection. However, a recent study in six of the most energy access-deprived states—Bihar, Jharkhand, Madhya Pradesh, Odisha, Uttar Pradesh, and West Bengal—suggested that **only about one-third of the rural population use LPG as their primary cooking fuel**.

The Guiding Principles of the Clean Cooking Energy Roadmap

- A **contextualised approach particular to each region**. For instance, in colder regions such as Himachal Pradesh and Uttarakhand, it is important to make alternatives for space heating and other heating requirements available, if HAP is to be eliminated.
- **Multidimensional and multi-fuel approach**: E.g. In rural areas with an adequate cattle population, the focus should be on **complementing LPG with biogas**.
- **Multi-stakeholder approach to improve adoption** by aligning the interests and integrate the roles of all the relevant actors in the sector.
- **An ecosystem-based approach**, in order address challenges across the value chain. E.g. various ministries, enterprises, oil marketing and urban gas distribution companies, donors and financiers, consumers etc.
- **Access to clean cooking energy as a developmental goal** by integrating access to clean cooking energy into existing government schemes in the various ministries.



Strategies to Improve Access to All Clean Cooking Energy Solutions

- **Fuel-specific Strategies have also been proposed to improve access. For e.g.-**

Fuel	Strategies
LPG	<ul style="list-style-type: none"> • Invest in R&D to improve thermal efficiency. (For LPG stoves it is about 55–57 per cent, which is much lower than the 84 per cent efficiency of induction stoves) • Provide low-interest loans to households for LPG refills through SHGs, flexible payment plans
Piped Natural Gas	<ul style="list-style-type: none"> • Credited-linked instalments for PNG connections • Adoption of prepaid metres that allow recurring payments of smaller amounts • Decentralise the supply and distribution of LNG

- **Other strategies:**
 - **Improve awareness of the health impacts of traditional biomass chulhas**, by sub-centres and primary health centres, **ASHAs, anganwadi workers** which are the closest access points and innovative practices like **LPG panchayats**.
 - **Understanding the market and consumers by** a context-based consumer segmentation with respect to food habits, willingness to pay, fuel mix, frequency of cooking, current stoves, etc. will be necessary.
 - **Understanding the social and cultural factors**, such as political will, local networks and influencers, and consumers' perceptions, household and community socio-economic structures necessitate the need to refrain from a **one solution-fits-all approach**.
 - **Focus on aspects of kitchen design and ventilation**: As of 2011, about 40 per cent of houses in India did not have a separate kitchen. Designs for better ventilation could be promoted under Pradhan Mantri Awaas Yojana – Gramin (PMAY-G).
 - **Improving data availability for energy access**, by going beyond just the instalment of a connection, and documenting the lived experience of using cooking energy fuels and technologies.
 - **Leverage alternate financing solutions** to compliment public funds by strategically unlocking private investments in the clean cooking energy sector. **E.g. Carbon finance**.

5.4. THE EMISSIONS GAP REPORT

Why in News?

Recently, UN Environment Programme (UNEP) launched its tenth edition of Emissions Gap Report 2019

About Emission Gap Report

- It is an annual science-based assessment of the gap between countries pledge on greenhouse gas emissions reductions and the reduction required to deliver global temperature increase below 2 degree Celsius by the end of this century.
- The report **also identifies key opportunities for each country** to increase the pace of emission reduction necessary to close the gap.
- The Emissions Gap Report measures and projects three key trendlines:
 - The amount of greenhouse gas **emissions** every year up to 2030
 - The **commitments** countries are making to **reduce** their **emissions** and the impact these commitments are likely to have on overall emission reduction
 - The **pace** at which emissions must be **reduced** to reach an emission low that would limit temperature increase to **1.5°C**, affordably

Key Findings in the report

- The top four emitters (China, USA, EU and India) contribute to over **55 per cent of the total emissions over the last decade, excluding emissions from land-use change such as deforestation.**
- China, the EU28, India, Mexico, Russia and Turkey are projected to meet their targets with current policies. India, Russia and Turkey are projected to be 'over perform' their targets by around 15 percent.
- In 2018, the world emitted a record high of 55.3 gigatonnes of CO₂-equivalent of greenhouse gases (GHG), up from the previous record of 54 gigatonnes set in 2017.
 - Report warns that the world has to cut its emissions by 7.6 per cent each year between 2020 and 2030 to get on track towards the 1.5°C temperature goal of the Paris Agreement.
 - Report says collective **ambition in NDCs must increase more than fivefold over current levels** to deliver the cuts needed over the next decade for the 1.5°C goal.

Related News

The WMO Greenhouse Gas Bulletin showed that globally averaged concentrations of carbon dioxide (CO₂) reached 407.8 parts per million in 2018, up from 405.5 parts per million (ppm) in 2017.

5.5. REPORT ON THE QUALITY OF PIPED DRINKING WATER

Why in News?

The Department of Consumer Affairs released a report on the **quality of piped drinking water** in major cities in India.

About the report

- Tests were conducted through the **Bureau of India Standards (BIS).**
- Tests were conducted on **various parameters** such as Organoleptic and Physical Tests, Chemical test, Toxic substances and Bacteriological tests in the first stage.
- **Findings-**
 - A vast majority of the samples have failed to comply with the requirements of Indian Standard (IS) 10500:2012 (Specification for Drinking Water as set by the BIS) in one or more parameters.
 - Delhi has abysmal water quality, Chennai and Kolkata rank very low, and Mumbai is the only city with acceptable results.

Why Mumbai has clean drinking water?

- The reason why Mumbai's water is relatively safer because generally it is sourced from rainwater (the purest source of water).
- Since 2012-13, the Municipal Corporation of Greater Mumbai (MCGM) has stopped using steel water pipes for surface distribution. The supply is now being channelled through 14 underground concrete water tunnels.
- In several slums, the criss-crossing network of pipes (spaghetti networks) has been replaced with single six-inch pipes.
- **Water testing labs have been upgraded** with the help of the National Environmental Engineering Research Institute (NEERI) and water sampling procedures have also been streamlined to ensure accuracy of results.

Causes of poor water quality

- **Focus on chlorination**- chlorination only kills bacteria & other microorganisms but aspects like appearance, smell and taste are ignored. Moreover, dissolved salts, alkalinity, toxic metals in water can't be eliminated by it.
- **Contamination in pipes**- The pipes carrying the water are old and leaking. Moreover, often the water supply line & sewerage lines run side by side which leads to contamination of water.
- **Groundwater pollution**- groundwater is severely contaminated by carcinogenic pollutants like Arsenic. It is often mixed with piped water supply to meet the large demand of the city.
- **Lack of accountability** of the official agencies- data on water is not made public on the same lines as air quality. Moreover, it is not legally binding on agencies to achieve such standards.
 - There is an issue of **conflict of interest** as the agency that provides water, the same agency also performs regular testing.
- **Lack of coordination**- between Union, State and Local government since water is a state subject.
- **Other factors**- Rapid urbanization, water pollution due to domestic and industrial waste, contamination and depletion of local water bodies etc.

Other relevant information

- As per Composite Water Management Index (CWMI) **report**
 - With nearly 70 percent of water contaminated, India ranks 120th of 122 countries in a global water quality index.
- **Central Ground Water Board** estimates that nearly a fifth of the urban local bodies are already facing a water crisis due to excessive extraction, failed monsoons, and unplanned development.

Consequences of poor water quality

- **Harmful health impacts:** Around 80 per cent of diseases in the developing countries are attributed to poor quality of water supply.

CAUSES	DISEASES
BACTERIAL INFECTIONS	Typhoid, Cholera, Paratyphoid fever, Bacillary dysentery
VIRAL INFECTIONS	Infectious Hepatitis (jaundice), Poliomyelitis
PROTOZOAL INFECTIONS	Amoebic dysentery
PESTICIDES	reproductive and endocrinal damage
HEAVY METALS	damage to the nervous system and the kidney, and other metabolic disruptions.
Lead, Flouride, Nitrates etc.	affects the central nervous system, yellowing of the teeth and damage to the spinal cord, digestive tract cancers etc.

- **High economic cost:** increased out-of-pocket expenditure for healthcare, reduced labour productivity and reduction in tourist inflow.
- **Reinforces Pollution positive feedback loop:** Result of poor drinking water is the prime reason for the sale of plastic bottled drinking water. However, this bottled water gives rise to plastic pollution that increases water pollution.
- **Wastage of resources:** The RO (Reverse osmosis) purification systems waste more than double the amount of water that they produce for drinking. Moreover, all the essential minerals and salts are removed during RO process, which have to be artificially added later thereby increasing its cost.

Way Forward

- **Data based support system:** Water quality should be tested frequently and the findings should be made public.
 - This will increase involvement, sensitization & awareness of citizens and accountability of service providers and the government.
- **Mandatory compliance:** Compliance to **Bureau of Indian Standards** for water quality should be made mandatory for local bodies.

Recent government initiatives in this regard

- **Jal Jeevan Mission is the project** launched by union government to ensure HarGharJal (piped water supply) to all **rural households by 2024** under the Department of Drinking Water and Sanitation, Jal Shakti Ministry.
- **Mission Bhagiratha** is a project for safe drinking water for every village and city household in **Telangana State**. The project will supply clean drinking water sourced from **River Godavari and River Krishna**.

- **Pricing for water:** Water can be priced for well-off sections of society so that proper maintenance cost should be recovered. Subsidies given need to be restructured to curtail wastages.
- **Better management:** Long-distance pipelines of water should be discouraged and water treatment should be made more localized.
- **Technological solution:** Up-gradation of the water treatment plant to remove toxic inorganic pollutants and dissolved solids.
- **Rainwater harvesting:** should be encouraged to the maximum extent possible.
- The government's effort to provide piped water to all rural households by 2024 under the **Jal Jeevan mission**, is a step in the right direction.

5.6. E-FLOW NORMS FOR RIVER GANGA

Why in news?

The **e-flow norms** notified by the National Mission for Clean Ganga (NMCG) are to be enforced from December, 2019.

About the e-flow norms

- The **e-flow or environmental flow** norms were **notified in September 2018** by the NMCG, the apex body responsible for the cleaning and rejuvenation of the river, to be enforced from December 2019.
- Environmental Flow refers to the **minimum flow of water** considered necessary for protecting the structure and function of an ecosystem and its dependent species.
- The ecological quality of rivers must be maintained by **maintaining a minimum flow**. Rivers must not dry-up or have their physical regimes significantly altered in order to **conserve the hydrological and ecological functions** of their drainage networks
- The e-flow norms stipulate the volume of water that dams and barrages must release to **allow the river to naturally clean itself and protect its aquatic biodiversity**.
- The 2018 e-flow notification specifies that the upper stretches of the Ganga — from its origins in the glaciers and until Haridwar — would have to maintain:
 - 20% of the monthly average flow of the preceding 10 days between November and March, which is the dry season;
 - 25% of the average during the “lean season” of October, April and May; and
 - 30% of the monthly average during the monsoon months of June-September.
- It means **enough water is to be released in the downstream** of the river system after utilizing the water for the development projects in order to ensure downstream environmental, social and economic benefits.



Namami Ganga Programme

- ‘**Namami Gange Programme**’, is an Integrated Conservation Mission, approved in June 2014 with budget outlay of Rs.20,000 Crore to accomplish the **twin objectives of effective abatement of pollution, conservation and rejuvenation of National River Ganga**.
- The Vision for **Ganga Rejuvenation** constitutes restoring the wholesomeness of the river defined in terms of ensuring
 - “Aviral Dhara” (Continuous Flow”),
 - “Nirmal Dhara” (“Unpolluted Flow”),
 - Geologic and ecological integrity.

Concerns with the norms

- **Inadequate minimum flow norms:** Under Draft Ganga Act, Justice **Girdhar Malviya Panel** suggested stricter provision than these specifications to increase accountability and responsibility for cleanliness and uninterrupted flow (Niarmalta and Aviralta).
- **Lack of guidelines for projects:** Along with minimum flow, guidelines also need to be laid out for the modifications that projects need to make.

- **No mention of aquatic biodiversity:** The amount of water that is required to ensure that the species is able to migrate freely is not considered while framing the limits. The limits the purpose of e-flow, that is to ensure free migration of these species.
- **Environmentalists view:** Some environmentalists are of the view that all the **hydroelectric projects as well as mining** in Haridwar-Kumbh region should be banned completely to endure natural flow of the river.
- Also, owners of three dams have said they cannot increase the flow from their reservoirs, as required by the notification, because it **would reduce their power generation capacity and lead to huge financial losses.**
 - There is no mechanism to **compensate for revenue losses** to the projects.

Way forward

- Though there is **temporary financial loss, in the larger interest of the river**, which is responsible for everyone's existence, the norms shall be implemented without fail, by bringing all stakeholders on board.
- The notification for the Ganga should **pave way for e-flows** notification of the Yamuna and other rivers.
- As some environmentalists claim the norms are insufficient, they **shall be revised periodically** as per needs.

5.7. ENERGY STORAGE SYSTEM ROADMAP

Why in News?

India Smart Grid Forum (ISGF) has prepared a report titled **"Energy Storage System (ESS) Roadmap"** for India for the period 2019 to 2032.

About the roadmap in the report

- Energy storage systems are technology or system, in which electric energy is loaded in and, by necessity, can lately be discharged into the network.
- The report estimates the investments in energy storage systems **for e-Mobility, telecom towers, data centres, replacement of diesel generators and integration of variable renewable energy (VRE) into the grid** leading to a reliable and low carbon grid in India.
- **Objectives of the roadmap are-**
 - Comprehensive analysis of the distribution grid level issues and to address them by enhancing grid flexibility through ESS.
 - To help India meet its emission reduction targets in Paris agreement.
 - ✓ Reducing emission intensity up to 33-35% from the 2005 level by 2030
 - ✓ 40% non-fossil fuel-based electricity generation in the energy mix by 2030.
 - ✓ To create an additional carbon sink of 2.5 to 3 billion tonnes of CO2 equivalent through additional forest and tree cover by 2030
 - Avoid import dependency for battery packs and cells

About India Smart Grid Forum (ISGF)

- It is a **Public Private Partnership initiative** of Ministry of Power (MoP), Government of India.
- ISGF has evolved as a **Think-Tank** of global repute on Smart Grids and Smart Cities.
- **Mandate-** to advise government on policies and programs for promotion of Smart Grids in India, work with national and international agencies in standards development and to help utilities, regulators and the Industry in technology selection, training and capacity building.

Sr. No.	Concerns raised	Role of Energy Storage Systems in addressing these concerns
1.	Non-continuous or variable nature of renewable energy: Increased penetration of distributed energy sources like rooftop solar panels and small wind turbines which are intermittent, uncertain, variable and distributed in the power system pose serious challenges to grid operations.	Enhancing reliability of renewable sources of energy- In future, conventional energy sources will provide just base load for our energy requirements, with additional energy coming from other sources like renewable energy. So, considering the variable nature of renewable energy, the adoption of ESS becomes crucial.
2.	Grid stability- grid stability is a growing concern for DISCOMs and it affects the energy planning of utilities. <ul style="list-style-type: none"> • Along with renewable energy sources, the penetration of Electric Vehicles (EV) will further affect the grid stability. 	ESS coupled with demand response from users and vehicle grid integration will add flexibility to the grid.

3.	High import dependence- lack of local manufacturing which will be insufficient to meet huge demands in future. For example- the cumulative demand of ESS by 2032 estimated is in excess of 2700 GWh	The report puts up a strong case for setting up of giga-scale battery manufacturing plants in India on fast track.
4.	Demand-supply mismatch- Ambitious targets for energy consumption have been set under various schemes (see box). This year's Economic Survey (2018-19) has advocated that India, which uses only around 6% of the world's primary energy, should try to triple its energy consumption to enter the upper-middle income group. <ul style="list-style-type: none"> Moreover, expected requirements of batteries for EVs is much higher than that for grid support. 	<ul style="list-style-type: none"> Demand for flexibility in power systems- At very high penetrations of variable wind and solar generation, ESS will be very helpful in maintenance of continued energy supply as energy at one time can be stored for future use. Energy storage systems can function like a power plant, dispatching electricity. Reducing energy waste- excess energy can be stored for later use.

Policy guidelines suggested in the report

- Integrate energy storage into overall energy master plan and energy strategy. This clarifies the role of energy storage and begins the conversation about competing methods to provide the multitude of services required by the grid.
- Enable energy storage to qualify for multiple streams of revenue- for the individual services it provides to the grid.
- Introduce time-of-use tariffs, pay-for services tariff, and others to eliminate price distortions and increase price transparency.
- Incentivize development and financing of energy storage and distributed renewable energy projects.
- Support in a targeted manner, demonstration projects and first movers with loan guarantees, low interest loans, grants, and others.

Some innovative suggestions in the report

- V2G (vehicle to grid) concept-** V2G concept can play a key role in grid balancing. Here, energy flows both to and from the vehicle, turning it to a portable battery bank.
 - V2G has been already commercialized in Denmark and the Netherlands.
- Energy Storage India Tool (ESIT)- has been developed as a part of this study.
 - The basic function of this tool is to take network load data and optimize the energy storage capacity.
 - It has the capability to analyse penetration of storage and its benefits at different level namely feeder, distribution transformer (DT) and customer levels.

5.8. ECOLOGICAL FISCAL TRANSFERS

Why in news?

A paper published by the Center for Global Development (CGD) analyses the state budgets to examine whether ecological fiscal transfers (EFTs) has impacted state forestry expenditures.

Concept of Conditional Payments for Environmental Conservation and Ecological Fiscal Transfers

- The spatially unequal distribution of costs and benefits associated with biodiversity conservation motivates the concept of conditional payments for environmental conservation, in which the beneficiaries of ecosystems' services encourage land-use decision makers to protect or restore ecosystems by making payments available conditional on them doing so.
- Ecological Fiscal Transfer, is a type of conditional environmental payments which involves conditional payments from higher levels of a country's government (e.g. national) to lower levels (e.g. state or local).
 - EFTs distribute a share of intergovernmental fiscal transfers and revenue sharing schemes according to ecological indicators such as protected areas or watershed management areas etc. These conservation areas thus become a source of income for the receiving governments.

Other modes of conditional payments for environmental conservation:

- Payments for Ecosystem Services (PES)** focuses on the 'beneficiary pays principle' and therefore provides an opportunity to put a price on previously un-priced ecosystem services.
- Reducing Emissions from Deforestation and forest Degradation Plus (REDD+):** It aims to compensate the local people for preserving the loss of forests or their degradation.

- Biodiversity-related fiscal transfers are a powerful means of **reconciling the conservation costs** encountered at local level with the benefits of biodiversity conservation at higher levels of governance. **EFTs are thus seen as an innovative policy instrument for providing incentives to local governments** to maintain or increase biodiversity conservation activities which provide ecological benefits to society in general.
- **EFTs have several potential advantages over REDD+ and PES-**
 - Payers can take **advantage of already-established structures for fiscal transfers** between levels of government, avoiding the need to design new institutions or assign new property rights.
 - EFTs can **potentially mobilize larger volumes of finance than PES**, raising the possibility of achieving both broad coverage and substantial dollar-per-hectare incentives.
 - The **EFTs pay across all forested areas**; not just contracted areas as in PES, or reductions in forest loss as in REDD+.
 - **EFTs could solve, in part, the challenge faced in REDD+** of translating incentives from national governments to more local levels. EFTs could potentially operate in tandem with international REDD+ payments, with payments from external funders to national governments for reducing emissions, and EFTs from national to state- and local-level governments for protecting and restoring forest cover.
- **However, EFTs also have limitations as an incentive mechanism.**
 - Money from the EFTs is **untied to forestry budgets** and **can be spent in any sector** (e.g. health, education, infrastructure) at the discretion of state governments.
 - They **may be designed to equalize budgets across local governments** or to compensate local governments for forgone resource use. Thus, there may be **only limited freedom to design EFTs as incentive mechanisms** for the increased provision of ecosystem services.
 - Furthermore, EFTs are **limited to public sector recipients** and don't directly transfer incentives to individual households as PES can.

Development of EFTs in India

- In the 1990s **Brazil became the first country to introduce EFT** to compensate municipalities for land-use restrictions imposed by protected areas (PA).
- Until 2014 the few examples of EFTs mostly involved protected areas. **In FY 2014-15, the world's first EFTs for forests were enacted in India** when the 14th Finance Commission (FC) added forest cover to the formula used to determine the amount of annual tax revenue distributed by central government to each state.
- The **14th FC** introduced states' forest cover around 2013 as an element of the horizontal devolution formula among the states, comprising **7.5% of the tax revenue to be transferred to states from 2015-16 through 2019-20**.
- It was done primarily to compensate states for the "fiscal disability" caused by forgone opportunities to convert forests to other uses resulting from implementation of the **1988 National Forest Policy**-an issue consistently raised in the Commission's consultations by states with high forest cover concentrated in the Northeast.
- **Forest-cover-proportional funds had previously been made available to states by the 12th and 13th Finance Commissions, but the recommendations of the 14th FC differed from those of its predecessors in three important respects-**
 - The 14th FC recommended a **quantum of finance some 30 to 250 times larger**.
 - The release of three-quarters of the funds granted by the 13th FC was contingent on the preparation of workplans and other pre-conditions; in contrast the release of the EFTs was automatic with **no pre-conditions**.
 - Grants from the 12th and 13th FCs had to be spent by states on forest-related budget items, whereas the EFTs operate as a pure transfer into states' general budgets-part of a broader pattern by the 14th FC of shifting Centre-to-state payments from earmarked grants to general purpose transfers.

Potential effects of EFT in India: In the medium-to-long term the following actions may occur as the result of a **sustained forest-cover-proportional fiscal transfer:**

- State governments **increase budgets** for forest management
- State governments **increase the use and effectiveness** of existing pro-forest policies within their control

- State governments **devise new ways** to encourage **pro-forest actions by local governments** within state boundaries.
- It is important to note that **India's EFTs are conditional on forest cover alone and have no social and environmental safeguards** constraining the means by which states protect and restore forests. Thus, it will be useful to observe India to see whether or not two additional actions occur:
 - **Lack of social safeguards** promotes repressive and unjust exclusion of local people from accessing forest resources.
 - **Lack of biodiversity safeguards** promotes reforestation with fast-growing commercial species at the expense of restoration of native forest.

Policy Recommendations

The CDG study, while acknowledging that it is probably too soon to detect an effect on forest cover, made following observations-

- **State governments' attention to the fiscal opportunity provided by the EFTs might increase**, as might their expectation that forest cover will be retained as an element of the horizontal devolution formula beyond 2019.
- **Even so, it is worth considering reasons why the reform might not have a noticeable effect-**
 - an offer of increased state revenue in near future might not incentivize public policy changes today; or
 - the fiscal incentive might be too small to influence policy (while large in absolute terms, \$5.7 billion per year of EFTs is still only around 2% of total state revenues); or
 - it might be that too much deforestation is beyond the influence of state governments.

In this backdrop the 15th Finance Commission has an **opportunity to give states far greater certainty that increases in forest cover will be rewarded with increases in revenue received**. It should do so by

- keeping forests in the horizontal devolution formula for another 5 years; and
- updating the year for which forest cover is measured from 2013 to a later year (e.g. 2019).

By doing so India's EFTs can fulfil their potential as an innovative mechanism for encouraging states to protect and restore forests-an important element of India's comprehensive approach to mitigating climate change.

5.9. NATIONAL GUIDELINES FOR PREPARATION OF ACTION PLAN - PREVENTION AND MANAGEMENT OF HEAT WAVE

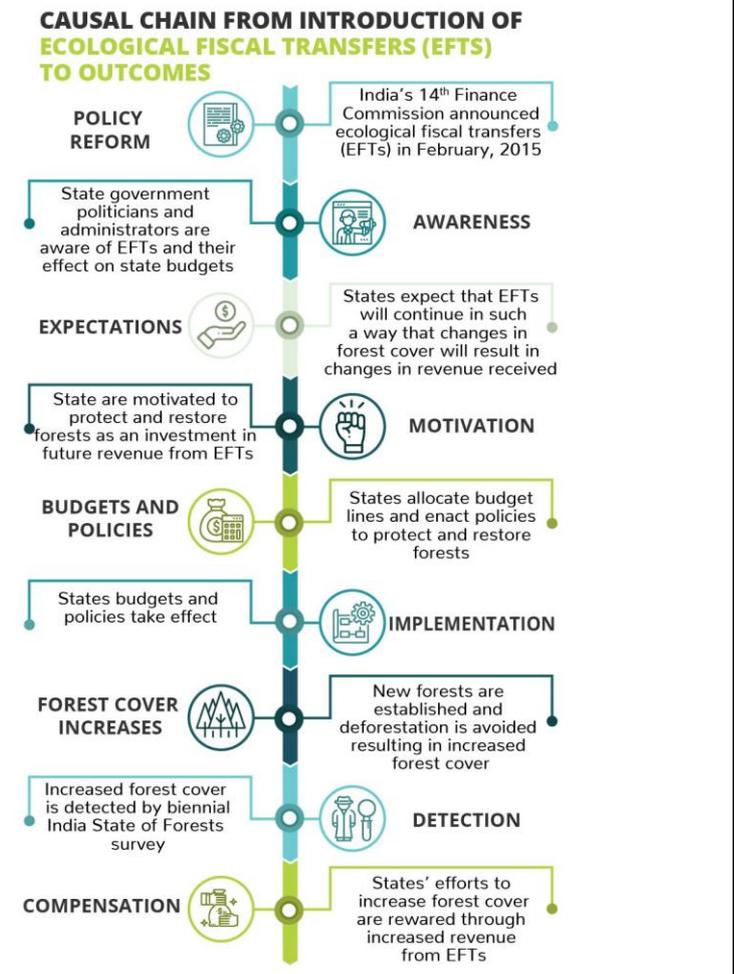
Why in news?

Recently the National Disaster Management Authority (NDMA) has released National Guidelines for Preparation of Action Plan - Prevention and Management of Heat Wave.

CGD study-2019 on EFTs in India finds that

- **States increased their forestry budgets by 19%** in three years after the introduction of EFTs relative to three years prior.
- However, this increase is considerably less than the 42% overall budget increase over the same time period.
- The states that benefit most from EFTs didn't systematically increase their forestry budgets.

These results could be attributed to the causal chain as shown below



Heat Wave in India

Heatwave has emerged as one of the major weather hazards in India. Heat wave is **period of abnormally high temperature, more than the normal maximum temperature**. Heat waves typically occur between March to June, and in some rare cases even extend till July.

- There have been **32 heat waves affecting 23 states this year (2019)**, the **second- longest spell** of high temperatures on record.
 - Rajasthan, Madhya Pradesh and Maharashtra were facing “**extreme**” heat conditions having experienced the longest spell of dry weather this year.
 - The **delayed arrival of the southwest monsoon** delayed the respite from heat wave conditions in almost two-third of the country.

What is Heat Wave? According to Indian Meteorological Department (IMD), heat wave is considered if maximum temperature of a station reaches at least 40°C or more for Plains, 37°C or more for coastal stations and at least 30°C or more for Hilly regions. **Following criteria are used to declare heat wave:**

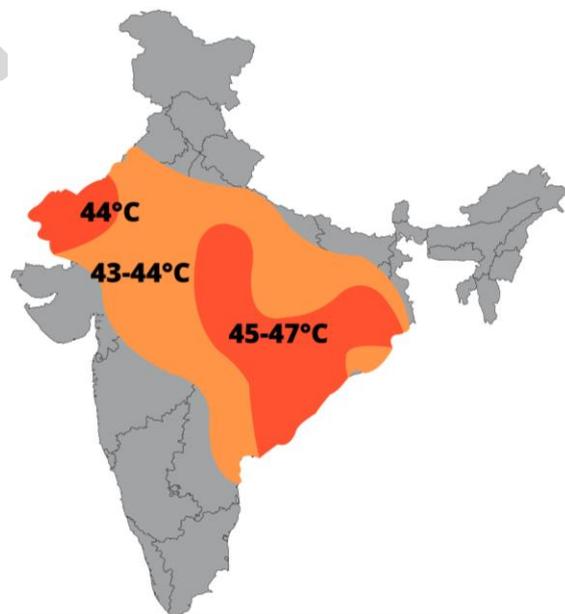
- **Based on Departure from Normal**
 - **Heat Wave:** Departure from normal is 4.5°C to 6.4°C
 - **Severe Heat Wave:** Departure from normal is >6.4°C
- **Based on Actual Maximum Temperature (for plains only)**
 - **Heat Wave:** When actual maximum temperature ≥ 45°C
 - **Severe Heat Wave:** When actual maximum temperature ≥ 47°C
- To declare heat wave, the above criteria should be met at least in 2 stations in a Meteorological sub-division for at least two consecutive days and it will be declared on the second day.

Factors affecting Heat vulnerability

- This include the quality of housing and built environment, local urban geographies, resident lifestyle, income levels, employment trends, social networks and self- perceptions of risk.
- **Unplanned urban growth and development**, changes in land use and land cover, densely populated areas and increasing urban sprawl and unique challenges associated with it such as **Urban Heat Island** effect in cities are exacerbating the impact of heatwaves.
- **Climate change** is driving temperatures higher as well as increasing the frequency and severity of heat waves in India.

Rationale for Heat Wave Action Plan (HWAP) Heat Waves has **not been notified as a Disaster** as defined under the Disaster Management Act, 2005 by the Government yet. Heat wave is **not even notified in the list of 12 disasters eligible for relief under National/ State Disaster Response Fund** norms. This makes HWAP highly relevant to be prepared for following reasons-

- **Widening geographical expanse:** Most of the states across northwest India, Gangetic Plains, Central India and east coast India are affected during the heat wave season.
- **Casualty due to Heatwave:** It is a “**silent disaster**”. According, to NDMA, **heatwave caused 24223 deaths since 1992 to 2015 in various states**. However, it is likely that the death figure is much higher as heat related illness is often recorded inaccurately and figures from rural areas are hard to attain.
- **Vulnerable Population:** Mostly weaker sections of the society have to work in the extreme heat to make their ends meet and are extremely vulnerable to the adverse impacts of heat waves such as dehydration, heat and sun strokes.
- **Evidence based planning with continuous updating:** These heat wave related deaths can be prevented with an evidence- based plan, effective implementation and frequent updating in line with recent scientific development. Hence, there is a need to update the **Heat Wave Guidelines of NDMA of 2017**.



Guidelines

These guidelines urge the stakeholders to learn from past experiences, improve inter agency coordination and ensure the participation of all.

- **Government Engagement:** Mandating participation from State and district government leaders, municipal health agencies, disaster management authorities and local partners.
- **Appointing State Nodal Agency and Officer** to conduct table-top exercises, simulations and drills before the heat season as well as to ensure coordination among various stakeholders.
- **Vulnerability assessment and establishing Heat-Health threshold temperatures:** It is important in order to establish priorities and minimum threshold for heat alerts and activities. The state should coordinate with IMD to develop threshold temperatures.
- **Drafting and developing Heat Action plan:** The State Nodal Officer can coordinate with local IMD office to start receiving summer season forecasts and release early warning and daily alert system with colour codes.
- **Team Preparation and Coordination:** Government should ensure that state officials and agencies are well trained and well informed regarding pre, during and post heat season activities. This will ensure clearly defined inter agency emergency response plan with roles and information flows clearly marked out.
- **Implementation and monitoring:** Information, Education and Communication plays an important role in widely disseminating key messages to communities in advance.
 - Do's and Don'ts during a heat wave should be available in local language and disseminated through media including social media.
- **Evaluating and Updating the plan:** After every heat season, the city or state must assess the efficacy of the heat action plan, including processes, outcomes and impacts.
- **Strategies for reducing extreme heat exposures and adapting to climate change (Long Term):** States should consider mitigation strategies, such as increasing green cover in a city to reduce UHI effect or implementing cool roofs.

5.10. NATIONAL LANDSLIDE RISK MANAGEMENT STRATEGY

Why in news?

The National Disaster Management Authority (NDMA) has released National Landslide Risk Management Strategy (NLRMS).

Background

- India is vulnerable to different types of landslides which cause significant destruction in terms of loss of lives and property.
- As per Geological Survey of India (GSI), about 0.42 million km² covering **nearly 12.6% of land area** of our country is prone to landslide hazards.
- In recent years, the **incidences of landslides have increased** due to extreme weather events, environmental degradation due to human interference and other anthropogenic activities resulting in heavy losses of human lives, livestock and property.
- This led to a **need for formulation of NLRMS**. NDMA constituted a Task Force for the formulation of national and local level strategy for landslide risk reduction.

- **A landslide** is defined as the **movement of a mass of rock, debris, or earth down a slope**. Landslides are a type of "mass wasting" which denotes any down-slope movement of soil and rock under the direct influence of gravity.
- **Causes of landslides:**
 - Undercutting of the foot of the hill slope due to river erosion, quarrying, excavation for canals and roads, etc.
 - External loads such as buildings, reservoirs, highway traffic, stockpiles of rocks, accumulation of alluvium on slopes, etc.
 - Increase in unit weight of slope material due to increased water content.
 - Vibrations due to earthquakes, blasting, traffic, etc., causing increase in shearing stresses.
 - Slope changes caused by deforestation.
- The Geological Survey of India has created a landslide zonation map of India. NDMA guidelines are being followed for **Landslide Hazard Zonation (LHZ)** maps and progressively larger scales for specific areas.
 - Landslide Zoning is the division of hill or mountainous areas into homogeneous spatial areas/ slope according to their degrees of actual or potential landslide susceptibility, hazard or risk.

Highlights of the strategy

- **Landslide Hazard Zonation:** It recommends Landslide Hazard Zonation maps to be prepared at macro scale and meso level. It focuses on making use of advanced state-of-the-art tools such as Unmanned Aerial Vehicle (UAV), Terrestrial Laser Scanner, and very high-resolution Earth Observation (EO) data.

- **Landslide Monitoring and Early Warning System:** Technical recommendation for developing and implementing rainfall thresholds, Numerical Weather Prediction (NWP), Automatic Rain Gauges, etc. have been included.
- **Awareness Programmes:** A **participatory approach** has been defined so that each section of the community is involved in the awareness drive. Since the community is the first to confront the disaster before any aid reaches them, a mechanism of awareness is framed to involve and educate the community.
- **Capacity Building and Training of Stakeholders:** It focuses on identifying targets group for training on landslide Disaster Risk Response and most importantly, strengthening the response framework through capacity building and training of vulnerable communities at grass root level.
 - Creation of **Centre for Landslide Research Studies and Management (CLRSM)** to create a techno-scientific pool of expertise in the country.
- **Preparation of Mountain Zone Regulations and Policies:** The strategy describes the formulation of land-use policies and techno legal regime, updation and enforcement of building regulations, review and revision of BIS code / guidelines for landslide management, proposed amendment in town and country planning legislations, regulations for land use zoning for natural hazard prone areas etc.

5.11. GLOBAL WARMING ALTERS RAINFALL PATTERN

Why in news?

A recent study shows that the **Indo-Pacific Ocean** is **warming** at a rapid rate and the changes are **impacting global rainfall patterns**.

Findings of the study

- The **Indo-Pacific warm pool** (a region of Warm Ocean between the western Pacific Ocean and eastern Indian Ocean) has **expanded two-fold between 1981 and 2018 due to consistent warming**.
- This **rapid warming** and increase in sea surface temperature has **altered lifecycle of the Madden Julian Oscillation (MJO)**.
 - While the MJO clouds are spending lesser (than usual) time over the Indian Ocean, their residence time over the west Pacific has increased.
- This change could drift **warmer surface water** towards the **Bay of Bengal** and trigger **cyclone activity** during post monsoon period.
 - It could **lead to reduced winter rain in north India**.
- **Global weather patterns** have also been altered:
 - Rainfall over northern Australia, west Pacific, Amazon basin, Southwest Africa and Southeast Asia has increased.
 - There is a decline in rainfall over central Pacific, along the west and east coast of US, North India, East Africa and the Yangtze basin in China.

About Madden Julian Oscillation (MJO)

- MJO wave is a global band of low-pressure area moving periodically from West to East and determines the initiation and intensity of low-pressure areas/depressions/cyclones and also oversees monsoon onsets under its footprint.
- It is disturbance of clouds, rainfall, winds, and pressure that traverses the planet in the tropics (between 30°N and 30°S) and returns to its initial starting point in 30 to 60 days, on an average.

Also refer to article “Delay in Monsoon” in June 2019 Monthly Current Affairs.

5.12. WORLD ENERGY OUTLOOK 2019

Why in News?

The International Energy Agency (IEA) has released World Energy Outlook for the year 2019.

More on news

- The world’s CO₂ emissions are set to continue rising for decades unless there is greater ambition on climate change, despite the “**profound shifts**” already underway in the global energy system.

International Energy Agency

- It is an autonomous intergovernmental organization established in the framework of Organization for Economic Cooperation and Development (OECD) in 1974 to help countries collectively respond to oil supply disruptions.
- A candidate country to the IEA must be a member country of the OECD.
- **India became an Associate Member in 2017.**
- **Apart from World Energy Outlook, it also produces Global Energy and CO₂ Status Report.**

- But a plateau for coal, along with rising demand for oil and gas, would mean global emissions continue to rise throughout the outlook period to 2040.
- **The outlook spans three alternative “futures”:**
 - **Stated Policies Scenario (STEPS):** This scenario provides a detailed sense of the direction in which today’s policy ambitions would take the energy sector.
 - **Sustainable Development Scenario (SDS):** This scenario charts a path fully aligned with the Paris Agreement by holding the rise in global temperatures to “well below 2°C and pursuing efforts to limit to 1.5°C”, and meets objectives related to universal energy access and cleaner air.
 - **Current Policies Scenario:** The Current Policies Scenario is a baseline picture of how global energy markets would evolve if governments make no changes to their existing policies and measures.

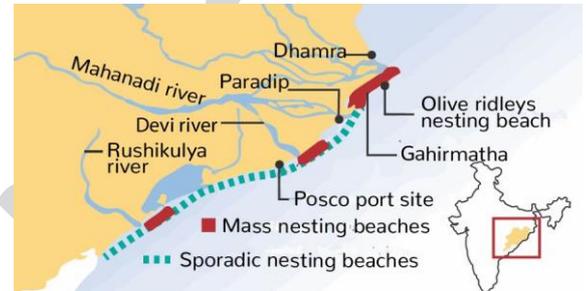
5.13. OLIVE RIDLEY TURTLES

Why in news?

Recently, the Odisha forest department banned fishing between November 2019-May 2020, in the state’s Gahiramatha marine sanctuary to protect Olive Ridley turtles.

More on News

- Gahiramatha, located in Odisha, is known as the **world’s largest Olive Ridley rookery**.
- These animals come in lakhs in the waters surrounding the sanctuary in November for mating. The females lay eggs in March.
- Trawlers and boatmen have been directed not to fish within 20 kilometers of the coastline.



About Olive Ridley Turtles

- The Olive Ridley Turtles are **the smallest and most abundant of all sea turtles** found in the world, **inhabiting warm waters of the Pacific, Atlantic and Indian oceans**.
- These turtles, along with their cousin, Kemp’s Ridley turtle, are best known for their unique mass nesting called **Arribada**, where thousands of females come together on the same beach to lay eggs.
- The species is recognized as **Vulnerable by the IUCN Red list** and is placed under **Appendix 1 of CITES**.
- **They are carnivores**, and feed mainly on jellyfish, shrimp, snails, crabs, molluscs and a variety of fish and their eggs.
- These turtles spend their entire lives in the ocean, and migrate thousands of kilometers between feeding and mating grounds in the course of a year.

Threats to Olive Ridley Turtles

- Olive Ridleys face serious **threats across their migratory route, habitat and nesting beaches**, due to human activities such as turtle unfriendly fishing practices, development and exploitation of nesting beaches for ports, and tourist centres and light pollution.
- They are still **extensively poached for their meat, shell and leather**, and their eggs, though illegal to harvest, have a significantly large market around the coastal regions.

Government Initiatives

- The Coast Guard had launched the '**Operation Oliva**' exercise as part of its annual mission to ensure the safe mid-sea sojourn of breeding Olive Ridley sea turtles.
- **Operation Save Kurma:** species specific operation on Turtles by Wildlife Crime Control Bureau.
- **The Wild Life Protection Act, 1972** and its latest amendments in 2006 provide legal protection to all the sea turtle species occurring in the state.

6. SOCIAL ISSUES

6.1. EDUCATION AS A PUBLIC GOOD

Why in News?

- The administration of Jawahar Lal Nehru University hiked hostel fee due to deficit of funds in running them. This triggered a debate whether Education is a public good or a private good.
- The Draft National Education Policy also stresses on making education equity based.

Evolution of Education as a public good in education policies of India:

- The first Commission to be appointed was the **University Education Commission in 1948**, under the chairmanship of **Dr. S. Radhakrishna** discussed the re orientation of higher education in relation to the five basic tenets of our constitution **Democracy, Justice, Liberty, Equality, and Fraternity**.
- The recommendations of Dr. Radhakrishnan were reinforced by the **Secondary Education Commission** appointed in **1952** with **Dr. L.S. Mudiliar as Chairman**.
- The **Education Commission** was appointed under the chairmanship of **D.S. Kothari**. Based on this Commission's report, the **National Policy on Education 1968** was formulated. It emphasized on a **common school system of Public Education** which would provide equality of access to children from all social strata and which would be adequate in quantity and quality was proposed. It made recommendations that reflected the democratic aspirations of the Indian masses **regarding free and compulsory education and increasing financial out-lays for education**.
- **Draft National Education Policy 1979 emphasized on** Adult Education, which the policy treated as an integral part of the **Revised Minimum Needs Programme**.
- The **National Policy on Education-1986 was modified in 1992**. The new education policy will give emphasis on greater attention should be given to the backward classes, physically challenged and minority child for their development in education. **At the same time steps will be taken to prevent establishment of institutions for commercialization of education**.
- The **Sarva Shiksha Abhiyan**, Mid-Day Meal Scheme, **Navodaya Vidyalayas** (NVS schools), **Kendriya Vidyalayas** (KV schools) and use of IT in education are a result of the NEP of 1986.
- By the **42nd Amendment to the Constitution in 1976** education was moved from the **State to the Concurrent List** and the **86th Amendment in 2002** under which **education became an enforceable right**.

Why Education should be a public good?

What is a Public Good?

The concept of public goods is central to economic analysis of the role of government in the allocation of resources. Public goods are defined by two characteristics:

- 1) **Non-excludability:** It is not possible to exclude non-payers from consuming the good.
- 2) **Non-rivalry in consumption:** Additional people consuming the good do not diminish the benefit to others.

- **Education as a service:** Education is one of the **vital services** that a modern state is expected to provide to its people. It is a service that every welfare democracy is obliged to give in the most accessible form.
- **Education as a Human right:** Article 26 of The historic **Universal Declaration of Human Rights**, adopted at the UN General Assembly in 1948, declared that “everyone has the right to education” states that “**education shall be free, at least in the elementary and fundamental stages**” and “**elementary education shall be compulsory**”, and that ‘education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms’.
- **Knowledge economy:** By 2030-2032 we will be the third largest economy at over ten trillion. India’s ten trillion economy will not be driven by natural resources, but by knowledge resources. Quality education will be a key part of the transition to the knowledge economy that is currently underway in parts of India but needs to encompass the entire country
- **Equality:** Competition in education or in job markets is fair only when the competitors are of equal strength which cannot be achieved by privatizing the education.

- **Demographic dividend:** India is one of the youngest nations in the world comprising huge chunk of population in **favorable demographic phase**. Affordable and accessible education will make India realize its potential.
- **Dignified living:** Nearly **one-fifth of the population of India is below poverty line** and making education as a public good provides them a way out to learn and earn their living in a dignified way. Education should be seen as tool to development against deprivation and cannot be treated as a commodity, where market forces create the demand for certain types of education (Eg: Artificial Intelligence)
- **Financing:** **India spends only 2.7% of GDP towards education** as against similar emerging economies such as China and Brazil spend above 4% and 6% of GDP respectively. Even if education is made free at institutions such as IITs and IIMs, there would be an additional expense of only about 0.1% of yearly budget, but could potentially have a multiplier effect on the development of an economy which has 54% of its total population below 25 years of age.
- **Enrollment ratio:** India's gross enrollment ratio in higher education is only 26.3% in 2018-19.
- **Philanthropic endowments:** Even the unique Ivy League universities (a group of eight schools such as Harvard) were created because of generous philanthropic endowments which functions more like a public institution today.

Arguments against making Education as a public good:

- **Financial constraints:** E.g. unlike developed countries, India has a low **per capita income of just over \$2,000**, the highest income tax rate of 42.74% and a **tax-GDP ratio of just below 11%**. So, providing **affordable higher education** becomes difficult.
- **Higher education is not a pure public good.** What people who call education a public good mean is that there are **positive externalities** i.e. not all of the benefits accrue to the students but society benefits when more people go to college. However, students enjoy a significant fraction of it. Thus, it is reasonable that students should bear a good fraction of the cost of higher education.
- Treating **higher education as a public good** means treating the individuals being educated as **instruments of the public good rather than as ends in themselves**. The more we believe the primary justification for education is the public benefits it produces, the less we allow **individuals to receive the higher education they want** rather than the education the government believes is good for them.
- Also, most of the **top institutes in US such as Stanford and Harvard Universities are privately owned** and they provide scholarships to students.
- Making education as a public good may not always lead to quality education due to **bureaucratization, limited competition, resources, limited need to attract best talents**.
- Many financial institutions provide education loans to students which they can repay back when they start earning (**Study now, pay later model of Australia**). This way the quality will not be compromised as there are more funds to disburse with the institutions.

Conclusion

The educational landscape has undergone deep changes over the last decades, with the transformation of governance models, the increasing involvement of civil society organizations as well as a growing trend towards privatization and commodification, economic, environmental and intellectual areas, call for a humanistic and **holistic approach to education that goes "beyond narrow utilitarianism and economism to integrate the multiple dimensions of human existence"**

6.2. LEARNING POVERTY

Why in news?

World bank recently **released the report "Ending Learning Poverty"**.

Learning Poverty

- Learning Poverty is defined as the **percentage of 10-year-olds who cannot read and understand a simple story**.

- World Bank estimates that 53 percent of children in low- and middle-income countries cannot read and understand a simple story by the end of primary school.

Recommendations for Ending learning poverty

- Targeted approach:** The report has targeted to reduce by at least half the share of 10-year old who cannot read by 2030.
 - Ensuring political and technical commitment to clear goals, means, and measures for literacy is required to achieve the target.
- Assessing performance:** It is essential that assessment systems have well-defined ways to inform future instruction based on assessment results.
 - These systems require proper design, implementation, documentation, and dissemination of results.
 - Attention should also be given to ensuring that the assessment results are comparable within the country over time, allowing for consistent measurement of country progress.
- Improving teacher quality by:**
 - Making teaching an attractive profession by improving its status, compensation policies, and career progression structures.
 - Ensuring teachers are well-equipped to transition and perform effectively in the classroom.
 - Promoting a meritocratic selection of teachers
 - Providing continuous support and motivation to allow teachers to improve continually.
 - Using technology wisely to enhance the ability of teachers to reach every student, factoring in their areas of strength and development.
- Role of families and communities:** Renewed attention is needed to the role that families and communities play in building the demand for education, creating the right environment for learning, and supporting the right education reforms.
- Multi sectoral approach:** Ensure that all children can learn requires better water and sanitation, improved health and nutrition, better social protection for disadvantaged populations, civil service reforms, and strengthened management and financing of public services.
- Access to age and skill appropriate material:** Availability of quality, age-appropriate reading materials is a significant predictor of strong early literacy. Children who lack access to books or exposure to printed or digital and written materials are more generally at a disadvantage as they try to learn to read
- Significance of home language:** Research has shown that children gain reading proficiency if they are taught in their home language first. Students taught to read in a language they do not speak at home have great difficulty learning.
- Redefining skill sets with the changing trends:** The world is changing at a rapid pace, as global trends such as disruptive technology, climate change, and rapidly evolving demographics continuously redefine the skills that learners need to develop today so they will be productive workers and engaged citizens tomorrow.
- Reading as a gateway to explore other areas:** The report specifically focused on developing reading habits in children as reading is a student's gateway to learning in every other area. When a child becomes proficient in reading, that unlocks the door to the vast knowledge codified in texts of all types.

India's Scenario

- The Annual Status of Education Report (ASER) 2018 published by education non-profit Pratham shows the prevalence of learning deficit and the poverty of basic reading and arithmetic skills among students in Indian schools (across government and private schools).
- Report shows that **only half (50.3%) of all students in Class V can read texts meant for Class II students.**
- The quality of the learning level bears directly on India's future workforce, its competitiveness and the economy. India's demographic dividend depends on the learning level of students.

6.3. INDUSTRY GUIDELINES ON DIGITAL LEARNING

Why in news?

Recently, **Union HRD Minister launched the draft 'Industry Guidelines on Digital Learning'**.

More about the news

- The Draft Guidelines were **developed by UNESCO, Mahatma Gandhi Institute of Education for Peace and Sustainable Development (MGIEP)**, responding to the Vizag Declaration on Digital Learning adopted at TECH 2018.

- TECH 18 was an international conference organised by the UNESCO, MGIEP and the Andhra Pradesh government.

Digital Learning in India

- **Definition:** Digital learning is the **learning that is supported by digital technology** or by instructional practice that makes effective use of digital technology. It makes teaching and learning a smoother experience as it includes animations, gamification and audio-visual effects.
- **Scope:** As per KPMG and Google report, **India's online education market is set to grow to USD 1.96 billion and around 9.6 million users by 2021** from USD 247 million and around 1.6 million users in 2016.
 - Reskilling and online certifications is the largest category today, Primary & secondary supplemental education will be the largest category by 2021 and Test preparation will be the fastest growing category in 2021.
- **Need for the digital learning guidelines:** The massive influx of digital learning resources has made the task of selecting appropriate digital learning games, applications or tools difficult for teachers, parents and school leaders.
 - These challenges highlight the importance of creating a set of guidelines for educational technology developers to integrate principles of good learning with digital pedagogies that are aligned with the values of peace, non-discrimination and sustainable development as enshrined in the Sustainable Development Goals (SDGs).

MGIEP

- It was established by UNESCO in cooperation with the Government of India in November 2012.
- It is the **first UNESCO specialized education institute in India**, and the first Category 1 institute in the Asia-Pacific region.
 - **Category 1 Institutes** are integral part of UNESCO, and seeks to strengthen the scientific capacity of Member States.
- UNESCO MGIEP **focuses on achieving the UN Sustainable Development Goal 4.7 towards education for building peaceful and sustainable societies across the world** by developing programmes that promote social and emotional learning, innovate digital pedagogies and empower the youth.

Draft guidelines

- These draft guidelines have been divided into two broad sections— **Mandatory and Recommended**.
- **Mandatory characteristics feature preliminary requisites** for any digital learning application and includes:
 - No discrimination
 - No gratuitous Violence
 - Learner Centric
- The **Recommended characteristics list desirable features** that align the application with the core values of UNESCO MGIEP and SDG 4 and includes Content Quality, Learning strategies, Data Privacy, Accessibility and Health Concerns.

Reasons for growth of online education in India

- **Low-cost alternative:** Lower infrastructure cost and a larger student base helps leverage on the economies of scale and hence reduced prices via the online channel.
- **Availability of quality education:** Areas where availability of quality of offline education is low witness higher adoption of non-traditional education methods. For example, states like Kerala, Bihar and Jammu and Kashmir account for around 4 Lakh distance learning enrolments.
- **Employability Quotient:** **Nearly 280 million job seekers are expected to enter the job market** in India by 2050. Growing job seeking population drives the demand for industry relevant training. According to an online learning platform Coursera, **around 2 million people took online AI (artificial intelligence) courses in 2019**.
- **Inefficiency of traditional education system:** Traditional education system is insufficient in providing services to all the segments of the education and skill development market; thus, prospective learners are looking for alternative sources.
- **Government's digital initiatives:** Government initiatives such as SWAYAM, E-Basta, Rashtriya Madhyamik Shiksha Abhiyan (RMSA), PMDISHA, Skill India and Digital India will enable the infrastructure needed by students to study online.
- **Growing Internet and smartphone penetration:** Nearly 735 million are projected internet users in India by 2021. Smartphone user base is expected to grow with the **addition of approximately 180 million new users by 2021**. It will drive technological adoption amongst masses.

Challenges with digital learning in India

- **Abundance of free content:** High availability of free content on streaming sites and other mediums, results in a large portion of the non-serious learners in the user base, resulting in loss of ad revenue from these customers. Availability of free content also diminishes the perceived value of paid content.
- **Multiple influencers in decision making:** The decision to purchase online solutions is influenced by stakeholders such as parents, peers, faculty and the information available on the internet thus delaying the adoption.
- **Lack of awareness:** Lack of awareness of online offerings prove to inhibit rapid growth of the category.
- **Obsolescence of content:** Online content generally has a short shelf life, and hence requires regular updates. Since this comes at a high cost, updating content remains a key challenge for players in this category.
- **Need for classroom experience:** Inability of the online channel to currently replicate aspects of the offline channel such as group learning, peer interactions, soft skill development, eventually impact personality development of the individual.
- **Need for practical experience:** Currently, online channel has a limited practical component which impacts the courses offered in fields such as medicine, civil and mechanical engineering.
- **Regulations:** Absence of a robust framework governing online education leads to authenticity related challenges. There are concerns over authenticity of courses and degrees.

Future of online education

- **Hybrid channel approach:** Collaboration of online and offline channels to provide ubiquitous content and learning. Online players need to establish offline touch-points for students. Offline players to broaden their online component to provide value added services and enhance overall learning experience
- **Evolving concept of continuous learning:** Adoption of online education to be driven across age groups by three kinds of needs:
 - Employability – Need to stay relevant in the job market
 - Social learning – Casual learning and social skill development
 - Entrepreneurship
- **Business model evolution in line with changing customer requirements**
 - Co-developed content by online players and industry to enhance perceived value of online education
 - Peer to peer learning among students to gain pace
 - Value added services such as internships and live projects along with regular courses, to provide hands-on experience to students
- **Technological innovations:**
 - Big data and Artificial Intelligence to assist in design of customized content.
 - Consumption of content will evolve through use of technologies like wearable devices and virtual labs.
 - Data storage on cloud to enable anytime, any-device access.
- **Gamification:** It is the application of typical elements of game playing (e.g. point scoring, competition with others, rules of play) to online marketing technique to encourage engagement with a product or service.
 - It will gain application in the form of simulation of concepts, incentive-based learning, level advancement badges and the likes. This will drive user engagement and increase knowledge acquisition.

Conclusion

Emerging Digital Learning community develop effective solutions that will be in-line with SDG 4, and the societal and economic needs of the 21st century. Government should develop **a mechanism to evaluate and compare the overall quality, relevance and learning outcomes of the multiple applications** and services at their disposal so that consumer can make informed choices.

6.4. THE TRANSGENDER PERSONS (PROTECTION OF RIGHTS) ACT, 2019

Why in News?

The Transgender Persons (Protection of Rights) Bill was recently passed by the Parliament.

Background

- In 2014, in **NALSA vs Union of India Case**, Supreme Court recognised a transgender person's right to self-identification as male, female or the third gender.
- A private member Bill was introduced in Rajya Sabha in 2014 to guarantee rights and provide welfare measures for transgender persons. It was passed in Rajya Sabha but was not taken up in Lok Sabha.

- In August 2016, **Government introduced the Transgender Persons (Protection of Rights) Bill, 2016 in Lok Sabha.** It was referred to the Standing Committee on Social Justice and Empowerment. However, the Bill lapsed with the dissolution of the 16th Lok Sabha.

Need for the Act

- **Social exclusion** is one of the main issues faced by Transgenders. Families refuse to accept them; healthcare facilities/professionals are not transgender friendly and ignore their privacy concerns; lack of employment and education opportunities; residential facilities are not easily available to them etc.
- **Discrimination:** They face **discrimination in laws related to inheritance.** For example, The Hindu Marriage Act, 1955 and Hindu Succession Act, 1956 specifically mentions sons and daughters but there is no mention of inheritance rights for transgenders.
- **Prone to multiple forms of violence:** including child abuse, sexual violence, hate crimes etc.

NALSA v/s Union of India, 2014 case: Framework given by supreme court regarding transgenders rights:

- The right to choose one's gender is part of the right to life and life with dignity.
- 'Third gender' to be included in all official documents/forms.
- To choose from one of the three genders was mandated to be only the person's choice.
- It provided for avenues of **reservation within the OBC quota** to this 'marginalised' section.
- It was suggested that a **commission to protect rights of this community** must be setup just like the National Commission for SC/STs.

Key Provisions of the Act

- **Definition of a transgender person:** The Act defines a transgender person as one whose gender does not match the gender assigned at birth. It includes trans-men and trans-women, persons with intersex variations, gender-queers, and persons with socio-cultural identities, such as kinnar and hijra.
- **Prohibition against discrimination:** The Act **prohibits 8 types of discrimination** against a transgender person, including denial of service or unfair treatment in relation to: education; employment; healthcare; access to public goods and facilities; right to movement; right to reside, rent, or own property; opportunity to hold public or private office; and access to a government or private establishment which has custody of a transgender person.
- **Recognition of Identity:** It provides for the **right to self-perceived gender identity.** A certificate of identity as a transgender person can be issued by **the District Magistrate.** A revised certificate can also be obtained after **Sex Reassignment Surgery (SRS).**
- **Offences and penalties:** It recognize the following offences against transgender persons. Penalties for these offences vary between six months and two years, and a fine.
 - forced or bonded labour (excluding compulsory government service for public purposes),
 - denial of use of public places,
 - removal from household, and village,
 - physical, sexual, verbal, emotional or economic abuse.
- **National Council for Transgender Persons** will be setup with representatives from the government, transgender community and experts in the field. It will advise the government on formulating policies for the community, and monitor the implementation, and address grievances, among others.
- **Welfare measures by the government:** Government must take steps for their rescue and rehabilitation, vocational training and self-employment, create schemes that are transgender sensitive, and promote their participation in cultural activities.
- **Health care:** The government must take steps to provide health facilities to transgender persons including **separate HIV surveillance centre and sex reassignment surgeries.** The government shall review medical

National Council for Transgender persons (NCT): The NCT will consist of:

- Union Minister for Social Justice (Chairperson);
- Minister of State for Social Justice (Vice- Chairperson);
- Secretary of the Ministry of Social Justice;
- one representative from ministries including Health, Home Affairs, and Human Resources Development.

Other members include

- Representatives of the NITI Aayog, and the National Human Rights Commission.
- **State governments** will also be represented.
- **Five members from the transgender community and**
- **Five experts from non-governmental organisation.**

curriculum to address health issues of transgender persons and provide comprehensive medical insurance schemes for them.

Issues with the bill

- **No right to self-identification.** Act removes the provisions for a District Screening Committee and leaves the power to issue the Certificate with the District Magistrate.
- **No review mechanism:** If a transgender person is denied a Certificate of Identity, the Act does not provide a mechanism for appeal or review of such decision of the District Magistrate.
- It **does not make provisions for affirmative action** in employment or education despite the Supreme Court mandate in NALSA Judgement.
- Although Act provides for welfare measures and healthcare provisions, which is a step forward, but **medical professionals lack knowledge of transgender bodies.**

Conclusion

- This Act reflects the essence of Article 14, 19 and 21 as transgenders will face better treatment contrary to what they have been subjected to over the years.
- An immediate progress should be made in propagating about the transgenders rights. Incentives should be given to Non-Government Organizations for spreading awareness and also for uplifting current situation of transgenders.
- This Act can bring a change in the way people perceive and treat transgenders if implemented effectively. Also, if issues mentioned above if are dealt with, it will result in better implementation of this Act which can go a long way in protecting the rights of transgenders.

6.5. MATERNAL MORTALITY DECLINE

Why in news?

Recent special bulletin on **Maternal Mortality** released by the **Sample Registration Survey (SRS)** recorded the **decline of maternal deaths in India.**

Maternal Deaths

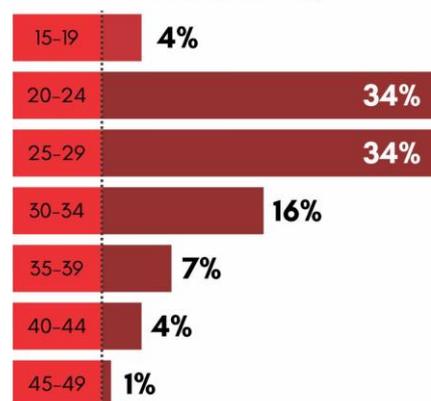
- As per WHO, **Maternal death** is the **death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy**, from any cause related to or aggravated by the pregnancy or its management but not from accidental or incidental causes.
- The major **complications** that account for nearly **75% of all maternal deaths** are:
 - severe bleeding (mostly after childbirth)
 - infections (usually after childbirth)
 - high blood pressure during pregnancy
 - complications from delivery and unsafe abortion
- Most of these **complications are preventable or treatable.**
- **Factors that prevent women from receiving or seeking care** during pregnancy and childbirth:
 - poverty
 - distance to facilities
 - lack of information
 - inadequate and poor-quality services
 - cultural beliefs and practices
- The **sustainable development goals** set by the United Nations target reducing the **global MMR to less than 70 per one lakh live births by 2030.**

Relevant Government Initiatives

- National Health Mission
- LaQshya
- POSHAN Abhiyan
- Pradhan Mantri Surakshit Matritva Abhiyan
- Janani Shishu Suraksha Karyakram
- Janani Suraksha Yojana
- Pradhan Mantri Matru Vandana Yojana
- Surakshit Matritva Aashwasan Initiative (SUMAN)

STARTLING FIGURES

Age-wise distribution of maternal deaths (2015-2017)



Key Findings of the report

- **Maternal Mortality Rate (MMR)** of India has **declined** from **130 in 2014-2016 to 122 in 2015-17**. The MMR is derived as a proportion of maternal deaths per 1,00,000 live births reported.
- It registered a **6.15% reduction** since the last survey figures of 2014-2016. Earlier, India had registered a 26.9% reduction in MMR since 2013.
- The **SRS** had categorized the **States** into **three groups**:
 - **Empowered Action Group (EAG) States**: Bihar, Jharkhand, Madhya Pradesh, Chhattisgarh, Odisha, Rajasthan, Uttar Pradesh, Uttarakhand, and Assam. The drop has been most significant in EAG States **from 188 to 175**.
 - **Southern States**: Andhra Pradesh, Telangana, Karnataka, Kerala, and Tamil Nadu. Here, MMR declined **from 77 to 72**.
 - **Other States**: the remaining States and Union Territories. MMR declined **from 93 to 90** in these states.
- MMR in individual states like **Kerala** is the **lowest** at 42, whereas it is the **highest** in **Assam** at 229.
- While **Karnataka** has shown the **highest percentage decline in MMR**, **Uttar Pradesh and Madhya Pradesh** have shown an **increase** by 15 points each in MMR.

6.6. SWACHH SURVEKSHAN GRAMEEN AWARDS 2019

Why in news?

Recently, **Swachh Survekshan Grameen (SSG)** awards 2019 were conferred by **Ministry of Jal Shakti** to top ranked states, union territories, and districts in the various categories on the occasion of **World Toilet Day (November 19)**.

More details

- It tries to develop ranking of all districts of India on the basis **of quantitative and qualitative sanitation (Swachhata) parameters**.
- The top three states are **Tamil Nadu, Haryana and Gujarat**.
 - **Top 3 Districts** – 1) Peddapalli, Telangana, 2) Faridabad, Haryana, 3) Rewari, Haryana
 - **State with maximum citizen participation**- Uttar Pradesh
- This various set of parameters are given following weightage.
 - **30 per cent weightage**: **Direct observation** of researchers wherein they check availability and usage of toilets, status of water logging and plastic littering.
 - **35 per cent**: Citizen feedback received online, during group meetings and from key influencers.
 - **35 per cent**: Service level progress.
- **Other key findings**
 - **97.5%** of people surveyed were **aware** of SSG 2019;
 - **81.3%** of respondents credited SBM-G for the **substantial improvement in cleanliness level**;
 - **83%** of respondents reported sufficient arrangements in their village to manage liquid waste and
 - **84.1%** citizens reported sufficient arrangements in their village to manage solid waste.

7. SCIENCE AND TECHNOLOGY

7.1. BANNING E-CIGARETTES

Why in news?

Recently, **Parliament has passed the Prohibition of Electronic Cigarettes (Production, Manufacture, Import, Export, Transport, Sale, Distribution, Storage, and Advertisement) Bill, 2019**. It will replace an Ordinance promulgated in September 2019.

Key provisions of the Act

- **Definition of E-cigarette:** The Bill defines electronic cigarettes (e-cigarettes) as **electronic devices that heat a substance, which may contain nicotine and other chemicals, to create vapour for inhalation**. These e-cigarettes can also contain different flavours and include all forms of electronic nicotine delivery systems (ENDS), heat-not-burn products, e-hookahs, and other similar devices.
- **Prohibition on e-cigarettes-** It makes production, manufacture, import, export, transport, sale, distribution or advertisements of e-cigarettes a **cognizable offence**.
- **Storage of e-cigarettes:** No person is allowed to use any place for the storage of any stock of e-cigarettes. If any person stores any stock of e-cigarettes, he will be punishable with an imprisonment of up to six months, or a fine of up to Rs 50,000 or both.
 - Moreover, the owners of existing stocks of e-cigarettes will have to declare and deposit these stocks at the nearest office of an authorised officer.
- **Powers of authorised officers:** If an authorised officer believes that any provision of the Bill has been contravened, he can search any place where trade, production, storage or advertising of e-cigarettes is being undertaken. The authorised officer can seize any record or property connected to e-cigarettes found during the search. Further, he may take the person connected with the offence into custody.

Rationale for banning

- **Health impacts:** Both the WHO and the Indian Council of Medical Research (ICMR) have highlighted the negative health impact of using e-cigarettes.
 - Nicotine is the addictive component of tobacco products. In addition to dependence, nicotine can have adverse effects on the development of the foetus during pregnancy and contribute to cardiovascular diseases.
 - In addition to nicotine, **the cartridges of e-cigarettes are filled with chemicals, flavourings, and metals** that have been demonstrated to be responsible for causing cancers and diseases of the heart, lungs, and brain.
- **Increase in usage:** WHO has observed that e-cigarettes are heavily marketed towards youth through the use of flavourings and promotional strategies. This has resulted in a rapid increase in the use of e-cigarettes amongst youth.
 - For instance, the percentage of youth using e-cigarettes in USA has increased from 1.5% in 2011 to 20.8% in 2018. In India, **e-cigarettes worth \$ 1,91,781 were imported between 2016-16 and 2018-19**.
- **Passive smoking:** The smoke which is exhaled by the users of e-cigarettes contains very high level of residual nicotine badly affects the people around standing as passive smokers, who accidentally inhale.
- **Not a Cessation aids:** E-cigarettes are usually promoted by the industry as smoking cessation aids but their efficacy and safety as a quitting aid has not yet been established. WHO does not endorse e-cigarettes as cessation aids that help people quit tobacco use.
- **Government's responsibility:** Under **Article 47 of Indian constitution**, government has the responsibility to raise the level of nutrition and the standard of living and to improve public health. The widespread use and unchecked proliferation of e-cigarettes and the like devices would seriously undermine and derail government's efforts to reduce the prevalence of tobacco use.
- **Lack of regulation of E-cigarettes-** unlike traditional cigarettes, e-cigarettes do not contain tobacco and therefore are not regulated under the COTPA Act.
 - Cigarettes and Other Tobacco Products Act (COTPA), 2003 regulates the sale, production, and distribution of cigarettes and other tobacco products in India, and prohibits advertisement of cigarettes.

- **International experience-** India is a signatory to the **WHO Framework Convention on Tobacco Control (WHO FCTC)**. In 2014, the WHO FCTC invited all its signatories to consider prohibiting or regulating e-cigarettes in their countries. E-cigarettes have been completely banned in 25 countries including Brazil and Singapore.

7.2. TRADITIONAL MEDICINE

Why in News?

Recently, Ministry of AYUSH hosted World Health Organization meeting on developing **Standardized Terminologies and Benchmarks documents for Practice for Traditional Medicine**.

More in News

- **WHO is developing Benchmarks Document** for Practice of Ayurveda, Panchakarma & Unani and International Terminologies Documents in Ayurveda, Siddha & Unani.
- Development of these benchmarks documents is included in the Project Collaboration Agreement (PCA) signed between World Health Organization (WHO) and Ministry of AYUSH on **Cooperation in the field of Traditional and Complementary Medicine under WHO Traditional Medicine Strategy 2014-2023**.

WHO Traditional Medicine Strategy 2014-2023

The strategy has two key goals:

- To support Member States in harnessing the potential contribution of Traditional Medicine to health, wellness and people centered health care
- To promote the safe and effective use of Traditional Medicine through the regulation of products, practices and practitioners.

These goals will be reached by implementing three strategic objectives:

- Building the knowledge base and formulating national policies;
- Strengthening safety, quality and effectiveness through regulation; and,
- Promoting universal health coverage by integrating Traditional Medicine services and self-health care into national health systems.

What is Traditional Medicine?

- Traditional medicine describes a **group of health care practices and products with a long history of use**.
- It frequently **refers to medical knowledge developed by indigenous cultures** that incorporates plant, animal and mineral-based medicines, spiritual therapies and manual techniques designed to treat illness or maintain wellbeing.
- **Major traditional medicines in India include:** Ayurveda, Yoga, Siddha, Unani, Sowa-Rigpa, Naturopathy etc.

Benefits of Traditional Medicine

- **Addresses gaps in health services:** Traditional medicine therapies are generally available and commonly used in low- and middle-income countries.
 - According to data provided to WHO, in India 70 percent of the population depends on Traditional Medicine for primary health care.
 - Traditional medicines provide low cost services and are perceived to have lower side effects.
- **Treatment of major disease:** World Health Organisation has acknowledged that traditional medicine and its practitioners play an important role in treating chronic illnesses, and improving the quality of life of those suffering from certain incurable diseases.
- **Holistic approach to treatment:** In Ayurveda, a human being is seen as a combination of body, mind, soul and senses. So, in order to treat any illness, the system takes all four into account and treats the patient more holistically.
- **New drug development:** Traditional knowledge can provide valuable guidance in selecting and obtaining plant material of potential therapeutic interest.
 - Traditional medicines are the source of some modern antimalarial drugs.

Issues with Traditional Medicine

- **Unregulated:** Traditional Medicine products are unregulated in many countries, and therefore many of the concerns about the risks for consumers relate to the safety and quality of medicinal products.
 - Reported problems include sales of incorrect plant species and the contamination and adulteration of Traditional medication therapies.

- **Untrained practitioners:** WHO notes that "inappropriate use of traditional medicines or practices can have negative or dangerous effects".
- **Lack of financial support:** Traditional Medicine often lacks required financial support for the development and conservation of traditional knowledge.
- **Lack of human resources:** Practitioners are moving away from traditional system for better opportunities.

Way forward

- **Promotion of Traditional Medicine:** The knowledge of traditional medicine, treatments and practices should be respected, preserved, promoted and communicated widely and appropriately based on the circumstances in each country.
- **Improve regulatory framework:** Governments have a responsibility for the health of their people and should formulate national policies, regulations, and standards as part of comprehensive national health systems to ensure appropriate, safe and effective use of traditional medicine.
- **Training and qualified practice for practitioners:** Governments should establish systems for the qualification, accreditation or licensing of traditional medicine practitioners. Traditional medicine practitioners should upgrade their knowledge and skills based on national requirements.
- **Collaboration between conventional and traditional medicine providers:** Since consumers often use both treatments simultaneously, it is necessary to improve collaboration between registered/licensed traditional practitioners and conventional health care providers.

7.3. TYPHOID CONJUGATE VACCINE

Why in News?

Pakistan became the first country in the world to introduce World Health Organisation-recommended typhoid conjugate vaccine (TCV).

More about the News

- Pakistan introduced TCV called **Typbar TCV** in its national immunisation program against **extensively drug-resistant (XDR)** typhoid outbreak.
- **Typbar TCV** is being administered in Pakistan with funding support from the **Global Alliance for Vaccine Initiative (GAVI)**.
- **Typbar TCV** is manufactured by **India based company, Bharat Biotech**. It became the world's first conjugate vaccine prequalified by the WHO.

Conjugate Vaccines

- Vaccines are used to prevent diseases by **invoking an immune response to an antigen** (the foreign part of a bacteria or virus that the immune system recognizes).
- This is usually accomplished with an **attenuated or dead version** of a bacteria or virus in the vaccine, so that the immune system can recognize the antigen later in life. Many vaccines contain a **single antigen** that the body will recognize.
- However, the antigen of some bacteria does not elicit a strong response from the immune system, so a vaccination against this weak antigen would not protect the person later in life.
- **Conjugate vaccines** combine **this weak antigen with a strong antigen** as a carrier so that the immune system has a stronger response to the weak antigen.

Global Alliance for Vaccine Initiative (GAVI)

- GAVI is a global health partnership of public and private sector organizations dedicated to "immunisation for all".
- It is backed by several global organisation, including the Bill & Melinda Gates Foundation, the WHO, the World Bank and the UNICEF, which arranges bulk buys to lower vaccine costs for poor countries.

7.4. CARTOSAT-3

Why in news?

ISRO successfully launched Cartosat-3 and 13 commercial nanosatellites from Satish Dhawan Space Centre (SDSC), Sriharikota.

About Cartosat 3

- Cartosat-3 satellite is a third-generation agile advanced satellite having high resolution imaging capability.

- The mission life of the Cartosat-3 is 5 years.
- It will be followed by additional satellites of the same design, namely Cartosat-3A and 3B, next year.
- **Orbit Type:** Sun synchronous polar orbit (SSPO) at altitude of 509 km.
 - **SSPO** are polar orbits which are synchronous with the Sun i.e. in these orbits, Earth's surface is always illuminated by the Sun at the same angle when viewed from the satellite.
- Launch Vehicle: **PSLV-C47**
- It was navigated for the first time using the indigenous **Vikram processor** designed by the ISRO and fabricated within the country.
 - The Vikram Processor is to be used for rocket's navigation, guidance and control and also for general processing applications.

Applications

- It will address the increased user's demands for large scale urban planning, rural resource and infrastructure development, coastal land use and land cover etc.
- It also has uses in **Disaster Management Support Programmes** like Cyclone and Floods Mapping & Monitoring, Landslide Mapping & Monitoring, Agricultural Drought, Forest Fire, Earthquakes etc.
- It is expected to help in **military reconnaissance** and mapping.

Related Information

Cartosat satellites

- Cartosat satellites are **earth observation satellites**, used mainly for large-scale mapping of the Earth through **high-resolution cameras**.
- They help to detect changes in natural geographical or man-made features.

Other satellites launched alongside

- 13 Commercial Nanosatellites from USA were also successfully injected into designated orbit.
- These include 12 SuperDove earth observation satellites named "**Flock-4P**", and a communication test bed satellite called "**MESHBED**".
- These satellites were launched under commercial arrangement with **NewSpace India Limited (NSIL)**, the commercial arm of Indian Space Research Organisation (ISRO).

Previous launches in Cartosat series

- **CARTOSAT-1**, launched in 2005, was the first Indian Remote Sensing Satellite capable of providing in-orbit stereo images.
- **Cartosat-2** was launched in 2007, and increases the imaging resolution to one meter.
- It was followed by six more spacecraft designated **Cartosat-2A to 2F**, which are believed to be primarily used for military reconnaissance.

7.5. SPACE-BASED INTERNET

Why in News?

American company **SpaceX** recently sent 60 small satellites (under 500 kg each) into Low Earth Orbit (LEO). This project, named **Starlink network**, seeks to build a 42,000-strong constellation aiming to supply non-stop, low-cost Internet everywhere on Earth.

Benefits of space internet

- **Better accessibility**- Traditional ways to deliver the Internet like fibre-optic cables or wireless networks cannot take it in remote areas or difficult terrains.
- **More affordability**- because of economies of scale and near zero investment on costly ground physical infrastructure.
- **Availability**- 24*7 availability of internet without any interruption.
- **Internet of Things (IoT) technology** is likely to be revolutionised. For ex. services such as autonomous car driving will become seamless.

Differences from earlier attempts

Space-based Internet systems have been in use for several years but only for a small number of users. The differences between earlier systems and Starlink project are-

Parameters	Earlier systems	Starlink
Orbit	Geostationary orbit (35,786 km)	Low Earth Orbit (LEO) (350 km to 1,200 km)
Time lag or latency in signal transmission	600 milliseconds	20-30 milliseconds
Serviceable area on Earth by each satellite	Covers about a third of Earth's area	Area covered is comparatively very less

Concerns

- Increased risk of **collisions** leading to more **space debris**.
- **Increased light-pollution** i.e. light reflected from these man-made satellites can interfere with and be mistaken for light coming from other heavenly bodies.
- Can **obstruct the line of sight** to observe other space objects and to detect their signals.

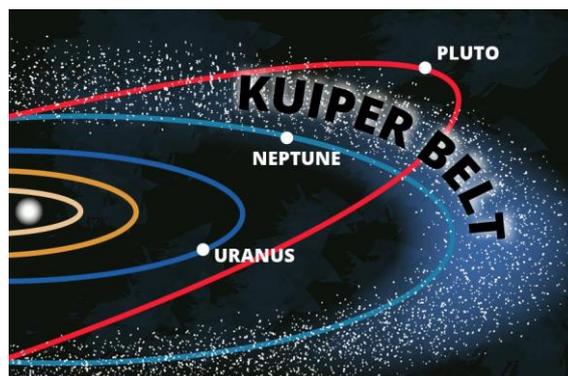
7.6. ULTIMA-THULE RENAMED AS ARROKOTH

Why in news?

The International Astronomical Union and Minor Planets Center, the global body for naming Kuiper Belt objects, has officially named the New Horizons Kuiper Belt Flyby Object as 'Arrokoth'.

More on news

- Arrokoth is one of the thousands of known small icy worlds in the **Kuiper Belt**, the vast “third zone” of the solar system beyond the inner terrestrial planets and the outer gas giant planets.
- Data from the newly named Arrokoth, has given **clues about the formation of planets** and our **cosmic origins**.
- It was **discovered in 2014 by a New Horizons team** using the powerful Hubble Space Telescope.
- NASA launched the **New Horizons mission** in January 2006. After crossing by Pluto in 2015, in January 2019 it flew by Arrokoth which was then provisionally named as Ultima Thule. This remains the **farthest flyby ever conducted**.
- Arrokoth is a Native American term meaning “sky” in the Powhatan/Algonquian language.



7.7. GEOCHEMICAL BASELINE ATLAS OF INDIA

Why in news?

For the first time, ‘Geochemical Baseline Atlas of India’ developed by **CSIR-National Geophysical Research Institute (NGRI)** for use by policy makers to assess environmental damage was released.

More on news

- The atlas **consists of 45 maps of metals**, oxides and elements present in top and bottom soils across India.
- The **map trace elements from top soil** i.e. top 25 cm depth and **bottom soil** at 100 cm depth from the year 2006 to 2011.
- The geochemical data presented in these maps will be a part of the Global Map to be prepared by the **International Union of Geological Sciences (IUGC)**.
- It will serve as a reference against which future generations of the country would be able to assess the chemical compositional changes on Earth’s surface.
 - Both human activities and natural processes are continuously modifying the chemical composition of our environment. These maps will form the backbone for environment management.
 - It will help in finding out future contaminations due to industries across the country. Government and policymakers can leverage it in planning the land use accordingly.”
- This is the third map among the series of maps published by **NGRI**. Earlier, **The Gravity map of India and Seismic map of India** were released.

8. CULTURE

8.1. GURU NANAK

Why in news?

Recently 550th birth anniversary of Guru Nanak was celebrated.

About Guru Nanak

- Guru Nanak is the **founder and first Guru of Sikhism**.
- He was born in 1469 at Talwandi Rai Bhoi (renamed later as **Nankana Sahib**) near Lahore.
- It is said that in 1499 he got enlightenment and heard '**God's Call**' to dedicate himself completely to the service of humanity.
 - He undertook **preaching tours (Udasis)** to spread his message.
 - He undertook five such udasis from 1500-1524 AD in which he not only covered most parts of India but also travelled to places like Mecca, Sri Lanka, Nepal etc.
- In the later years of his life, Guru Nanak settled down at the **township of Kartarpur** ("creator's town"), on the banks of river Ravi in Punjab.
 - The **recently inaugurated Kartarpur Corridor** connects the **Dera Baba Nanak Sahib Gurdwara** in India's state of Punjab to the **Gurdwara Darbar Sahib Kartarpur** shrine in Narowal district of Pakistan's Punjab province.
 - It runs across over Ravi River.
 - The **Gurdwara Darbar Sahib** was ordered by Maharaja of Patiala between 1921-1929.
- Guru Nanak died at the age of 70. He appointed **Bhai Lena as his successor** and renamed him as **Guru Angad**.
- Guru Angad compiled the compositions of Guru Nanak, to which he added his own in a new script known as **Gurmukhi**.
- Compositions of Guru Nanak and other Sikh gurus and the writings of other figures like Shaikh Farid, Sant Kabir, Bhagat Namdev were compiled in **Guru Granth Sahib**, the holy scripture of the Sikhs.
- Most of the biographical accounts of Nanak's life come from the **Janamshakhis**(literally birth stories)
 - These are writings which profess to be biographies of Guru Nanak, written at various stages after his death.

Teachings

- He believed that **God is Formless (Nirankar)**, and there is '**One God**' that dwells in every one of his creations, and that all human beings can have **direct access to God without the need of any rituals or priests**.
- Setting up a unique spiritual, social and political platform based on **equality and fraternal love**, Guru Nanak attacked the **citadel of the Hindu Caste System, and condemned the theocracy of Mughal rulers**.
- His idea of liberation was not that of a state of inert bliss but rather the **pursuit of active life** with a strong sense of social commitment.
- His followers ate together in the common kitchen (langar), irrespective of their former creed, caste or gender.
- Guru Nanak founded and formalised the 3 pillars of Sikhism.
 - **Naam Japna**- meditation on God through reciting, chanting, singing, and constant remembrance followed by deep study & comprehension of God's Name and virtues.
 - **Kirat karni**- To honestly earn by one's physical and mental effort while accepting both pains and pleasures as god's gifts and blessings.
 - **Vand Chakna**- The Sikhs were asked to share their wealth within the community by practising Vand Chakna- "Share and Consume together".

8.2. THIRUVALLUVAR

Why in news?

Recently, a controversy kicked up in Tamil Nadu after the **image of Thiruvalluvar in saffron-coloured attire was tweeted**.

About Thiruvalluvar

- Thiruvalluvar, **commonly known as Valluvar**, was a Tamil saint, poet, and a philosopher. He is **usually shown with a white shawl in the images**.
- Details about Thiruvalluvar's real name, date and place of birth, religious affiliation and family background are not available. Many researchers put his birth date between 1st century BC and 2nd century AD.

- Thiruvalluvar's moral philosophy is **anthropo-centric since it focuses on life on this earth** rather than aspiring for heavenly abode.
 - Moreover, he opposed absolutizing and idealizing the problems and making them other-worldly affairs.
- He boldly **advocated a life of discipline, self-control, chastity, non-violence, temperance and devotion.**
- He is best known as the **author of Thirukkural**, a collection of 1330 couplets on ethics, political and economic matters, and love.
- In Thirukkural, through the phrase 'Aadhi Bhagavan', Thiruvalluvar **asserted that the Omnipotent and Omnipresent God was Universal.**

About Tirukkural

- Written in Tamil, it is an ancient treatise on the Code of Ethics and Universal Human Values.
- It is a moral compendium which has been classified under three major headings; aram (righteousness), porul (wealth), ibam (enjoyment).
 - The ideological implication of these titles is that one must earn wealth through righteous means and enjoyment becomes imminent through that which leads to enlightenment.
 - This view is similar to the Sanskrit tradition of dharma, artha, kama and moksha.
- Out of four aspects of life (Purusharthas) Aram, Porul, Inbam and Veedu (Moksha) **Thirukkural addresses only the first three** and advocates the path to Veedu through the others and hence it is called Muppall (3 Elements).
- It attempts to provide guidelines for the individuals in the society i.e.- the ascetic, the family members, etc. who are responsible for themselves and to others.
- The codes are still applicable to all sections of the world societies - with a modern outlook and a democratic autonomy with ultra-modern living comforts and very far advanced science and technology of the third millennium. It is thus acclaimed by many as a Universal Code of Ethics.

8.3. TRAVELOGUES IN DECODING INDIAN HISTORY

Why in news?

In the recently delivered Ayodhya judgement, Supreme Court took note of the account of three European travellers namely Joseph Tieffenthaler, William Finch, and Montgomery Martin.

More about the travellers

Joseph Tiefenthaler

- He was an **18th-century missionary hailing from Italy** who travelled in India for 27 years.
- In India, **he was commissioned at the famous observatory of Sawai Jai Singh**, the Raja of Jaipur, and was later attached at the Jesuit College in Agra.
- He also lived in **Awadh, where Ayodhya is located, for over five years.**
- In his book '**Description Historiqueet Geographique Del'inde**' he gives details about his travels to Ayodhya.

William Finch

- He is known to have **arrived in India in 1608 at Surat with Sir William Hawkins**, a representative of the East India Company.
- He is said to give the **earliest English language account of Kashmir, as well as trade routes connecting Punjab and eastern Turkistan and western China.**
- Finch **visited Ayodhya between 1608 and 1611**, and did not find any building of importance of Islamic origin.
- William Finch's account has been recorded in the 1921 book '**Early Travels in India (1583-1619)**' by the historiographer Sir William Foster.

Robert Montgomery Martin

- He was an **Anglo-Irish author and civil servant.** He **practised medicine in Ceylon (present day Sri Lanka), East Africa and Australia.**
- Martin then went on to work in Kolkata where he **helped found the paper 'Bengal Herald'**. He later returned to England where he wrote about the British Empire.
- He **wrote the three-volume work 'History, Antiquities, Topography and Statistics of Eastern India'**.
- He had written about **the worship of Lord Ram in the Ayodhya region** and destruction of temples and the erection of mosques.

8.4. UNESCO'S CREATIVE CITIES NETWORK

Why in news?

UNESCO has announced that **Mumbai and Hyderabad have been included** amongst the 66 cities selected in its network of 'Creative Cities' on the occasion of World Cities Day 2019.

More on news

- Mumbai has been designated as **Creative City of Films** and Hyderabad a **Creative City of Gastronomy**.
- **Earlier, Chennai and Varanasi** were selected UNESCO cities of music while **Jaipur** is the City of Crafts and Folk Arts.

About UNESCO's Creative Cities Network

- The initiative was created in 2004 to **promote cooperation** with and among cities that have **identified creativity as a strategic factor for sustainable urban development**.
- The **180 cities** which currently make up this network **work together towards a common objective**:
 - placing creativity and cultural industries at the heart of their development plans at the local level and cooperating actively at the international level.
- By joining the Network, cities commit to **sharing their best practices** and developing partnerships involving the public and private sectors as well as civil society to strengthen creation, production, distribution and dissemination of cultural activities, goods and services.
- The Network covers **seven creative fields**:
 - Crafts and Folk Arts,
 - Media Arts,
 - Film,
 - Design,
 - Gastronomy,
 - Literature
 - Music.

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

9.1. NEED OF SCIENTIFIC TEMPER

Why in News?

Prime Minister has stressed the need for the development of scientific temper among people to expedite development of the country.

About Scientific temper

- Scientific temper refers to an **attitude of logical and rational thinking**. An individual is considered to have scientific temper if s/he-
 - searches for new bodies of knowledge
 - does not accept anything without a proof or a test
 - has the ability to change one's stand in light of new evidences
 - does not rely on pre-conceived notions in lieu of observational evidence
- It uses the scientific method which includes questioning, observing physical reality, testing, hypothesizing, analysing and communicating.
- **Parts of scientific temper:** Discussion, argument and analysis are vital parts of scientific temper and thus, elements of fairness, equality and democracy are built into it.
- **Prerequisites:** The spirit of inquiry and the acceptance of the right to question and be questioned are fundamental to Scientific Temper. It calls upon one to ask the 'how', the 'what', and the 'why' of an object, event or phenomenon.

Importance of Scientific Temper for an individual

Scientific Temper is not merely for the application of science but also for being able to make more **rational and informed choices** in life. It helps a person to-

- Strengthens one's character and develops value system like-
 - **Prudence-** ability to use reason to govern oneself and take practically righteous decisions in different circumstances. E.g. fiscal prudence means using money in a sensible way and avoiding vices like vanity or wasteful expenditure.
 - **Wisdom-** Socrates said- "True knowledge exists in knowing that you know nothing". A person with scientific temper not just takes decisions using experience and knowledge but also learns from every circumstance. It also helps in **addressing cognitive dissonance**.
 - **Truthfulness and Trustworthiness-** since decisions are based on merit and do not rely on prejudices or stereotypes, they become trustworthy.
 - **Integrity-** consistent and uncompromising honesty and integrity of one's character. It is possible when decisions are rational and do not change because of external pressures or personal inclinations.
 - **Tolerance-** ability to respect differences and alternate perspectives. Informed choices require diversity of opinions that makes a person more democratic and tolerant.
 - **Justice-** a rational person seeks justice based on established rules as well as principles of natural justice.
 - **Temperance-** moderation in action, thought or feeling.
Informed and rational decisions avoid vices like recklessness and extremities. So, it brings us closer to the Aristotle's **Golden mean principle**.
- Helps in building **Social capital-** trustworthiness, truthfulness and predictability in character and behaviour leads to sustainable and stronger social relationships.
- A rational person is **unlikely to be easily manipulated by others**. On the other hand, persuasion of such a person can be done easily using logic and reason.

Fundamental Duty

As per **Article 51A(h) of Indian Constitution**, it is the fundamental duty of every citizen of India **to develop the scientific temper**, humanism and the spirit of inquiry and reform.

Additional Information

Cognitive dissonance - the state of having inconsistent thoughts, beliefs, or attitudes, especially as relating to behavioural decisions and attitude change.

Golden Mean Principle - The basic **principle** of the **golden mean**, laid down by Aristotle, is a **principle** of moderation or striving for a balance between extremes, which is intended to serve the best interest of one's stakeholders and publics, rather than a tactic of negotiation.

- **Essential for progress-** all dogmatic beliefs are roadblocks in the path of this continuous progress of civilization.
- **Boosts civic sense-** For example, religion or laws may ask us to not throw garbage on the streets but a person may or may not implement these directions. But the firm conviction comes from a scientific understanding of what harm does this do to our environment.

Challenges in inculcating Scientific Temper

- Scientific temper is understood in academic perspective rather than a daily application. Students are expected to accept what is given in the textbooks and not question the basis or the implications it has.
- **Fundamentalism-** try to glorify traditional practices that often defy scientific principles and promote social evils like Sati, Nikah halala etc.
- **Godmen or mystics-** They take advantage of the tendency to not question bodies of knowledge claimed to be true by someone and even misguide people further.
- **Lack of practical knowledge-** students are not exposed to any practical or hands on approach to learning.

Way Forward

The Scientific temper needs to be a way of life for individuals and societies. Scientific Temper needs to be inculcated with the collective effort of all the determinants of ethics or socialisation agents like media, schools, colleges, peer groups, etc. Following steps can be taken to ensure scientific temper in our society-

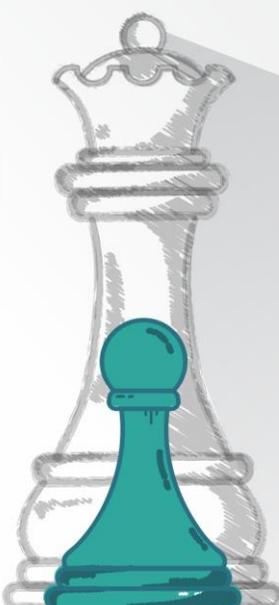
- **Sensitization of society** regarding various issues like women issues, minority question, basic human rights etc.
- Scientific temper can be promoted by teachers by promoting **qualitative education** in schools with a focus on practical approach.
- **Enacting laws** similar to Maharashtra's Anti-Superstition and Black Magic Act that seeks to check such social evils
- Using channels like using a credible source, dramas, road shows to **improve social awareness** and promote scientific and rational thinking.
- **Media regulators** like News Broadcasting Standards Authority (NBSA), Internet & Mobile Association of India (IAMI) should check instances where superstitions or such traditional practises are being promoted on T.V, social media etc.

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10. NEWS IN SHORT

10.1. MEGHALAYA BRINGS ENTRY LAW FOR VISITORS

- The Meghalaya Cabinet recently approved amendments to the **Meghalaya Residents Safety and Security Act (MRSSA) 2016**.
- The Act is applicable only to those **visiting the state as tourists, labourers, students or for business transactions**.
- The move comes in the **backdrop of demands for an ILP-like regime and concerns that people excluded from the National Register of Citizens in Assam** might try to enter Meghalaya.
- It will lead to **laws that require non-resident visitors to register themselves on the lines of the Inner Line Permit (ILP) system** of Arunachal Pradesh, Nagaland and Mizoram.
 - ILP is based on the Bengal Eastern Frontier Regulation Act (BEFR), 1873. It is an official travel document or a special permit issued by the Government of India, which allows inward travel of an Indian citizen into a protected area for a limited period.

10.2. PATHALGADI MOVEMENT

- Around 10,000 tribals in Jharkhand's Khunti town, (constituting 2% of the district's population) are **facing sedition charges under IPC section 124A**, for participating in Pathalgadi movement.
- Under **Pathalgadi Movement** (literally 'laying stones'), tribals put up stone monoliths with engravings in order to enlighten Adivasi people about their constitutional and other rights.
 - The engravings usually highlight the special autonomy granted to Adivasi areas under the Fifth Schedule of the Indian Constitution and key provisions of the PESA (Provisions of the Panchayats (Extension to Scheduled Areas) Act, 1996) are also carved.
 - Moreover, it is used as a way by Adivasis to demarcate their territories. And, outsiders like police and paramilitary forces are not welcomed in Pathalgadi areas.
- It started after the Jharkhand government amended colonial-era laws that diluted the tribes' rights to forest land.

10.3. SPECIAL PROTECTION GROUP (AMENDMENT) ACT

- The **Special Protection Group (Amendment) Act, 2019** has been passed in both Houses of Parliament.
- **Provisions of the Bill**
 - Bill seeks to **amend Special Protections Group Act, 1988**.

- ✓ SPG was formed on the recommendations of the **Birbal Nath committee, 1985**.
- SPG will continue to provide security to the **Prime Minister** and members of his immediate family residing with him **at his official residence**.
- It will also provide security to any **former Prime Ministers** and his immediate family members, for a period of **five years** from the date on which he ceases to hold the office of Prime Minister.
 - ✓ Earlier in the Act, such a security was provided for a period of one year. However, there was **no cut off period for providing the SPG protection to former Prime Ministers or members of their immediate families** as it could be extended beyond one year based on threat perception.
 - ✓ Thus, **the number of individuals** to be provided SPG cover can potentially **become quite large**. In such a scenario, there can be **severe constraint on the resources**, training and related infrastructure of SPG.
- If the SPG security is withdrawn from a former Prime Minister, it will also be withdrawn from his immediate family members.
 - ✓ Earlier, if the level of threat faced by any immediate family member warranted such security then it was provided to him.

10.4. KULBHUSHAN JADHAV CASE

- Recently, International Court of Justice (ICJ) in its report to UN General Assembly found that Pakistan had violated its obligations under Article 36 of the Vienna Convention in the case of Indian national Kulbhushan Jadhav.
 - Article 36 of the Vienna Convention on Consular Relations requires a nation arresting or detaining a foreign national to afford the detainee access to his or her consulate and to notify the foreign national of the right of consular access.
 - On the issue of exclusion of rights relating to consular access because of espionage, the court clarified that there **is no provision in the Vienna Convention containing a reference to cases of espionage; nor does the Article 36** exclude from its scope certain categories of persons, such as those suspected of espionage.

International Court of Justice (ICJ)

- The International Court of Justice (ICJ) is the principal judicial organ of the United Nations (UN).
- It was established in June 1945 by the Charter of the United Nations.
- The Court's role is to settle, in accordance with international law, legal disputes submitted to it by States and to give advisory opinions on legal questions referred to it by authorized United Nations organs and specialized agencies.

10.5. H-1B VISA DENIALS

- United States of America has **ramped up H-1B denials** under the executive order “Buy American and Hire American”. **H-4 visas have also been issued at a much lower rate.**
- Out of the total H-1B applications in 2018, 74% came from India. Hence, **Indian applicants are most affected by the increase in visa denials.**
- **H-1B visas** allow US companies to employ foreign workers temporarily in specialised occupations for three years, extendable to six years.
- **H-4 visa** is a visa issued to immediate family members like spouse & children of H-1B workers.

10.6. PRICE DEFICIENCY PAYMENT

- Recently, Haryana decided to **bring more crops under Bhavantar Bharpayee Yojna (BBY)** scheme to ensure farmers of fair prices for their produce and emphasising on diversification of crops.
 - It is **Price Deficiency Payment scheme of Haryana** which aims to reduce farmer’s risk of getting the low prices of these vegetables in the market by providing them a protected price.
 - Scheme will now **include carrots, peas, kinnow, guava, capsicum and brinjal** along with potato, onion, tomato and cabbage which were covered earlier.
- Under **Price Deficiency Payment**, farmers are proposed to be **compensated for the difference between the government-announced Minimum Support Price (MSP) for select crops and their actual market prices.**
 - This system aims to **address the gaps in MSP** based procurement of crops.
- **Central Scheme ‘Pradhan Mantri Annadata Aay SanrakshAn Abhiyan’ (PM-AASHA)** also has one of the component as **Price Deficiency Payment scheme** while other components include Price Support Scheme (PSS) and Pilot of Private Procurement and Stockiest Scheme (PPSS).
- Other states having similar schemes include the **Bhavantar Bhugtan Yojana (BBY)** by **Madhya Pradesh** and the incentive given to **milk farmers** by **Karnataka**.

10.7. PATENT PROSECUTION HIGHWAY PROGRAMME

- Recently, the Union Cabinet approved a proposal for **Bilateral Patent Prosecution Highway (PPH) Programme** between the Indian Patent Office and patent offices of other interested countries.
- With this, the **patent offices of India and Japan** have inked an agreement for expeditious grant of patents to Indian entities and individuals by entering into the **pilot programme on PPH** for a period of three years.

- Under this pilot programme, **Indian Patent Office** may receive patent applications in certain **specified technical fields only**, like electrical, electronics, computer science, information technology, physics, civil, mechanical, textiles, automobiles and metallurgy while **Japan Patent Office** may receive applications in **all fields of technology.**
- The **PPH programme will lead to benefits like:**
 - reduction in disposal time and pendency of patent applications
 - consistency in quality of granted patents
 - more inbound investments by companies
 - introduction of newer technologies thereby giving fillip to Make in India and increasing employment opportunities.

10.8. KHADI GETS SEPARATE HS CODE

- Recently, Khadi has been allocated a separate Harmonized System (HS) code by the Ministry of Commerce and Industry.
- The absence of a separate HS code hindered Khadi from achieving its full potential, as its exports were difficult to categorize and calculate.
- Harmonized System is a **six-digit identification code developed by the WCO (World Customs Organization).**
 - It allows participating countries to classify traded goods on a common basis for customs purposes.
 - Customs organizations use this code to clear every commodity that enters or crosses any international border.
- WCO is an independent intergovernmental body whose mission is to enhance the effectiveness and efficiency of Customs administrations.

10.9. OECD ECONOMIC OUTLOOK 2019

- Economic Outlook is a twice-yearly analysis published by the Organisation for Economic Co-operation and Development (OECD) with economic analysis and forecasts for future economic performance of OECD countries and selected non-member countries.

Key Findings of 2019 Economic Outlook

- It estimated global GDP growth for this year is 2.9% and 3% for 2020-21. This is the lowest rate since the 2008 global financial crisis.
- **On India:** It marginally cut India’s economic growth forecast for 2019 to 5.8%, but said it would pick up to 6.2% in 2020 and further to 6.4% in 2021.

10.10. CREDIT-LINKED SUBSIDY SERVICES AWAS PORTAL

- **Minister for Housing and Urban Affairs** launched **Credit-linked Subsidy Services Awas Portal, (CLAP)**.
- The portal provides a **transparent and robust real-time web-based monitoring system** for beneficiaries of credit-linked Subsidy Services (CLSS) under **Pradhan Mantri Awas Yojana-Housing for All (Urban)**.
- Using the portal, a beneficiary can **track his application status in real-time** and thus will help in **addressing the grievances of beneficiaries** in a more comprehensive and organized manner.
- CLAP would also **benefit other stakeholders to work in synergy** to release subsidy to beneficiaries on time.
- Pradhan Mantri Awas Yojana (Urban) aims **housing for all** in urban areas by 2022.

10.11. MANDATORY PACKAGING IN JUTE MATERIALS

- The Cabinet Committee on Economic Affairs, has accorded its approval for mandatory packaging of **food grains and sugar** in jute material for the Jute Year 2019-20.
- Government has retained the scope of mandatory packaging norms under the **Jute Packaging Material (JPM) Act, 1987** as per last year.
- The JPM Act was enacted to protect the jute sector from the plastic packaging segment.
- Under it, the government has mandated that **100% of the food grains** and **20% of the sugar** shall be mandatorily packed in **diversified jute bags**.

10.12. ICEDASH AND ATITHI

Recently, the government unveiled two new IT initiatives, **ICT ICEDASH and ATITHI**.

About ICEDASH

- ICEDASH is **Ease of Doing Business monitoring dashboard** of the Indian Customs helping public see the daily Customs clearance times of import cargo.
- This dashboard has been developed by the **Central Board of Indirect Taxes and Customs (CBIC)** in collaboration with National Informatics Centre.

About ATITHI

- ATITHI is **Easy to use mobile app, developed by CBIC** for international travellers to file the Customs declaration in advance.
- This will **facilitate hassle-free and faster clearance** by Customs at the airports and enhance the experience of international tourists and other visitors at the airports with.

10.13. KODAVAS COMMUNITY OF COORG

- Recently, Central government decided to **continue a British-era rule of exempting** the Kodava community, from obtaining licence for firearms such as pistols, revolvers and double-barrelled shotguns.
- The current exemption has been given for a **tenure of 10 years**, till 2029.
- **About Kodavas**
 - Kodavas (also known as Kogadu), a well-known **martial community of Coorg region in Karnataka**.
 - They **worship weapons during the 'Kailpodh' festival** and are the **only** community in the country who are **exempted from obtaining arm licenses**.
 - They are known for its outstanding **contributions** to the **country's defence sector** and hence, Coorg is also called the **Land of Generals**.
 - Another **distinguishing characteristic** of this community is the high status given to women like no child marriage, dowry is forbidden and widow remarriage is prevalent.
 - **Other important festivals** celebrated by Kodavas are Puttari (to celebrate the first harvest of paddy) and Kaveri Sankramana.

10.14. NIGHT TRIAL OF AGNI-II

- Recently, **India successfully conducted the night trial of Agni-II missile** for the first time.
- **About AGNI-II missile**
 - It is **surface-to-surface medium-range nuclear-capable ballistic missile**.
 - It is **developed by the Defence Research and Development Organisation (DRDO)**.
 - It has already been inducted into the armed forces.
 - It is **20-metre-long**, and has a strike range of **2,000 km**. It has a launch weight of 17 tonnes and can carry a payload of 1,000 kg.
 - It is a two-stage missile **equipped with advanced high accuracy navigation system**, was guided by a novel state-of-the-art command and control system and **propelled by solid rocket propellant system**.

10.15. MILITARY EXERCISES

- **Counter-Terrorism Table-Top Exercise (CT-TTX):** It is **first counter-terrorism exercise for "Quad" countries** (U.S., India, Japan and Australia) recently hosted by the National Investigation Agency in New Delhi.
- **Exercise Surya Kiran- XIV:** It is joint military exercise between **India- Nepal**
- **Exercise Mitra Shakti-VII:** It is joint military exercise between **India-Sri Lanka**.

- **Exercise Shakti- 2019:** It is biennial **joint military exercise between armies of India and France**, conducted alternately in India and France.
- **Exercise Za'ir-Al-Bahr:** It is **joint maritime exercise** between the navies of **India and Qatar**.
- **Tiger Triumph:** It is first ever tri service joint exercise between **India and the United States**. The exercise will primarily focus on humanitarian disaster and relief (HADR) operations.
- **Dustlik-2019:** It is first ever joint military exercise between **India and Uzbekistan**.

10.16. GLOBAL TERRORISM INDEX (GTI), 2019

- The index is published by the Sydney-based **Institute for Economics & Peace (IEP)**.
- The index provides a **comprehensive summary of the key global trends and patterns in terrorism since 2000**.
- It produces a composite score in order to provide an **ordinal ranking of countries on the impact of terrorism**.
- **According to 2019 Index**
 - **Number of global deaths from terrorism fell 15.2% in 2018**, even as the number of countries affected by extremist violence continued to grow.
 - The **largest declines in 2018 were recorded in Iraq**, which proclaimed a military victory over IS in 2017, and **Somalia**, where US forces have been conducting airstrikes against Shabaab extremists since 2017.
 - **Afghanistan, where the Taliban** succeeded IS was ranked the **top most terror stricken country**, ahead of Iraq, Nigeria and Syria.

10.17. MIGRATORY BIRDS DIE IN SAMBHAR LAKE

- Recently, thousands of migratory birds died at Sambhar lake in Rajasthan due to **Avian botulism**.
- It is **caused by a bacterium called Clostridium botulinum**.
- **It affects the nervous system of birds**, leading to flaccid paralysis in their legs and wings and neck.
- It is found that biological oxygen demand in sambhar lake is above permissible limits, this led to rise of Clostridium botulinum.
 - **Clostridium botulinum** are heat-resistant and in the absence of oxygen they germinate, grow and then excrete toxins.
- **About Sambhar Lake**
 - India's largest inland saltwater lake situated in Rajasthan.
 - It has been designated as wetland of international importance under Ramsar Convention.

- The site is important for a variety of wintering waterbirds, including large numbers of flamingos. Human activities consist of salt production and livestock grazing.

10.18. LOKTAK INLAND WATERWAYS PROJECT

- **Ministry of Shipping** has given approval for the development of **Loktak Inland Water Ways improvement project in Manipur** under the central sector scheme.
- The project will develop the **Inland water transport connectivity** in North East States and give boost to the tourism sector also.
- **Loktak Lake** is the **largest fresh water lake** in Northeast India, located at Moirang in Manipur.
 - It is famous for **floating Phumdis** (heterogeneous mass of vegetation, soil and organic matter) and **Keibul Lamjao National Park** which is the only floating national park in the world.
 - **Sangai Deer** (engendered species) has the habitat in Keibul Lamjao National Park.

10.19. NRCA NEW POLICY ON 'MAN-EATER' TIGERS

- National Tiger Conservation Authority (NTCA) in its new guidelines has **replaced the word 'man-eater' with 'dangerous to human life'** for tigers.
- Till now the forest department had to find evidence to prove that a tiger had killed humans before it could issue order either capture it or eliminate it, resulting in loss of both time and human lives.
- But classifying a tiger as **'dangerous to human life'** will enable the forest department to take action when an animal strays into a human settlement and capture it without having to prove whether or not it's a man eater.
- The new guidelines **also ban non-departmental individuals, like private sharpshooters**, from participating in operations to eliminate/tranquillise or capture tigers in conflict.

10.20. MEGHALAYA LIVING ROOT BRIDGES

- Recently, German researchers published living root bridges study in journal Scientific reports.

About Living root bridges (Jing kieng jri)

- This is **community driven innovation** by forest dwellers especially Khasi and Jaintia peoples of Meghalaya by weaving and manipulating the **roots of the Indian rubber tree (Ficus elastica) in hollowed out Areca catechu or native bamboo trunks**.
- Indian rubber tree is conducive to the growth of bridges because of three main **properties- they are**

elastic, the roots easily combine and the plants grow in rough, rocky soils.

- Spanning between 15 and 250 feet and built over centuries, the bridges, **primarily a means to cross streams and rivers**, have also become world-famous tourist attractions.

10.21. GLYPHOSATE-BASED HERBICIDES

- The pharmaceutical company **Bayer** is facing various lawsuits over one of its **herbicides**, which is based on a compound called **glyphosate**.
- Developed in 1970, glyphosate is applied to the **leaves of plants to kill weeds**.
- It is used extensively in India in states like **Maharashtra** (for sugarcane, maize and other fruit crops), **West Bengal** and **Assam** (for tea cultivation).
- It has been under contention, after a research published by the World Health Organisation (WHO) stated that glyphosate is **“probably carcinogenic to humans”**.

10.22. NUGEN MOBILITY SUMMIT

- Recently, the **NuGen Mobility Summit** was organized in Manesar, Gurugram by the **International Centre for Automotive Technology (ICAT)**.
- The **objective** of the Summit was to **share new ideas, learnings, global experiences, innovations and future technologies** trends for the faster adoption, assimilation and development of advanced Automotive Technologies for a smarter and greener future.
- The **ICAT**, located in Manesar, is an automotive testing, certification and R&D service provider under the aegis of NATRiP (National Automotive Testing and R&D Infrastructure Project), Government of India.
- **NATRiP** is an initiative in Automotive sector, joining of hands between the Government of India, a number of State Governments and Indian Automotive Industry to create a state-of-the-art Testing, Validation and R&D infrastructure in the country.

10.23. GOVERNING COUNCIL MEETING OF SACEP

- Recently, **15th governing council meeting of South Asia Cooperative environment Programme (SACEP) was held in Dhaka, Bangladesh**.
- Along with SACEP, the 6th Inter-governmental Meeting of South Asia Seas Programme (SASP) was also held.

About SACEP

- **SACEP** is an inter-governmental organization which was established in 1982.
- Its member countries **Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka** aim to promote and support protection,

management and enhancement of the environment in the region.

About SASP

- SASP is a regional agreement adopted in 1995 – among the five maritime countries of South Asia, **Bangladesh, India, Maldives, Pakistan and Sri Lanka**, sharing the Indian Ocean.
- SASP is part of the global **Regional Seas Programme** established under the auspices of **UN Environment**.
- It aims to **protect and manage the marine environment and related coastal ecosystems of the region** in an environmentally sound and sustainable manner
- SACEP acts as the Secretariat for the South Asian Seas Programme.

10.24. GREEN CLIMATE FUND

- India gets USD 43 million from **Green Climate Fund** to boost climate resilience in 3 coastal states.
- The six-year project will build climate-resilient livelihoods for 1.7 million people in Andhra Pradesh, Maharashtra and Odisha and offset 3.5 million tonnes of carbon, protect vulnerable ecosystems, and benefit another 10 million people with improved shoreline protection.

Climate financing mechanisms

- **Green Climate Fund (GCF):**
 - GCF helps developing countries limit or reduce their greenhouse gas (GHG) emissions and adapt to climate change.
 - It was **set up** in 2010 as part of the **United Nations Framework Convention on Climate Change (UNFCCC)**'s financial mechanism.
 - When the Paris Agreement was reached in 2015, the Green Climate Fund was given an important role in serving the agreement and supporting its goal.
 - GCF aims to catalyze a flow of climate finance to invest in low-emission and climate-resilient development, driving a paradigm shift in the global response to climate change.
- **Global Environment Facility (GEF):**
 - GEF was established on the eve of the 1992 Rio Earth Summit to help tackle most pressing environmental problems. The **World Bank serves as the GEF Trustee**, administering the Fund.
 - GEF funds are available to developing countries and countries with economies in transition to meet the objectives of the international environmental conventions and agreements.
- **Special Climate Change Fund (SCCF):**
 - SCCF was established under the UNFCCC in 2001 to finance projects in all developing country parties relating to: adaptation; technology transfer and capacity building etc.
 - GEF, as an operating entity of the Financial Mechanism, has been entrusted to operate the SCCF.
- **Adaptation Fund:**
 - It was established in 2001 to finance concrete adaptation projects and programmes in developing country Parties to the Kyoto Protocol that are

particularly vulnerable to the adverse effects of climate change.

- It is financed with a share of proceeds from the clean development mechanism (CDM) project activities and other sources of funding.

10.25. RED ATLAS MAP AND CFLOWS APP FOR FLOOD MITIGATION IN CHENNAI

- 'Red Atlas Action Plan Map' is a first of its kind map to be prepared by the Ministry of Earth Sciences, Tamil Nadu State Disaster Management Authority and Greater Chennai Corporation.
 - It will aid effective flood mitigation in Chennai which witnessed the worst deluge in 2015.
 - It includes probable scenarios for different rainfall periods while taking all historical datasets into account, for providing information on individual corporation wards
 - It aims at flood mitigation, preparedness, operations and management aspects.
- 'Coastal Flood Warning System App' (CFLOWS-Chennai) is a complete web GIS-based decision support system that involves coupling models of regional weather forecasts, storm surges and captures about 796 flood scenarios.
 - It can be used both for mitigation planning operations before flooding and in real time for aspects like relief work.

10.26. ASIAN DENDROCHRONOLOGY CONFERENCE

- Recently, 6th Asian Dendrochronology Conference was held in Lucknow.
- Research papers presented at the conference showed a close relationship between temperature, precipitation and tree ring width.
- They highlighted that reconstructions of past responses of vegetation from different ecosystems can predict the impact of climate change on weather and other environmental parameters.
- Dendrochronology is the study of tree rings that hold a wealth of information about not only a tree's past but also that of the ecosystem in which it lives.
 - Tree rings are layers of growth that a tree acquires in a year. The colour of old wood is always darker than a comparatively newer wood which creates a contrasting pattern of rings year on year.
 - The ring is thick in the years of good growth, characterised by a healthy supply of resources, it is thin when the ecosystem has dearth of resources.

10.27. SEXUAL TRANSMISSION OF DENGUE VIRUSES

- Recently, Spanish health authorities confirmed world's first case of dengue being transmitted

through sex, which until recently was thought to be transmitted only by mosquitos.

- Dengue is a viral disease transmitted mainly through the **Aedes Aegypti mosquito**, which thrives in tropical climates.

10.28. 3S PROJECT

- Centre is planning to expand the reach of the Smart Safety Surveillance or 3S programme.
- It is a project to optimize post-marketing surveillance of priority drugs and vaccines.
 - It was recommended by the World Health Organization (WHO), considering the limited safety data on vaccines introduced in India.
 - It aims to ensure the vaccines distributed under the universal immunization programme are safe.
- As part of the 3S project, India is evaluating the recently-introduced rotavirus vaccines.
- It is also trying to strengthen the collaboration among key stakeholders, such as Ministry of Health and Central Drugs Standard Control Organisation (CDSCO), to ensure high levels of vigilance.

10.29. INDIAN BRAIN ATLAS (IBA 100)

- Researchers at the International Institute of Information Technology, Hyderabad (IIIT Hyderabad) have created the first ever Indian Brain Atlas known as IBA 100.
- To construct this Indian population-specific human brain atlas, the researchers took MRI scans of 100 Indians.
- The study from this atlas has revealed the average brain size of an Indian was smaller in height, width and volume in comparison to people of the Caucasian and eastern (Chinese and Korean) races.
- Until now, Montreal Neurological Institute (MNI)'s Caucasian brains were used as standard to study brain. So, these MNI templates were not ideal for Indian population due to difference in ethnicity and ran the risk of misdiagnosis due to the difference in size of the brains.
- IBA 100 will help in better/early diagnosis of Alzheimer's and other brain-related ailments.
- The MNI and International Consortium for Brain Mapping (ICBM) had created first-ever digital human brain atlas in 1993.

10.30. FASTAG

- Govt relaxes FASTag deadline by a month due to shortage of tags. The new system was to start on December 15.
- Under a new "One Nation One FASTag" scheme, the National Highway Authority of India (NHAI) is trying to get states on board so that one tag can be used seamlessly across highways, irrespective of whether it is the state or the Centre that owns/manages it.

- It employs **Radio Frequency Identification (RFID) technology** for payments directly from the prepaid or savings account linked to it. It is affixed on the windscreen that can enable electronic payment when it crosses a booth without stopping.
- A FASTag is valid for five years and can be recharged as and when required.

10.31. ACCELERATOR LAB

- The United Nations Development Programme (UNDP) has launched the **India chapter** of its new initiative, **Accelerator Labs**, for which it is partnering with Germany and Qatar.
- It **seeks to drive innovation** in order to address some of the most pressing issues facing India, including air pollution, sustainable water management and client-resilient livelihoods.
 - The project has been launched in collaboration with the government's **Atal Innovation Mission**.
- They **identify grassroots solutions** together with local actors and validate their potential to accelerate development.
- Accelerator Labs are built on UNDP's partnerships with governments to scale solutions. This is highlighted in the Indian Accelerator Lab team's philosophy to '**work out loud**', or share the issues.

10.32. DWARF PLANETS IN SOLAR SYSTEM

- Recently, the astronomers have suggested that **Hygiea** may possibly be considered as a dwarf planet.
- Currently, there are **officially five dwarf planets** in our Solar System, namely, **Pluto, Eris, Makemake, Haumea and Ceres**.
- The **International Astronomical Union** sets **four criteria** for a dwarf planet, which are, it **orbits** around the Sun; it is **not a moon**; it has **not cleared** the neighbourhood around its orbit and lastly it has **enough mass** that its own gravity pulls it into a roughly spherical shape.
- **Hygiea**, which was considered as an **asteroid** till now, lies in the asteroid belt between **Mars** and **Jupiter**. Earlier it was thought that Hygiea qualifies only **first three** criteria.
- But now, new observations made through the European Space Organisation's **SPHERE instrument** at the Very Large Telescope (VLT), show that Hygiea satisfies the **fourth** criteria too and thus qualifies to be classified as a dwarf planet.

10.33. SAANS CAMPAIGN

- Recently, Ministry for Health and Family Welfare launched '**SAANS'-Social Awareness and Action to Neutralise Pneumonia Successfully**.
- **It aims**

- To reduce child mortality due to pneumonia.
- To mobilise people to protect children from pneumonia,
- To train health personnel and other stakeholders to provide prioritised treatment to control the disease.

- Under the campaign, a child suffering from pneumonia can be treated with **pre-referral dose of anti-biotic amoxicillin by ASHA workers**.
- Health and wellness centres can use pulse oximeter device to identify low oxygen levels in the blood of a child, and if required, treat him by use of oxygen cylinders.
- **Pneumonia is a lung infection** that is most commonly caused by viruses or bacteria. These infections are generally spread by direct contact with infected people.

10.34. WINTER-GRADE DIESEL FOR HIGH ALTITUDE REGIONS

- Indian Oil Corporation (IOC) has launched a special **winter-grade diesel** for high altitude regions like Ladakh.
- In **regular diesel fuel, paraffin wax** is added to improve for improving viscosity and lubrication but at low temperatures of **-30° Celsius**, it thickens or "gels" leading to freezing of diesel.
- The **winter-grade diesel** developed by IOC has a low pour point of **-33° Celsius** which means that it has certain additives that enable the fuel to remain fluid in extremely low temperatures during the winter months in high-altitude sectors like Ladakh or Kargil.
 - **Pour Point** - It is the temperature below which the liquid loses its flow characteristics.
- It is likely to reduce the hardships faced by the local people for transportation and mobility during winter months, helping facilitate the local economy and tourism.

10.35. NEW HIV SUBTYPE FOUND BY GENETIC SEQUENCING

- Recently, a new **subtype of the Human Immunodeficiency Virus (HIV)** that causes AIDS has been identified through genome sequencing.
- It is called **HIV-1 Group M, subtype L**. Such a discovery was made for **first time in two decades**.
- There are **two major types** of the human immunodeficiency virus. HIV-1, representing the vast majority of infections worldwide, while HIV-2 is far less common and primarily concentrated in the west and central African regions.
- Group M viruses are responsible for the **global pandemic**, which can be traced back to the **Democratic Republic of Congo (DRC)** in Sub-Saharan Africa.
- **Genome sequencing** is the process of determining the complete DNA sequence of an organism's genome. It figures out the **order of DNA nucleotides**,

or bases, in a genome, i.e. the order of Adenine, Cytosine, Guanines, and Thymine that make up an organism's DNA.

10.36. GLOBAL BIO-INDIA SUMMIT, 2019

- Recently **Global Bio-India Summit, 2019** was held in Delhi. It was India's **first largest biotechnology conference**.
- It was organised by The **Department of Biotechnology** (under Ministry of Science and Technology) and **Biotechnology Industry Research Assistance Council (BIRAC)**.
- It showcased the **potential of India's biotech sector** to the international community.
- **BIRAC** is a not-for-profit, Public Sector Enterprise, set up by Department of Biotechnology (DBT).
 - It acts as an Interface Agency to **strengthen and empower the emerging Biotech enterprise to undertake strategic research and innovation**, addressing nationally relevant product development needs.

10.37. QS WORLD UNIVERSITY RANKINGS FOR ASIA

- In the **QS World University Rankings Asia 2020**, **96 Indian institutions** rank among 550 (8 among the top 100 and 31 among the top 250) for the continent.
- Only Mainland China is more represented than India. It has four institutions in the top 10 this year, India **does not yet have a university among the top 30**.

- The best performing institution from India is **IIT Bombay** (dropped one place to 34th place), It is followed by **IIT Delhi** (43rd place) and **IIT Madras** (50th place).
- The QS Rankings use a methodology based on **11 metrics** like 'Academic Reputation', 'Employer Reputation', 'Papers per Faculty', 'Citations per Paper', 'Staff with PhD' etc.
- India dominates the '**Staff with PhD**' indicator with seven institutions achieving the perfect 100.00 score. All seven are IITs.

10.38. BHARATIYA POSHAN KRISHI KOSH

- Recently, **Ministry of Women and Child Development (WCD)**, announced **Bharatiya Poshan Krishi Kosh (BPKK)**.
- The BPKK will be a **repository of diverse crops across 128 agro-climatic zones** in India for **better nutritional outcomes**.
- The Kosh aims at **reducing malnutrition through a multi-sectoral results-based framework**, including agriculture, among women and children across the country.
- The project team will **select around 12 high focus states** which are representative of the geographical, social, economic, cultural and structural diversities of India.

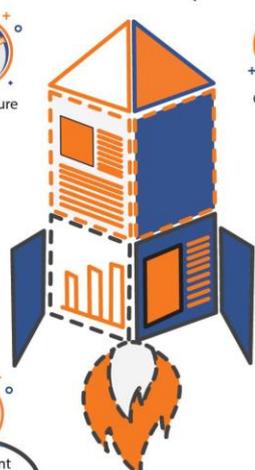
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11. GOVERNMENT SCHEMES IN NEWS

11.1. PRADHAN MANTRI MATRU VANDANA YOJANA (PMMVY)

Why in News?

According to RTI data, almost 61% of beneficiaries registered between April 2018 and July 2019 received the full amount of ₹6,000 promised under the Pradhan Mantri Matru Vandana Yojana (PMMVY).

Objective	Beneficiary	Key Features
<ul style="list-style-type: none"> • Providing partial compensation for the wage loss in terms of cash incentives so that the woman can take adequate rest before and after delivery of the first living child. 	<ul style="list-style-type: none"> • All Pregnant Women and Lactating Mothers (PW&LM) having first child in family. • In case of Miscarriage/ Still Birth/ Infant Mortality, a beneficiary is eligible to receive benefits under the scheme only once. • Exclusion: PW&LM who are in regular employees of Central Government or State Governments or PSUs or those who are in receipt of similar benefits under any law for the time being in force. 	<ul style="list-style-type: none"> • PMMVY is implemented using the platform of Anganwadi Services scheme of Umbrella ICDS under Ministry of Women and Child Development. • A cash incentive of Rs 5000 is provided directly in the account of PW&LM for first living child of the family subject to their fulfilling specific conditions relating to Maternal and Child Health. • The cash incentive provided would lead to improved health seeking behaviour amongst the PW& LM. • Cash incentive of Rs.5000 in three installments: <ul style="list-style-type: none"> ○ 1st installment of Rs.1000 on early registration of pregnancy, ○ 2nd installment of Rs.2000 after six months of pregnancy, ○ 3rd installment of Rs.2000 after child birth is registered and the child has received the first cycle of BCG, OPV, DPT, Hepatitis-B, or its equivalent/ substitute. • The eligible beneficiaries would receive the incentive given under the Janani Suraksha Yojana (JSY) for Institutional delivery and the incentive received under JSY would be accounted towards maternity benefits so that on an average a woman gets Rs.6000.

11.2. PRADHAN MANTRI KISAN SAMPADA YOJANA (PMKSY)

Ministry of Food Processing Industries (MoFPI) has approved projects worth Rs 271 crore under the Creation/Expansion of Food Processing & Preservation Capacities (CEFPPC) scheme, which is a component of **Pradhan Mantri Kisan SAMPADA Yojana (PMKSY)**.

Objective	Key Features
<ul style="list-style-type: none"> • Creation of modern infrastructure for food processing mega food parks/ clusters and individual units • To create effective backward and forward linkages - linking farmers, processors and markets • To create robust supply chain infrastructure for perishables 	<ul style="list-style-type: none"> • PMKSY was earlier named as SAMPADA (Scheme for Agro- Marine Processing and Development of Agro-Processing Clusters). • It is a comprehensive package which will result in creation of modern infrastructure with efficient supply chain management from farm gate to retail outlet. • It will provide a big boost to the growth of food processing sector and better returns to farmers. • It will also help in doubling of farmers income, creating huge employment opportunities especially in the rural areas, reducing wastage of agricultural produce, increasing the processing level and enhancing the export of the processed foods. • This central sector scheme has been approved for the period of 2016-20 coterminous with the 14th Finance Commission cycle. • It is an umbrella scheme incorporating ongoing schemes of the Ministry of Food Processing which will result in creation of modern infrastructure with efficient supply chain management from farm gate to retail outlet. • Schemes under PMKSY - <ul style="list-style-type: none"> ○ Mega Food Parks ○ Integrated Cold Chain and Value Addition Infrastructure ○ Food Safety and Quality Assurance Infrastructure ○ Creation/Expansion of Food Processing & Preservation Capacities ○ Infrastructure for Agro-processing Clusters ○ Creation of Backward and Forward Linkages ○ Human Resources and Institutions.

11.3. PRADHAN MANTRI MUDRA YOJANA (PMMY)

The Reserve Bank of India (RBI) has expressed concern over rising bad loans from Pradhan Mantri MUDRA Yojana (PMMY) by Ministry of Finance.

Objective	Beneficiary	Key Features
<ul style="list-style-type: none"> Increasing access of finance to the unbanked. To bring down the cost of finance (from the Last Mile Financers) for the micro/ small enterprises, which are mostly in the informal sector. 	<p>Any Indian Citizen who has a business plan for a non-farm sector income generating activity such as manufacturing, processing, trading or service sector and whose credit need is less than Rs 10 lakh.</p>	<ul style="list-style-type: none"> MUDRA loans are extended by banks, NBFCs, MFIs and other eligible financial intermediaries as notified by MUDRA Ltd. For implementing the Scheme, government has set up a new institution named, Micro Units Development & Refinance Agency Ltd (MUDRA). MUDRA Bank would be responsible for refinancing all Last Mile Financers such as Non-Banking Finance Companies, Societies, Trusts, , Co-operative Societies, Small Banks, Scheduled Commercial Banks and Regional Rural Banks which are in the business of lending to micro/small business entities engaged in manufacturing, trading and services activities. The present authorised capital of MUDRA is at Rs. 5000 crore. RBI has allocated an amount of Rs 20,000 crore from Priority Sector shortfall of Commercial Banks for creating a Refinance Corpus Fund. 3 types of loans to be allotted by micro units' development and refinance agency bank are: <ul style="list-style-type: none"> Shishu: covering loans upto Rs. 50,000 Kishor: covering loans above Rs. 50,000 and upto 5 lakhs Tarun: covering loans above Rs. 5 lakh and upto 10 lakhs There is no subsidy for the loan given under PMMY. However, at present, MUDRA extends a reduction of 25bps in its interest rates to MFIs / NBFCs, who are providing loans to women entrepreneurs. Banks have been mandated by RBI not to insist for collateral security in the case of loans upto 10 lakh extended to the units in the Micro Small Enterprises sector.

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