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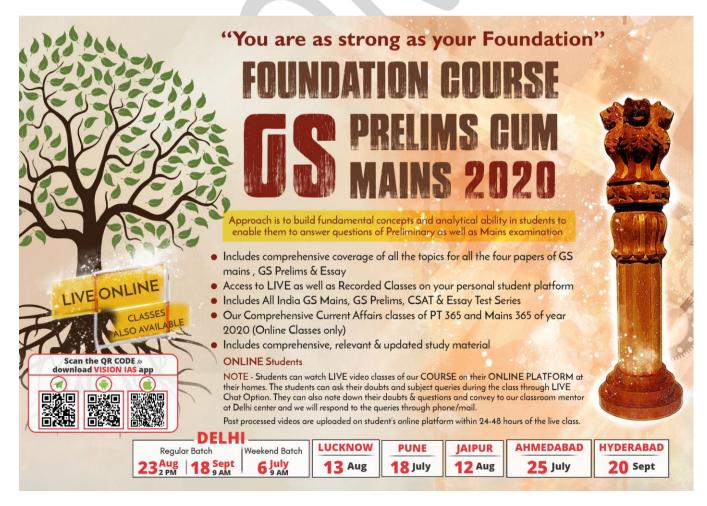
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1. POLITY & CONSTITUTION

1.1. REMOVAL OF ARTICLE 370 AND 35A

Why in news?

The Centre decided to end the special status given to Jammu and Kashmir (J&K) under Article 370.

More on news

- President of India in "concurrence" with the "Jammu and Kashmir government" promulgated Constitution
 (Application to Jammu and Kashmir) Order, 2019 which states that provisions of the Indian Constitution are
 applicable in the State. This effectively means that all the provisions that formed the basis of a separate
 Constitution for Jammu and Kashmir stand abrogated. With this, Article 35A is scrapped automatically.
- Along with this, a statutory resolution was approved by the Parliament which invoking the authority that flows from the effects of Presidential Order – recommended that the President abrogate (much of) Article 370.
- Also, Jammu and Kashmir Reorganization Act, 2019 was passed by the Parliament. Jammu & Kashmir (J&K) was re-organised into two Union Territories J&K division with a legislative assembly and the UT of Ladakh without having an assembly.

Article 370 and Article 35A - A brief background

- The peculiar position of Jammu and Kashmir was due to the circumstances in which the State acceded to India. The Government of India had declared that it was the people of the state of J&K, acting through their constituent assembly, who were to finally determine the constitution of the state and the jurisdiction of government of India.
- The applicability of the provisions of the Constitution regarding this State were accordingly, to be in nature of an interim arrangement. This was the substance of the provision embodied in Art. 370 of the Constitution of India.
- Art. 370 had "temporary provisions with respect to the State of Jammu and Kashmir" which gave special powers to the state allowing it to have its own Constitution.

Possible implications of the move

- Complete applicability of Indian Constitution to J&K
- No separate flag
- Tenure of the J&K assembly to be five years, instead of the earlier six years.
- Replacing Ranbir Penal Code (the separate penal code for J&K) with the Indian Penal Code.
- Article 356 under which the President's Rule can be imposed in any state, will also be applicable to the UT of Jammu and Kashmir.
- The central quota laws in school-college admissions and state government jobs will apply.
- People from other states may be able to acquire property and residency rights.
- RTI would be made applicable.
- Certain provisions of the J&K Constitution which denied property rights to native women who marry a person from outside the State may stand invalidated.
- According to article 370, except for defence, foreign affairs, finance and communications, **Parliament needs** the state government's concurrence for applying all other laws.
- Article 35A of the Indian Constitution, which stemmed out of Article 370, gave powers to the Jammu and Kashmir Assembly to define permanent residents of the state, their special rights and privileges.

How the Scrapping of Article 370 and 35A became possible?

- President issued a **presidential order under Article 370 (1)** of the Constitution. This clause enables the President to specify the matters which are applicable to Jammu and Kashmir in concurrence with the Jammu and Kashmir government.
- The **order amended Article 367**. Article 367 contains guidance on how to read or interpret some provisions. The amended Article declares that "the expression 'Constituent Assembly of the State...' in Article 370 (3) shall be read to mean 'Legislative Assembly of the State'. Article 370(3) provided that the Article 370 was to be amended by the concurrence of the Constituent Assembly. However, because of the amendment, it can now be done away by a recommendation of the state legislature.
- In other words, the government used the power under 370(1) to amend a provision of the Constitution (Article 367) which, then, amends Article 370(3). And this, in turn, becomes the trigger for the statutory

resolution - Resolution for Repeal of Article 370 of the Constitution of India. As Jammu and Kashmir is under the president rule, concurrence of governor is considered as "Jammu and Kashmir government".

Scrapping Article 370: Constitutional and legal challenges

Petitions have been filed in the Supreme Court challenging the recent action of the Union Government on Jammu and Kashmir, the following legal issues may receive attention in the course of judicial deliberations.

- Legality of the Presidential order: Article 370 itself cannot be amended by a Presidential Order. Even though the Order amends Article 367, the content of those amendments, however, do amend Article 370. And as the Supreme Court has held on multiple occasions, you cannot do indirectly what you cannot do directly. Therefore, legality of the order – insofar as it amends Article 370 – is questionable.
- Misusing the President Rule and Making Governor as a substitute for the elected assembly: The governor is the representative of the Union Government in the State. In effect, the Union Government has consulted itself.
 - Also, President's Rule is temporary and is meant to be a stand-in until the elected government is restored. Consequently, decisions of a permanent character - such as changing the entire status of a state- taken without the elected legislative assembly, but by the Governor, are inherently problematic.
- Equating state assembly with constituent assembly: The difference is that the one has to exercise its powers as per the constitution, while the other develops the constitution. This distinction that is at the heart of India's basic structure doctrine that prevents certain constitutional amendments on the ground that Parliament, which exercises representative authority, is limited and cannot create a new constitution and thereby exercise sovereign authority.
- Going against the Jammu and Kashmir's Constitutional position: Presidential order has assumed that legislative assembly has power to scrap Article 370. But Article 147 of the Jammu and Kashmir Constitution prohibits such a move. The Article makes it clear that any changes to the Jammu and Kashmir Constitution needs the approval of two-thirds of the members of the legislative assembly.

Conclusion

When the Constituent Assembly of J&K ceased functioning, a long-standing debate about the nature of Article 370 started. Before dissolution, the Constituent Assembly neither recommended abolishing Article 370 nor did they advocate for it to be permanent. Yet, it remains to be seen whether the manner in which Article 370 has been repealed stands the test of judicial review.

Article 370 was about providing space, in matters of governance, to the people of a State who felt deeply vulnerable about their identity and insecure about the future. However, there are concerns that it neither served the common people in J&K nor did it facilitate J&K's integration with the rest of India. Therefore, one must hope that the move will bring a new dawn of development and inclusion for Jammu and Kashmir, which will give a voice to those who were deprived and marginalised.

1.2. NATIONAL REGISTER OF CITIZENS (NRC)

Why in news?

The updated and final National Register of Citizens, which validates bonafide Indian citizens of Assam has recently been released with over 19 lakh applicants having failed to make it to the list.

Background

The NRC has its roots in the Memorandum of Settlement or the Assam Accord signed between the Assam State Students Union and the Government of India in 1985. The accord was an outcome of the violent anti-migrant movement of the 1980s and contained various clauses to curb illegal migration.

The Assam Accord

It was a Memorandum of Settlement signed between representatives of the Government of India and the leaders of the Assam Movement in New Delhi on 15 August 1985.

It contained a provision that all 'foreigners' who came to Assam after March 25, 1971 should be detected and deported under the Illegal Migration Determination (by Tribunals) (IMDT) Act, 1983. It also talked about the deletion of foreigners' names from the electoral rolls.

- The Citizenship Act of 1955 was amended after the Assam Accord for all Indian-origin people who came from Bangladesh before January 1, 1966 to be deemed as citizens.
 - Those who came between January 1, 1966 and March 25, 1971 were eligible for citizenship after registering and living in the State for 10 years while those entering after March 25, 1971, were to be deported. However, nothing much happened over the decades.
- In 2014, the Supreme Court asked the state government to update the 1951 NRC in a time-bound manner. Present exercise has been conducted under the supervision of the Supreme Court.

What is NRC?

- The National Register of Citizens is a list of all the legal citizens of Assam, the only state with such a document.
- It is governed by the Citizenship Act, 1955, and the Citizenship (Registration of Citizens and Issue of National Identity Cards) Rules, 2003 (amended in 2009) and a 2010 order of the Ministry of Home Affairs, published in the Gazette of India.
- It will **include persons** whose names appear in any of the electoral rolls upto the midnight of 24th March, 1971 or National Register of Citizens, 1951 and their descendants.
- NRC Vs Census: The census is conducted every decade, on a national level and gives the state a window into the size and nature of Indian population. But the NRC is a unique exercise for the onus to prove citizenship lies with the citizens. They have to, through a documentary evidence, show how they have come to be citizens of India living in Assam.

Significance of having an NRC

- A long-term Solution: Established measures to curb illegal migration from Bangladesh, such as diplomatic and border management efforts failed to bring any results. The two main reasons for this are: 1) Bangladesh does not recognise any infiltration taking place from its territory to India; 2) The porous border between India and Bangladesh hinders effective border management. Thus, an NRC is being viewed as an alternate and a far-sighted administrative solution to the menace.
- Ascertaining the identity: NRC will provide a much-needed perspective on the extent of illegal migration. The fear that illegal immigrants will change the demography of state and influence the politics of state will also be done away with.
- A deterring tool: It is expected to deter future migrants from Bangladesh from entering Assam illegally as publication of the draft itself had created a perception that staying in Assam without valid documentation will attract detention/jail term and deportation.

Issues associated with the NRC

Fear of exclusion: There are concerns that NRC may end up incorrectly including or excluding people from the list.

decision of the Foreigners Tribunal.

There is also an issue related to D voters. D-voters are those who are disenfranchised by the government on the account of their alleged lack of proper citizenship credentials and their inclusion will depend on

- Concerns of minorities: There are fears that such an exercise could end up targeting minorities in the
 - The Citizenship (Amendment) Bill, 2016 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.

Provisions for people having missed out the

What is the Significance of the Cut of Date?

and civilians of East Pakistan.

NRC list

The cut of date was a critical bone of contention in

determining the status of migrants from Bangladesh to

India. It was on March 25, 1971 that the Pakistan

military junta started a crackdown on freedom fighters

The large-scale atrocities led to a steady exodus of

over 10 million refugees to India, who primarily spread

across the states of Assam, West Bengal, and Tripura.

- The Assam government has assured people that those who find their names missing from the final NRC will not immediately be termed "foreigners" or illegal immigrants.
- Such people will be allowed to register protests with the Foreigners Tribunal. They can even approach the High Court or even the Supreme Court for further appeal in the matter.
- The State government will also provide **legal aid to the poor** who find their names missing from the list.

- No specific policy in ascertaining the fate of people: The government has not prepared a post NRC implementation plan as
 - o 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**.
 - If they are identified as "illegal" migrants, they will be locked-up in detention camps, until their deportation. Media reports have been stating that these detention camps are infamous for their inhumane living conditions.
- Security concerns: Concerns are already being raised as to the security fallout.
- Issue of Statelessness: There are apprehensions, that India will end up creating the newest cohort of stateless people, raising the spectre of a homegrown crisis that will echo that of the Rohingya people who fled Myanmar for Bangladesh.

Way Forward

- Regarding finally excluded individuals: They would officially be non-citizens but India has no fixed policy for
 "stateless" persons. They will surely not have voting rights but certain facilities on "humanitarian grounds"
 may be provided to them such as right to work etc.
- Tackle issue of illegal migration comprehensively: Solving illegal migrants' issue in Assam will not solve the whole issue as they may very well come through states like West Bengal and then move on to the other parts of the country. Thus, following steps should be taken:
 - o **Comprehensive border management**: including fencing, total surveillance 24x7, use of new imaging technology etc.
 - **Forging bilateral agreement** with neighbouring countries that provide for taking back nationals who stay illegally in the other country after due verification.
 - Assistance from international organisations: such as United Nations High Commissioner for Refugees (UNHCR), the International Organization for Migration (IOM), and other concerned international agencies with experience in this kind of complex issue.
 - Establish a SAARC convention: India should take the initiative to encourage other countries in the SAARC region to develop a SAARC convention or declaration on refugees in which member states would agree to ratify the 1951 Refugee Convention.

The road ahead

Amidst all its apprehensions, the **NRC** is a **forward-looking step** in documenting India's citizens and detect and deter infiltrators. The NRC process, at the current juncture, is an outcome of both a judicial push and political balance of power as the Supreme Court has driven it, closely monitoring the entire process. The cooperation of the States will be key for the success of NRC.

1.3. REGULATING SOCIAL MEDIA

Why in news?

Recently, the Tamil Nadu Government told the Supreme Court that social media profiles of users should be linked with their Aadhaar numbers.

Background

- The Tamil Nadu government is seeking **Aadhaar-social media linking** after two PILs were filed in the Madras HC for authentication of identity.
 - But, the Madras High Court dismissed the original plea to link Aadhaar to social media accounts as it violated the Supreme Court's judgment on Aadhaar.
- On the other hand, various social media platforms including **Facebook have voiced their opinion against** such a move, as they fear it may be misused against them.
 - Different high courts have conflicting opinions regarding this and these platforms seek to transfer all these petitions to the Supreme Court
- The Supreme Court has highlighted that there is a need to find a balance between the **right to online privacy** and the **right of the state to trace the origins** of hateful messages and fake news.
- However, the point of contention is on the manner in which social media should be regulated.

Need for regulation of Social Media

- **Exponential increase-** in social media profiles on the platforms such as Whatsapp, Facebook etc.
- Quick spread of information- If some event happens in one part of the world, its information or disinformation can be spread in minutes, which can create chaos or panic.
- Disparity of information available- Owing to the limited knowledge about the source of news and fact check mechanisms.
- To curb illegal activities- such as spread of fake news, pornographic and anti-national content, among other things.

Challenges in regulation of Social Media

- Poor Compliance by the platforms- For example, when it comes to takedown of content by these platforms, governments often point out that there is lack of compliance.
- Tedious Process- For example, even if books are banned under CrPC, there needs to be a gazette notification and it allows people to challenge the decision.
 - Until a decision comes, the harm may have been done. This process is even more tedious in the case of social media.

• Ensure violence does not take place- such as against religious and ethnic groups. E.g. Muzaffarnagar riots.

Arguments against regulation

- Unconstitutional Move- as it is against the Right to Privacy interpreted by the court under the Constitution and also against the spirit of the Supreme Court's Puttaswamy privacy judgment.
 - o It can violate the individual's fundamental rights, dignity and personal information.
- **Could lead to commercial use of Aadhaar-** as it would result in users' messages and posts being traceable, which can be used to target profiles by different stakeholders.
 - Data Collection will increase as Aadhaar is tied across databases including driving licence and vehicular registration, PAN, social security benefits etc. When this information is collated with Aadhaar, it can lead to a 360-degree profile of an individual. This can be misused or tracked by various companies and applications.
- Will disempower some sections- which have been empowered by the anonymity of social media such as-
 - Women- have used anonymity to correct systemic and historic sexual harassment through the MeToo movement.
 - Caste Groups- have used it to highlight how certain institutions, particularly those that offer education and health services, have discriminated against them.
- **Prone to misuse-** the experts believe this could also allow the government to use social media platforms as surveillance tools.
- Wrong to link some issues with social media- e.g. Fake news is not an invention of digital age, rather has been present since long. These issues have not much to do with these platforms themselves

Way Forward

- A larger **stakeholder conversation** is required between companies, law enforcement agencies, civil societies, academicians and technical experts.
- Social media can be brought within a degree of regulation by adopting data protection laws. If these
 companies don't gather a lot of data, or if there is the right to correct data, it will provide a higher degree of
 security to people.

1.4. INDIA ENTERPRISE ARCHITECTURE (INDEA) FRAMEWORK

Why in News?

Shillong Declaration on e-governance adopted at the 22nd National Conference on e-Governance (NCeG) talked about India Enterprise Architecture (IndEA).

What is India Enterprise Architecture?

- IndEA, is a framework for **developing a holistic architecture** treating the Government as a single enterprise which are functionally inter-related.
- IndEA **provides a generic framework**, comprising a set of architecture reference models, which can be converted into an integrated architecture,

• With IndEA, there will be **one personalised account for each individual** and he or she can avail all government services from that account. This shall eliminate the need to visit separate sites and have separate logins on them to access government services.

Main principles of IndEA

The following set of principles inform and guide IndEA framework:

- **SDG Linkage**: Performance Measurement Systems are aligned to Sustainable Development Goals prioritized by the Government.
- Integrated Services that cut across agency-silos are identified, designed and delivered to realize the vision of ONE Government.
- **Sharing & Reusability**, i.e., all commonly required Applications are abstracted to be built once and deployed across the Whole-of-Government through reuse and sharing.
- Technology Independence: Application Design is open standards-based and technology-independent.
- **Data-sharing** across the Government, subject to rights and privileges, so as to prevent development and use of duplicative sets of data by different agencies.
- Mobile channels are mandatory for delivery of all services, among all delivery channels.

Envisaged benefits

- Provide a **ONE Government Experience to the citizens and businesses**, by offering integrated services through multiple channels, in a contactless, frictionless manner.
- Enhance the efficiency of delivery of services, by defining and enforcing service levels of a very high-order
- Improve the effectiveness of implementation of the developmental and welfare schemes through a holistic performance management.
- Enhance the productivity of employees and agencies through easy access to information.
- **Provide integrated and cross-cutting services through** seamless interoperability across the Whole-of Government.
- Bring in flexibility and agility in making changes to the systems to align with the best practices and to leverage the latest technologies.
- Realize cost-effectiveness through use of shared infrastructure and services.
- Enable establishing a Connected Government that works for inclusive development.
- Maintain the right balance between security of data and privacy of personal information.

Challenges

- **IndEA Framework is generic by design.** It cannot be used straightaway by any enterprise. The framework has to be customized to fit the broad requirements of the business vision and objectives of the enterprise.
- The methods of implementation vary widely across enterprises, depending on the ecosystem of governance and the current stage of evolution of e-Governance in the enterprise. As such it is difficult to lay down any principles or detailed procedures for the implementation stage
- Enterprise Architecture has intricate dependencies and inter-connections between several parts. It is **not possible to pull out individual components and redesign / implement them in isolation** as it would seriously impair the interoperability and integration capabilities across government

Conclusion

With IndEA, India would be inching closer towards digital governance and establish itself as a knowledge economy as envisaged in the Digital India initiative. To achieve this EA planners should recognize the importance and provide specialized resources and effort adequately in the planning phase.

1.5. MORE JUDGES FOR SUPREME COURT

Why in news?

Parliament has recently passed the legislation to increase the sanctioned strength of the Supreme Court from 31 to 34 including the Chief Justice of India.

Background

- Originally, under **Article 124** of the Indian Constitution the strength of Supreme Court was fixed at eight (one chief justice and seven other judges).
- Article 124 (1) provides the power to the Parliament to increase the number of judges if it deems necessary.
- The Parliament through **The Supreme Court (Number of Judges) Act, 1956** increased strength of Supreme Court to ten.
- The Act was last amended in 2009 to increase the judges' strength from 25 to 31.

Need to increase number of judges

- Huge pendency of cases As per Law Ministry, currently, 59,331 cases are pending in Supreme Court. Due to
 paucity of judges, the required number of constitution benches to decide important cases involving
 questions of law were not being formed.
- Low disposal rate- Case disposal rate in Supreme Court remained between 55 to 59% leading to delay in rendering justice to the public.



2. INTERNATIONAL RELATIONS

2.1. US-CHINA TRADE WAR

Why in News?

Recently, US formally labeled China a currency manipulator, further escalating its trade war with China.

More about news

- It's the first time that the US labeled a country a manipulator since the 1990s, when China was also the target.
- The move came after the People's Bank of China (PBOC), the central bank of **China**, allowed the yuan to suddenly depreciate relative to the dollar by 1.9 per cent one of the biggest single-day falls.
- It signaled that the **ongoing trade war between the world's two biggest economies** was now turning into a currency war as well.

Background of US-China trade war

- The US and China trade is heavily skewed in favour of the China. In 2018, the US had a trade deficit of \$419.2 billion with China.
- In August, 2017, US President Trump asked US Trade Representative to begin an investigation for **possible** tariff hikes on Chinese goods.
 - It promptly started in January 2018, when Trump imposed a 30 per cent tariff on foreign solar panels and
 20 per cent tariff on the first 1.2 million washing machines imported during the year. Both the moves primarily hurt Chinese interests.
 - US imposed heavy tariffs on imported steel and aluminum items from China and it responded by imposing tit-for-tat tariffs on billions of dollars worth of American imports.
- The dispute escalated in to trade war in which US demanded China to reduce US \$375 billion trade deficit, and introduce "verifiable measures" for protection of Intellectual Property Rights, technology transfer, and more access to American goods in Chinese markets.
- Made in China 2025 also drew the ire of US because of its focus on making China the dominant player in emerging fields of technology and manufacturing, as well as its support for domestic firms with subsidies.

Global Impact of trade war

- Lower world GDP: In a report earlier this year, the IMF noted that the US-China trade tension was one factor that contributed to a "significantly weakened global expansion" late last year, as it cut its global growth forecast for 2019.
 - According to a Bloomberg Economics report, uncertainty over trade could lower world gross domestic product by 0.6 per cent in 2021 compared to a no-trade-war scenario.
 - o If US and China continue to raise tariff and non-tariff barriers, the global economic growth rate will fall to a seven-year low of 2.8% and worse still, the world economy could enter a recession in near future.
- Impact on currencies: These tensions can shift "tariff war" to a potential "currency war". It leads to greater risks not only for those trading in US and Chinese currencies or their stocks (over 60% of global financial investors), but also for capital flows between emerging markets that tend to peg the value of their own currencies to the dollar.
- Coupling with BREXIT: Ongoing trade tensions between the US and China, and the uncertainty due to Brexit have impacted European countries exports badly especially on Germany which is the world's third-biggest trader after the US and China.
- Restructuring of Global value chains (GVCs): Machinery, electronics, and computer equipment account for 60% of US imports from China. These are made via GVCs that share production across a dozen or so countries. Less demand from the US would mean China buying fewer components and sub-assembly units from Japan, South Korea, Vietnam and Thailand. This will shrink trade and weaken the GVC model.
- Gain for textile industries in South Asia: Textile imports of US have shifted from China towards other countries in South Asia with Vietnam and Bangladesh witnessing larger increase in exports to USA.

What is currency manipulator?

Currency manipulation happens when governments try to artificially tweak the exchange rate to gain an "unfair" advantage in trade.

- Alternatively, cotton imports from USA to China have declined for the first half of 2019 and imports from other countries including Brazil, Australia and India have increased.
- **Weakened WTO**: The US steel and aluminum measures in March 2018 on frivolous grounds of national security was a violation of the WTO spirit.
 - The US has no interest in pursuing the WTO's agreed Doha agenda. By not allowing the appointment of an Appellate Body judges, it is strangulating the WTO's dispute panel.

Implications for India

In comparison with US-China trade, India's total trade with the US was just \$ 142 billion in 2018. The size of India-US trade is less than one fifth of US-China trade. However, this could change to India's advantage as US China trade war has opened new avenues for other countries.

Positive

- Growth in exports: As per a UNCTAD report, India is likely to increase its exports by as much as \$11 billion in the long term due to the fall out between the US and China. The increase would come in items that are currently being imported from China where US companies do not have the competitive edge to match India.
 - ✓ Indian exports would gain in China for the goods that it today imports from the US.
 - ✓ India's exports to China have grown much faster than to US post the trade war between the two largest economies.
- Benefit to some domestic companies: India has benefitted from US-China trade war by exporting more to China like plastic, cotton, inorganic chemicals and fish. India has a revealed comparative advantage in some of these commodities.
 - ✓ Indian exporters can take advantages in three distinct sectors: garments, information communication and technology (ICT) and to some extent in automotive components.
- o **Increased FDI:** There could be increased investment and capital flow between India and the US and India and China as China and the US seek to disentangle themselves.
 - ✓ Chinese companies have in recent times made a beeline to invest in India especially in the area of telecommunications.
- Benefit to Steel sector: The US is the world's biggest steel importing country and India's has been a
 bright spot in the global steel industry for long—growing steadily year on year without a break, and the
 potential for future growth is also very high.

Negative

- Value of the Rupee: Due to weakening of the US dollar, which automatically creates a negative impact on the trade deficit of India, causing a chain reaction of sorts.
- o **Indian stock markets:** Amid concerns over the global trade war, key indices in the Indian share market dropped due to the cautious approach of the investors.
- o **India-US duties:** As the United States of America imposed duties on steel and aluminum, India now has to pay approximately \$241 million worth of tax to the US.
 - ✓ As far as the manufacturing industry is concerned, the additional duty imposed could have a detrimental impact, as **the cost of production will go up** due to the **rise in the price of raw materials.**

Conclusion

In the wake of US-China trade war, the opportunities and challenges have been created, India needs to double-down on engaging with US and sorting out things on the trade front. Also, the right step has been taken in which India is keen to increase its market share in both countries and has carried out a detailed analysis identifying items where there is potential to increase exports.

2.2. INDIA-FRANCE

Why in News?

Recent Indian Prime Minister's visit to France for a bilateral summit marked a further consolidation of the strong Indo-French strategic ties.

More about News

- The discussions broadly focussed on reaffirming France and India as the key strategic and likeminded partners, strengthening of the defence partnership — including future defence acquisitions, progress on set up of the Jaitapur nuclear power plant, convergent, strategic and political priorities in the Indo-Pacific.
- In the digital space, the two countries have adopted a cybersecurity and digital technology road map.
 - A Cooperation Agreement was signed between the Centre for Development of Advanced Computing and Atos for developing cooperation in fields of quantum computing, Artificial Intelligence and exascale supercomputing.

Recent developments

- Both countries signed Mutual Logistics Support Agreement, enables Indian naval warships to now seek access to the French naval base in Djibouti to refuel for an operational turnaround to return to Indian shores.
- Both countries have planned the launch of 8-10 satellites as part of a "constellation" for maritime surveillance in the Indian Ocean region.
- CNES concluded an agreement with ISRO for training programmes and bioastronautics for a human space flight- (Gaganyaan) by 2022.
- The Indian Railway Station Development Corporation (IRSDC) entered into a Tripartite Agreement with French National Railways (SNCF) & AFD, a French development agency in order to support Railway Station Development Program in India.

Areas of cooperation

- Maritime security cooperation/ Indo-Pacific region:
 - Conduct of bilateral naval Exercise Varuna and exchange of information in the area of maritime surveillance
 - Heightened cooperation at multilateral bodies: For e.g. India support to France's candidacy at the Indian Ocean Rim Association (IORA); France's chairing of the Indian Ocean Naval Symposium (IONS) in 2020, will be an opportunity to closely associate India with France's priorities.
 - French military bases in Djibouti, Abu Dhabi, and Reunion Island can be a force multiplier for India, which itself is looking to build naval facilities in Oman (Duqm), Mauritius and Seychelles (Assumption Island).

Space

- 2015 MoU signed between the French (CNES) and Indian (ISRO) space agencies enriched cooperation projects.
 - ✓ It led to the finalizing of a joint mission of **India's Oceansat-3 satellite** hosting France's Argos system for climate monitoring and tracking, scheduled to be launched in 2019.
 - ✓ It has also resulted in the **third jointly developed satellite**, **Trishna**, for thermal infrared imaging.
 - ✓ France is also considering contributing to India's space agency, ISRO's, upcoming inter-planetary missions to Mars and Venus.
- The ambitious Joint Vision for Space Cooperation signed in 2018 paved the way for coordinating space and maritime collaborations and enabled the commencement of work on a constellation of microsatellites for maritime surveillance.
- **Political/foreign relations**: France has emerged as India's one of the most reliable partner on issues relating to terrorism and Kashmir.
 - France supports India's candidacy for a seat as a permanent member of the United Nations Security Council and supported multilateral export control regimes (accession to MTCR in June 2016, Wassenaar Arrangement in 2017, the Australia Group in January 2018).

Defence relations:

- France and its defence industry actively contribute to the "Make in India" programme in the defence sector.
- The **first conventional submarine, Scorpene**, which started being built in India in 2008 with transfer of technology and support from DCNS, began sea trials in 2015, and the second in January 2017.
- o An agreement on India's acquisition of **36 Rafale fighter** jets was concluded in September 2016.
- **Counter terrorism**: Terror strikes in France in recent years by home-grown terrorists have enlarged the scope of counter-terrorism cooperation to include cyber security and discussions on radicalisation.
- Bilateral Trade in Goods: In 2018, India-France bilateral trade stood at € 11.52 billion (+7.60%) as compared to the corresponding period the previous year. India's exports to France were valued at € 5.99 billion, up 11.77% during this period with a rise in exports.

- French Investments in India: France has emerged as a major source of FDI for India. France is the 10th largest foreign investor in India.
 - France is focusing on Chandigarh, Nagpur and Puducherry under the **flagship programme of Smart** Cities.
- **Nuclear field**: In the nuclear field, an agreement was signed about a decade ago for building six EPR nuclear power reactors with a total capacity of 9.6 GW for which negotiations have been ongoing between the Nuclear Power Corporation of India (NPCIL) and Areva, and now EdF.
 - The agreement on the industrial way forward between NPCIL and EdF affirms that work at Jaitapur will commence before the end of 2018.
- Educational relations: Potentially, the most significant was the focus on youth and student exchanges. Currently about 2,500 Indians go to France annually to pursue higher education, compared to more than 250,000 from China.
- Tourism: A target of a million Indian tourists and 335,000 French tourists has been set for 2020.
- Combating climate change: France and India actively strengthened their cooperation under the 2015 Paris Agreement on Climate Change. Together, they spearhead the implementation of this Agreement. They jointly launched the International Solar Alliance.

Conclusion

This is a time for nations like India and France to take the lead and shape the narratives as well as the emerging institutional frameworks. The visit gives immense possibilities which exist in Indo-French bilateral partnership and there are growing signs that the political leadership in both countries are keen to exploit them.

2.3. NO FIRST USE DOCTRINE

Why in News?

Union Defence Minister recently said that India reserves the right to change its policy of 'No First Use' (NFU),

based on future circumstances which has been the cornerstone of India's nuclear weapons policy for decades.

Background

- "No First Use" is a pledge taken by a country to not use nuclear weapons as a means of warfare unless a rival nation resorts to such an action first.
- These policies are generally declaratory in nature and there is no diplomatic arrangement in place to either verify or enforce it.
 - Those that have pledged can still use nuclear weapons first in a conflict.
- India adopted the "No First Use" policy after
 the Polybran II tests in 1999, asserting that its
 - the Pokhran II tests in 1998, asserting that its newly acquired arsenal will be used only as a deterrent.
- In recent times, many important leaders have called for the policy to be scrapped.
 - Late Defence Minister Manohar Parrikar said in November 2016 that India should not "bind itself" through such a pledge
 - Lieutenant General BS Nagpal, former commander-in-chief of the Strategic Forces Command, recently described it as a "formula for disaster".

Significance of NFU for India

• Create image of India as responsible nuclear power: Diplomats have often advanced the country's commitment not to use nuclear weapons first as proof of the country being a "responsible" state and thereby a way to resist any pressures to sign any treaties that would affect its nuclear arsenal. It also helped India to get NSG waiver, entry into exclusive nuclear groups such as MTCR and Australia group.

No first use policy in other country

- China was the first to pass such a resolution after it became a nuclear power in 1964, portraying it as an indication of the "purely self-defensive nature" of the country's nuclear strategy.
- The United States has never declared a NFU policy.
- In 1982, Soviet Union pledged that Moscow would have an NFU policy and not launch a nuclear weapon during conflict. However, in 1993, Russia did away with the stance and like other states said that it would not use nuclear weapons against other countries who do not possess nuclear arsenal.
- Pakistan has made no such commitment.
- As of today, China and India are the only nuclear weapon states that have maintained an unconditional NFU pledge.

- To avoid conventional war: Conventional wars have been avoided between India and Pakistan in the year 2001 at the backdrop of Parliament attack and in 2008 after the Mumbai terrorist attack due India's commitment to NFU policy as against the unclear nuclear policy of Pakistan.
- First strike requires survivable secondstrike capability: A first use posture still requires a country to have survivable second-strike capability as there is nothing such as a "splendid" first strike implying 100% removal of the adversary's assets and leadership.
- **Civilian control:** This ensure that command and control stay firmly with the civilian political leadership.

India's Nuclear Doctrine

- On 4th January 2003 India's official nuclear doctrine was released. It spelled out two of the contingencies under which nuclear weapons were to be used
 - When Indian territory is under a nuclear attack, or
 - Indian forces that may be outside India are under attack.
- The Indian doctrine also stated that it will not use nuclear weapons against non-nuclear-powered states, and would strictly control the export of such materials and technologies.
- The onus of authorising retaliatory attacks was placed on the civilian political leadership, led by the Prime Minister.
- However, the doctrine included one additional and significant, caveat: "in the event of a major attack against India, or Indian forces anywhere, by biological or chemical weapons, India will retain the option of retaliating with nuclear weapons".
- India remains committed to the goal of a nuclear weapon's free world, through global, verifiable and non-discriminatory nuclear disarmament.
- Global No First Use (GNFU) order: NFU for India also presents an opportunity for cooperation with China to work jointly towards a Global No First Use (GNFU) order. Notably, there is considerable convergence regarding the belief of nuclear weapons being restricted to the political realm.

Reason for calls for change in stance

- Pakistan's Tactical Nuke threats: Time and again Pakistan keeps talking about the use of tactical nuclear weapons (TNW) against the Indian forces if any attempt is made to enter its territory. Also, India's conventional advantage has been blunted by Pakistan via use of sub-conventional assets such as terrorists
- **Power a symmetry between India and China:** The conventional disparity between India and China is not just huge but also more palpable. This is putting immense pressure on India's NFU policy.
- India would have to suffer a first strike before it retaliated: It is argued that NFU doctrine is not ideal when India is on a two-front war with both China and Pakistan and they simultaneously launch offensives.

Challenges India might face in changing stance

- India's Image: Reconsidering NFU policy may adversely damage India's long earned reputation as a responsible state.
- Affect India's relation with neighbour: Adopting a first strike policy will affect India's relationship with neighbours like Bangladesh, Nepal, Sri Lanka, Myanmar, Bhutan as they will start fearing India. Here they can also go closer to China as it can be an alternative protector of them due to its commitment to NFU policy till today.
- Existing nuclear structure: If India has to switch from NFU, it will have to make substantial changes to
 existing nuclear structures, alert levels, deployment and command and control arrangements. This will
 involve a sizeable increase in delivery systems and warheads.
- China may also revise its NFU Policy: If India changes its NFU policy, it gives China opportunity to revise its own NFU policy, leading to more tension in South Asia.

Conclusion

All doctrines need periodic reviews and India's nuclear doctrine is no exception. With the rapidly changing strategic environment if India's policymakers feel the need to review the nation's nuclear doctrine, they should be cognizant of the costs involved in so doing. A sound policy debate can only ensure if the costs and benefits of a purported policy shift are discussed and debated widely.

2.4. MEKONG GANGA COOPERATION

Why in news?

Recently, the 10th Mekong-Ganga Cooperation Ministerial Meeting (10th MGC MM) was held in Bangkok, Thailand.

Highlights of the meeting

- The new MGC Plan of Action 2019-2022 was adopted that envisages
 - o **project-based cooperation in the seven areas of MGC cooperation,** namely tourism and culture, education, public health and traditional medicine, agriculture and allied sectors, transport and communication, MSMEs
 - three new areas of cooperation, i.e. water resources management, science and technology, skill development and capacity building.
- The ministers agreed to celebrate the 20th Anniversary of MGC in 2020.
- The ministers reiterated the importance of tourism cooperation and recalled that 2019 has been identified as the "India-ASEAN Tourism Year".

About Mekong- Ganga Cooperation

- It is an initiative by six countries India and five ASEAN countries, namely, Cambodia, Laos, Myanmar, Thailand and Vietnam for cooperation in tourism, culture, education, as well as transport and communications.
- It was launched in 2000 at Vientiane, Laos.
- Both the Ganga and the Mekong are civilizational rivers, and the MGC initiative aims to facilitate closer contacts among the people inhabiting these two major river basins.
- It is also indicative of the cultural and commercial linkages among the member countries of the MGC down the centuries.

Why Mekong Ganga Cooperation is significant for India?

- Reaffirmation of India's Act East Policy by effectively integrating with the region.
- **Development of North East Region** if trade and industry flourish in the entire region overland trade via Myanmar to many MGC countries. Brahmaputra Valley is a key aspect in making the Mekong- Ganga Cooperation Project effective and harvesting favorable social and economic gains.
- Boost to cultural and commercial cooperation.
- Make in India- Wide experience of Mekong countries in manufacturing can be utilised by India in its make in India endeavour.
- Balancing China's assertiveness in the region. China's dominance can be seen in controlling the waters of Mekong river upstream.
- **Stronger place in World Politics** India's political leadership in the region will provide it a high ground in the world politics.

2.5. G-7

Why in news?

Recently, India was invited as a special guest for attending the 45th G-7 Summit in France.

About G-7

- It is an **intergovernmental organisation** that was formed in 1975.
- Initially it was formed as an effort by the US and its allies to discuss economic issues, which included battling a global oil crisis.
- The G7 or 'Group of Seven' are Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States which discuss issues such as global economic governance, international security, and energy policy.
- The G7 was known as the 'G8' for several years after the original seven were joined by Russia in 1997. The Group returned to being called G7 after Russia was expelled as a member in 2014 following the latter's annexation of the Crimea region of Ukraine.

- The G7 nations meet at annual Summits that are presided over by leaders of member countries on a rotational basis.
- The G7 does not have a formal constitution or a fixed headquarters. The decisions taken by leaders during annual Summits are non-binding.
- India is not a member of the G7 group.

Issues faced by G-7

- **Creating inequality:** According to Oxfam International, G7 leaders are creating a wide gap between the 'haves' and the 'have-nots' both in their countries as well as across the globe.
- **Domination of US:** The G7 has turned into a collection of bilateral talks mostly tailored to suit the US priorities.
- **Limited to economic issues:** G7 is not capable of addressing issues outside of economic issues like terrorism, nuclear proliferation, climate change etc. Moreover, these issues needs cannot be solved without the help of non-G7 countries.
- No involvement of major countries like Russia, China etc: The rise of India, China, and Brazil over the past few decades has been reducing the G7's relevance, whose share in global GDP has now fallen to around 40%. The G7's future has been challenged by continued tensions with Russia, disagreements over trade and climate policies
- Competition from G20: Group of Twenty's (G20) rise is becoming as an alternative forum. The power and prestige of the G20 has surpassed that of the G7. Emerging powers including Brazil, China, India, Mexico, and South Africa, whose absence from the G7 was often noted, all belong to the G20. The group's member states represent about 80 percent of global GDP and two-thirds of the world's population.

Conclusion

Ultimately, the G7, like many other steering mechanisms developed in the 20th century, is struggling to find relevance in a world order marked by so-called "coalitions of convenience." There is a growing realization that revamping the post-war order for the twenty-first century requires **new member nations, especially from Asia and Africa**. India is **leveraging its heft in the international order** as issues such as trade, Kashmir, and India's relations with Russia and Iran were all discussed with G7 members.



economic interests and create an enhanced joint negotiating capacity in the United Nations

The Group of 77 at the United Nations is a coalition of 134 developing nations, designed to promote its members' collective

3. ECONOMY

3.1. DIRECT TAX CODE

Why in news?

Recently, the draft legislation of the **new Direct Tax Code (DTC)** was submitted by the task force, headed by **Akhilesh Ranjan**, to the Government of India.

More on the news

- The Direct Tax Code (DTC) is an attempt by the Government of India to simplify the direct tax laws in India.
 - It will revise, consolidate and simplify the structure of direct tax laws in India into a single legislation.
 - When implemented, it will replace the Income-tax Act, 1961 (ITA), and other direct tax legislations like the Wealth Tax Act, 1957.

Related Information

- What is a Direct Tax?
 - These are the taxes, paid directly to the government by the taxpayer. Under the direct tax system, the incidence and impact of taxation fall on the same entity, which cannot be transferred to another person.
 - It is termed as a progressive tax because the proportion of tax liability rises as an individual or entity's income increases.
 - Examples- Income tax, corporate Tax, Dividend Distribution Tax, Capital Gain Tax, Security Transaction Tax.
- The system of Direct taxation is governed by the Central Board of Direct Taxes (CBDT). It is a part of the Department of Revenue in the Ministry of Finance.
- The task force was constituted by the government to frame draft legislation for this proposed DTC in November 2017 and review the existing Income Tax Act.

Need

- The Income Tax Act, 1961 with over 700 sections was drafted as per the nature of Indian economy in 1960s and the capacity to mobilize resources from taxpayers directly.
- However, in these 58 years, there have been following developments-
 - Changes in the Indian economy towards liberalisation and privatisation.
 - Changes in the Global economy towards more integration and globalisation.
 - Changes in the models of doing business such as e-commerce.
 - Changes in the technology which can be leveraged towards better tax administration
- Also, the IT Act has been amended various times which has made it **complex** and **increased tax litigations**.

Key Provisions of the draft DTC

- Rejig of tax brackets- to widen them and which can bring a significant relief for the middle and upper middle class
 - A common corporate rate of 25% will apply to both large local as well as foreign companies that are present in India without a subsidiary.
- Removal of Surcharges and Cesses- which are currently imposed above a certain income slab and for specific purposes.
- **Negotiated Settlements-** a new concept of settling disputes through **mediation** between the taxpayer and a **collegium of officers**. Here, the assessee will only have to pay the tax and interest and no penalty in case of a negotiated settlement.
- Assessment System- creation of an assessment unit to replace an assessing officer and a separate litigation
 unit. It has favoured jurisdiction-free, anonymous assessment by domain experts with the involvement of
 senior officials.
- **Incentives for Start-Ups-** by treating them differently from that of a normal company. It is proposed that the funds raised by the start-ups will not require any kind of scrutiny.

Trends of Direct Tax collection

- There has been a growth of more than 80% in the number of returns filed in the last four financial years and direct tax-GDP ratio rose to 5.98% in FY 2017-18, the highest it has been in the last 10 years.
- Further, the number of persons filing income tax returns also increased by about 65% during period from 2014-2018.
- Moreover, Direct Tax-GDP ratio rose to 5.98% in FY 2017-18, which is highest in the last 10 years. This shows a sign of improvement of Tax-Buoyancy in the economy.

Benefits

- **Simplification of processes for taxpayers-** due to features such as basic tax slabs and limited number of efforts needed to file taxes.
 - E.g. Surcharge and cess complicate the tax calculations especially for tax-deduction purposes and also add to unnecessary disputes.
- Expansion of tax base- as large number of people will be covered in the lowest tax slab, which will promote voluntary tax compliance.
 - Despite being a country of over 1.3 billion people, there are only 74 million effective taxpayers in India as per the last count.
- Address contemporary needs- such as greater mobility of capital, capital account convertibility, tax competition among countries.
 - Further, it will be capable of dealing with new business models in a digital economy.
 Evolution of the digital economy has allowed companies to offer their services despite not having physical presence in a country.
- Bring objectivity in tax architecture- as the draft has also proposed concrete principles of taxation, which would guide the future tax proposals by all governments.

Significance of Direct tax collection

- High Tax buoyancy: It is an important metric to know
 the expected level of government borrowings from the
 debt market. Higher tax buoyancy would mean the
 government would borrow less, keeping interest rates
 lower, while giving room for corporates also to borrow
 at lower rates thus reducing crowding out effect in the
 economy.
- Fiscal Health: High rate of direct tax collection increases spending capacity of government on social sectors such as education and health, without compromising the fiscal prudence in the economy.
- Maintaining Inflationary Trends: High rate of direct tax collection helps in maintaining the optimum interest rate in the economy, which in turn assists in maintaining the inflationary pressure.
- Lower Indirect tax: Higher direct tax collections could lower the tax burden on the poor by creating fiscal space for a reduction in GST rates.
- **Reduction in malpractices** through faceless assessment, whereby there will be no requirement of physical presence of the assesse (tax payer) or the identity of the assessor (tax official).
 - There is an emphasis on reducing litigation and making the interface of the department with taxpayers anonymous to eliminate harassment and corruption.
- **Boost to savings and investment-** as the corporate tax regime will be rationalised which will create predictability in the minds of individual and corporate players.
 - o The DTC also pays specific attention to startups under stressed positions due to taxation.
 - The capital gains tax regime, minimum alternate tax and dividend distribution tax have also been reviewed by the task force.

Way Forward

- Although previous efforts to develop an alternative mechanism for settlement of tax disputes, including mediation, have not had too much success, but it can be ensured through the DTC in the following way-
 - There is a need for a robust database of jurisprudence, and proper training to tax officers, chartered
 accountants and other professionals empanelled to ensure a proper, effective and impartial approach to
 settling litigation.
 - o Periodically release internal manuals, which contain the revenue department's interpretation of the provisions keeping in mind court rulings.
- Further, there should be an **institutional mechanism**, with participation of all the stakeholders, to periodically oversee the changing requirement and amend the DTC as required.

3.2. JALAN COMMITTEE REPORT

Why in news?

Recently, the Reserve Bank of India (RBI) decided to transfer a surplus of **Rs 1.76 lakh crore** to the Government of India exchequer.

Background

• One of the many issues of friction between the government and the central bank is the **transfer of higher surplus** by the latter to the government.

- The RBI transfers the "surplus", i.e. the excess of income over expenditure, to the government, in accordance with Section 47 (Allocation of Surplus Profits) of the Reserve Bank of India Act. 1934.
- Earlier, the RBI used keep a major chunk of this surplus for its contingency and asset development. However, after the Malegam Committee (2013) recommendations its transfer of surplus increased.
- Last year, RBI formed a committee under the chairmanship of Bimal Jalan to review the provisions under the Economic Capital Framework.
- Recently, based on the recommendations of the committee, the RBI Central Board has decided to increase its net transfer to the government.
- The recent transfer includes Rs 1.23 lakh crore of surplus for 2018-19 and Rs 52,637 crore of excess provisions identified under a revised Economic Capital Framework (ECF) adopted by the RBI board.
 - The transferred amount is over three times the five-year average of Rs 53,000 crore.
 - The higher surplus is due to the long-term forex swaps and the open market operations (OMO) conducted by the central bank over the last fiscal.

Key Recommendations of the Committee

- Guiding principle- The committee has given the recommendations on the principle that the alignment of the objectives of the government and the RBI is important.
- Defines economic capital- as a combination of realized equity and revaluation reserves. (Central Board has decided to keep this entire capital at the level of 24.5-20%)
 - Realized equity- it is a form of contingency fund for meeting all risks/losses primarily built up from retained earnings. The committee states that the entire income above the realised equity should transferred. It currently stands at 6.8% and the committee recommends it to be in the range of 6.5-5.5% of the balance sheet. (Central Board has decided to set this at 5.5% of the balance sheet).
 - Revaluation reserves- it comprises of the
- periodic marked-to-market unrealized/notional gains/losses in values of foreign currencies and gold, foreign securities and rupee securities, and a contingency fund.
- Surplus Distribution Policy- which targets the level of realized equity to be maintained by RBI within the overall level of its economic capital.

Arguments in favour

- More Judicious use of resources- as the RBI's reserves are far in excess of prudential requirements. These funds be utilised to provide capital to government-owned banks.
 - It can help offset the expected shortfalls in various tax revenues in 2019-20 and aid the government in meeting its fiscal deficit target.

CASH IN HAND

THE PAYOUT

- SURPLUS ₹ 1.23 lakh crore
- EXCESS CONTINGENCY PROVISIONS ₹ 52 637 crore
- RBI MADE INTERIM PAYOUT OF ₹28,000 CR IN MARCH

THE HISTORY

Issue of size of RBI contingency reserves examined by 3 panels

- V SUBRAHMANYAM in 1997 Recommended that it be 12% of total assets
- USHA THORAT in 2004 Suggested that it be pegged at 18% of RBI's assets
- YH MALEGAM in 2013 Said RBI should transfer adequate amount' of profits to contingency reserves annually



How does the RBI accumulate these resources?

- Apart from keeping inflation in check, the RBI also performs following activities-
 - Management of the borrowings Governments in India,
 - Regulation of banks and non-banking finance companies,
 - Management of the currency and payment systems.
- While carrying out these functions or operations, it makes profits. It also earns through-
 - Its foreign currency assets (bonds & treasury bills of other central banks and deposits with other central banks).
 - holdings of local rupee-denominated government bonds or securities, and while lending to banks for very short tenures, such as overnight.
 - It claims a management commission on handling the borrowings of state governments and the central government.
- Its expenditure is majorly on the printing of currency notes and on staff salaries.

- o It will also improve the yield of the government securities due to improved financing capability.
- Help government deal with economic slowdown- which can be addressed using these resources to provide
 fiscal stimulus to a sagging economy, reduce off-balance sheet borrowings or meet the expected shortfall in
 revenue collections.
- Many governments decide on this issue- e.g. in Japan, the government decides the quantum of surplus which the central bank transfers to the government.
- Strong position of the Reserve Bank- which had an overall fifth rank in 2018 at 26.8 per cent of its balance sheet with respect to central banking economic capital.

Arguments against

- **Buffer against externalities-** such as potential threats from financial shocks, and the need to ensure financial stability and provide confidence to the markets.
- **Crucial towards autonomy-** of the Reserve Bank, which can be ensured only, maintaining a larger reserve, so that it doesn't depend on Government in times of financial stress.
 - o In the backdrop of resignation of the last RBI Governor, this move has been criticised by some experts as having led to erosion of **autonomy of RBI.**
- Can create inflationary pressures- in the economy with an immediate increased government spending, if it is not done in a proper manner.

Way Forward

In the future, it should be the endeavour of both the Government and the Reserve Bank to ensure that both risks management and needs of the economy are balanced.

3.3. BANK MERGER

Why in news?

Recently government announced to merge 10 state-owned banks to create four large banks.

More in News

- Under the plan, Oriental Bank of Commerce and United Bank of India will be merged with Punjab National Bank; Canara Bank with Syndicate Bank; Andhra Bank and Corporation Bank with Union Bank of India; and Allahabad Bank with Indian Bank.
- This merger would bring number of public schedule bank in India from 27 before 2017, to 12.

Benefits of Bank Merger

- **Global Banks:** Big Indian Banks can slowly and gradually transform themselves into global banks. With consolidation, the Indian banks will gain greater recognition and higher rating in the global market.
- **Risk management and large loans:** Merger will result in better NPA and Risk management. Also, Banks will not be reluctant to approve big loans to averse the risk.
- **Customer service:** Larger size of the Bank will help the merged banks to offer more products and services and help in integrated growth of the Banking sector.
- **Human Resource:** The wide disparities between the staff of various banks in their service conditions and monetary benefits will narrow down
- **Improve regulation:** From regulatory perspective, monitoring and control of a smaller number of banks will be easier after mergers.

• To Reduce cost:

- These banks are owned by government and each bank are competing with other for the same pie (in terms of deposits or loans) in the same narrow geographies, leading to each one incurring costs.
- The volume of inter-bank transactions will come down, resulting in saving of considerable time in clearing and reconciliation of accounts.

Challenges in Bank Merger

• Overlook regional requirement: Many banks focus on regional banking requirements. With the merger the very purpose of establishing the bank to cater to regional needs is lost.

- **Too big to fail:** When a big bank books huge loss or crumbles, there will be a big jolt in the entire banking industry. Its repercussions will be felt everywhere.
- **Job Loss:** Mergers will result in immediate job losses on account of large number of people taking VRS on one side and slow down or stoppage of further recruitment on the other.
- **Cultural clash:** Mergers will result in clash of different organizational cultures. Conflicts will arise in the area of systems and processes too.
- **Disruption in services:** It may lead to deterioration of services and disruption in the near term as the merger process gets under way. This will lead to a further slowdown in lending for a while.

Steps to be taken

- **Standard process:** There is no standard procedure to choose the banks for merger. The government should design a standard process for merger.
- **Consultation with stakeholders:** All stakeholders must be taken into confidence, before the merger exercise is started.
- **Reduce the NPA first:** The government should clean the bank book first and then consolidate the weak bank with the strong bank.
- **Governance reforms:** Along with bank consolidation government should take immediate measures to improve governance and get desired result.

3.4. DEVELOPMENT BANK

Why in News?

Finance minister recently announced setting up a development bank as a slew of measures to boost the economy and financial market sentiments.

What is development Bank

- Development banks are financial institutions that **provide long-term credit for capital-intensive investments** spread over a long period.
- These banks also extended useful services such as in-house technical expertise, underwriting new capital issuance and creating confidence in other lenders.
- They performed a counter-cyclical role to ensure investment flows even during economic downturns and actively supported regional integration and the internationalisation of domestic companies.

Source of fund

- To lend for long term, development banks require correspondingly long-term sources of finance, usually obtained by issuing long-dated securities in capital market, subscribed by long-term savings institutions such as pension and life insurance funds and post office deposits.
- Considering the social benefits of such investments, and uncertainties associated with them, **development** banks are often supported by governments or international institutions.
 - Such support can be in the form of tax incentives and administrative mandates for private sector banks and financial institutions to invest in securities issued by development banks.

Development bank in India

- In India, development banking was started immediately after independence.
- Industrial Finance Corporation of India (IFCI) is the first development bank in India. It started in 1948 to provide finance to medium and large-scale industries in India.
- After 1991, following the Narasimham Committee reports on financial sector reforms, development finance institutions were disbanded and got converted to commercial banks.

Differences between Commercial banks and Development banks

Commercial banks	Development banks
Provide short term loans.	Provide long term loans.
Accept deposits from the public.	Accept deposits from commercial banks, Central and State governments.
Direct finance to customers.	Provide refinancing facilities to commercial banks.

Reason for recent demand for development bank

- Recent Economic slowdown: For instance, during the 2008 Global Financial Crisis, development financial
 institutions played an important countercyclical role in many jurisdictions, by scaling up their lending
 operations when private financial institutions experienced temporary difficulties in granting credit.
- The problem in long term lending: Project finance has been a domain of DFIs since long. DFI transforming to a bank had a negative impact on lending long term funds as banks have access to short term resources and not to long term resources.
- Loss of core competence: When a bank offers a variety of products under an umbrella brand, there is a possibility that the multi-product bank would lose sight of their core competence and would face a greater risk by participating in untested activities.

Conclusion

Reliable and well-administered development financial institutions with a well-defined mandate and sound governance framework is an important vehicle to accelerate economic and social development. They can create new channels to crowd-in the private sector. Moreover, they can play a catalytical role by generating new knowledge, convening stakeholders, and providing technical assistance to build capacity in the private and public sectors.

3.5. SLOWDOWN IN INDIAN ECONOMY

Why in News?

Recent economic data Indicates that there is slowdown in Indian economy

Current situation in India

- **GDP:** The recently released government data showed that Gross domestic product (GDP) grew at 5% in the first quarter of FY20. This is marking the slowest growth since the fourth quarter of FY13.
- Investment: The investment rate as measured by Gross Fixed Capital Formation (GFCF) as a per cent of GDP is showing a declining trend.
 - GFCF as a per cent of GDP has declined from 34.3 per cent in 2011 to 28.8 per cent in 2018.
 - Similarly, the GFCF in the private sector declined from 26.9 per cent in 2011 to 21.4 per cent in 2018.
- Saving: Saving declined from 32.7 per cent in 2011 to 29.3 per cent in 2018. The decline in savings rate is because the economy is experiencing a declining wage growth (both rural and urban wages).
- Wages: Rural wage growth has declined from 27.7 per cent in FY14 to less than 5 per cent in FY19.

What is cyclic slowdown?

- A cyclical slowdown is a period of lean economic activity that occurs at regular intervals. Such slowdowns last over the short-to-medium term, and are based on the changes in the business cycle.
- Generally, interim fiscal and monetary measures, temporary recapitalisation of credit markets, and needbased regulatory changes are required to revive the economy.

What is structural slowdown?

- A structural slowdown, on the other hand, is a more deeprooted phenomenon. It is driven by disruptive technologies, changing demographics, and/or change in consumer behaviour.
- Fixing such problems would require the government to undertake some structural policies. The best example in this regard would be the reforms that were carried out to address the crisis in 1991.

Is slowdown cyclic or structural?

- There has been a lot of discussion regarding the economic slowdown that India is currently experiencing.
- The Reserve Bank of India (RBI), in its annual report for 2018-19, has said that the recent deceleration could be in the nature of a soft patch mutating into a cyclical downswing, rather than a deep structural slowdown.
- Although RBI acknowledge that there are still structural issues in land, labour, agricultural marketing and the like, which need to be addressed.
- The corporate wages have also exhibited a single-digit growth in FY19 compared to a double-digit growth a few years back.
- **Export:** During the period from 2011-2018, exports as a per cent of GDP also declined from 24.5 per cent to 19.6 per cent.
- Inflation: The inflation rate in the economy has declined from 10.03 per cent in FY13 to 3.41 per cent in FY19. Low inflation rate depicts weakening of demand that would discourage fresh investments and job creation.

Causes of slowdown

- **Global economy:** With the US-China Trade war and Brexit, global sentiments have remained poor, making the prospects of an export-led growth bleak.
- **Series of disruptions:** A series of reform like Demonetisation, GST etc create disruptions in economy and gives a severe blow to consumption and export growth.
- **Tight monetary and fiscal policy:** Since 2016-17, the monetary policy was focused on inflation. combined fiscal deficit of the centre and the state was high. And government committed to lowering its fiscal deficit, it left little room for government to increase its spending to boost the economy.
- Financial sector: Stress in financial sector due to rising NPA and NBFC crisis created liquidity crunch

Steps taken by government to revive economy

- Capital Infusion in Banks: The government announced upfront capital infusion of Rs 70,000 crore into public sector banks.
- Mega of banks: The government announced merger of 10 public sector banks into four.
- Rollback of surcharge on FPI: The government has announced rollback of enhanced surcharge on foreign portfolio investors and domestic portfolio investors which was announced in budget. The government also announced to simplify KYC for FPI.
 - The announcement on removal of surcharge is expected to provide the market some comfort as FPIs had withdrawn close to \$ 3.4 billion since July.
- No angel tax: it will be withdrawn for start-ups and their investors.
- **FDI easing:** Government allowed 100% FDI in commercial coal mining and allowed as much in contract manufacturing through the automatic route. Government also give relaxation in 30% local sourcing norms for single-brand retail.
- Relief for Indian companies: The finance ministry notified a scheme to settle the indirect tax disputes in the pre-GST era, named Sabka Vishwas legacy dispute resolution scheme, which was announced in the union budget for FY20.
- **Relief in CSR:** CSR violations will not be treated as criminal offence, instead they will be treated as civil violations.
- **To boost real estate:** The government announced ₹30,000-crore liquidity support to the struggling housing finance companies (HFCs).
- **Help for MSME:** MSMEs to get all their pending GST refunds within 30 days. Further, all GST refunds of micro, small and medium enterprises (MSMEs) will be paid within 60 days from the date of application.

Steps to be taken

Short-term action

On monetary policy

- Action is needed to reduce the repo rate. A real rate of borrowing of 2.5% cannot be conducive to borrowing when animal spirits are weak. Banks will have to transmit rate reductions, requiring an institutional mechanism (as the RBI Governor has indicated).
- The rupee has to be allowed to depreciate slowly, since the rising real effective exchange rate has hurt exports.

On fiscal policy

- The RBI stressed on continued focus on reforms in factors of production, faster implementation of capital expenditure by public authorities, among others.
- Given the limited fiscal space, the only possibilities of raising revenues are of the non-tax type: monetise government and PSU land as rapidly as possible.
- The goal of divesting government equity in public enterprises and in PSBs will also generate resources for increasing public infrastructure investment—which should crowd in private investment. It could be partly used to recapitalise PSBs.

Long term action

Banking sector reform: Strengthening the banking and non-banking sectors gives a big push for spending on
infrastructure and revive consumption and private investment. Strengthening the bankruptcy code would be
a game changer for banks in resolving stressed assets.

- **Prioritize growth-friendly policies:** The Indian government should pursue reforms in the areas of urban governance; housing, land, credit, and labor markets; and infrastructure contracting. It should also seek to shrink the informal economy and expand the tax base, while also improving state capacity and personnel management.
- Focus on Agriculture sector: For sustainable growth, agricultural growth must be 4% plus pa. That requires a tilt away from the price- and subsidy-based current regime to a strategy-based one on public investment in agriculture.
- **Focus on Industrialization:** India, despite being a developing economy, has adopted a service-led growth strategy by bypassing the industrialization effort, with the share of services at 54 percent of the economy. This phenomenon hindered in generating enough jobs for its teeming millions and growth in income is stagnating.
- **Foster greater federalism:** Indian states should be allowed to engage both cooperatively and competitively with the central government and with each other. Proactive bottom-up actions by state governments will be needed to effectively scale up the fragmented agricultural sector and industrial production.

3.5.1. SLOWDOWN IN AUTO-INDUSTRY

Why in news?

According to Society of Indian Automobile Manufacturers (SIAM) data, Auto-industry witnessed steep dip in sale in month of July.

Reasons for slowdown

- NBFC crisis: Nearly half the vehicles sold in rural markets are financed by non-banking financial companies (NBFCs). Since IL&FS crisis last year auto-industry faces a severe liquidity crunch which almost drying up credit for dealers and customers.
- Policy reset: Meddling by multiple ministries and policy flip-flops like leapfrogging from BS IV to BS VI, sudden diesel ban, New axle load norms and EV thrust have hurt sales
 - There is a possibility that some customers are waiting to buy the latest Bharat Stage (BS)-VI emission standard compliant vehicles or are waiting for more incentives from vehicle makers who will be looking to sell off their BS-IV compliant stocks before the April 1, 2020 deadline.
 - In July 2018, the government increased the official maximum load-carrying capacity of heavy vehicles by 20-25 percent with the aim of bringing down logistics costs. This adversely affects sale of commercial vehicles
 - The lack of a clear migration policy towards Electric Vehicles (EV) creates confusion among buyers, contributing towards a reduction in auto sales.
- **Multiple shocks:** Starting with demonetization, many decisions like GST roll-out and multi-year insurance have weighed heavy on consumers.
- Shared mobility: Tech-led shared mobility from firms such as Ola and Uber have dented demand in urban market
- **Election pause:** Big transitions like elections are known to push consumers into wait-and-watch mode on buying costly items like cars.
- Growing organised pre-owned vehicle market: Over the past five years, the size of pre-owned market has
 expanded significantly, with higher share of organised players. This may impact new vehicle demand,
 especially in case of sharp price hikes.

Impact of slowdown

- Overall Economy: The automobile industry supports the steel, chemicals, textiles and other sectors as well, and any slowdown will impact the broader economy.
- **Job loss:** According to the latest figures that are available, original equipment manufacturers (OEMs) have removed about 15,000 temporary workers in the past two to three months. A lack of working capital amid tepid demand has led to closure of nearly 300 dealerships across the country. This has led to over two lakh people losing their jobs, according to the Federation of Automobile Dealers Associations (FADA)
- **Revenue loss:** Auto-industry accounting for about 11% of the entire GST revenues of the country. Any slowdown would impact exchequer heavily.

Steps taken by government

- The Centre lift the ban on purchase of new vehicles for replacing all old vehicles by government departments
- BS-IV vehicles purchased up to March 2020 will remain operational for the entire period of registration
- The government allow an additional 15 per cent depreciation, taking it to 30 per cent, on all vehicles acquired till March 2020.
- Revision of one-time registration fee to be deferred till June 2020.
 - In July 2019, Ministry of Road Transport and Highways (MoRTH) had issued a draft notification that proposed to increase the registration charges for new IC engine powered vehicles to Rs 5,000 from the current Rs 600. This was met with intense resistance from the auto industry.
- The government promised to introduce new scrappage policy soon.

Way Forward

- A reduction in GST to 18% from the current rate of 28% will help in an immediate price reduction and boost
- Government should take timely measures to handle the NBFC crisis to infuse liquidity into the system

3.6. BOND YIELD AND INVERSION

Why in news?

Talks on Bond yield and Bond Inversion were recently in news amid global slowdown and rising fears of recession. In India, government bond yields fell sharply in the wake of the Union Budget.

Bond and Bond Yield

- A bond is a debt instrument issued by a country's government or by a company to raise funds and having a maturity period of more than one year.
- Every bond has a price fixed by the issuer known as face value and an annual interest known as coupon payment.
- Later when the bond is traded in the secondary market, its price fluctuates in response to changes in interest rates in the economy, demand for the instrument, time to maturity, and credit quality of that particular bond.
- The effective rate of return or the profit that the bond earns is called as **Bond Yield** and is calculated by

dividing the bond's coupon rate by its face value. Bond Yield has an inverse relationship with the bond price.

- Government bonds (referred to as G-secs in India, Treasury in the US, and Gilts in the UK) come with the sovereign's guarantee and are considered one of the safest investments compare to other investment options like shares, corporate bonds etc.
- Thus, when an economy slows, investors prefers to invest in government bonds, leading to rise in their demand and prices and thus fall in their yields.
- On the other hand, when an economy grows, there will be rise in inflation leading to increase in repo rate. This may increase rate of interest in other investment options thus decreasing the demand for government bonds and their prices leading to rise in their yield.

Yield Curve

- It is a graphical representation of yields for bonds (with an equal credit rating) over different time horizons.
- The term is normally used for government bonds which come with the same sovereign guarantee.
- If bond investors expect the economy to grow normally, yield curve is upward sloping.
- When the economy is expected to grow only marginally, the yield curve is flat.
- And the yield curve is **inverted** when the economy is expected to slow down.

Bond yields can therefore be a useful parameter in assessing economic health.

Bond Yield Inversion

- Yield inversion happens when the yield on a longer tenure bond becomes less than the yield for a shorter tenure bond.
- A yield inversion typically signals a recession.
- An inverted yield curve shows that investors expect the future growth to fall sharply; in other words, the demand for money would be much lower than what it is today and hence the yields are also lower.

3.7. SOCIAL STOCK EXCHANGE

Why in news?

In budget session, Finance Minister proposed a social stock exchange (SSE) under the regulatory ambit of the Securities Exchange Board of India (SEBI) to support social enterprises and non-profits in raising funds.

About Social Stock Exchange (SSE)

- It is an electronic fundraising platform that allows investors to buy shares in a social enterprise that has been vetted by the exchange.
 - Social enterprises, volunteer groups and welfare organisations will be listed on this platform so that they can raise capital.
 - Social enterprise is a revenue-generating business whose primary objective is to achieve a social objective, for example, providing healthcare or clean energy.
- It will act as crowd-sourcing platforms for fundraising by non-profit entities aimed at impact investment and transparency.
- Globally, at least ten SSEs have been set up, including in Canada, the UK, Singapore, Kenya, South Africa, Brazil, Portugal, Mexico, Austria and Jamaica.

Impact Investment in India

- Impact Investment is the investments made into businesses with the aim to make a measurable social, economic and environmental impact while also generating a range of returns, from profit to publicity.
- India is considered a breeding ground for (social) impact investing due to the enormous size of its demography and the unfulfilled demands for social and economic services.
- The reduced public investment in priority sectors like primary education, health, housing, water and sanitation etc. has allowed the growth of the private entrepreneurial space.
- Impact investments are growing in India, and in six years between 2010 and 2016, the impact investing sector in the country attracted over \$5.2 billion.

Need for SSE

- **No such platform**: Currently, there are no dedicated online information or investment platforms to serve "for-profit" social enterprises. Some privately-owned crowdfunding platforms for non-profits do exist, but they cover only a small fraction of NGOs.
- Small fraction of donors: Access to, and availability of, funds is one of the biggest problems for social enterprises and non-governmental organisations (NGOs). Currently, there is only a small crop of individual donors who contribute money to such entities.
- **Social welfare objectives:** Government also wants to meet various social welfare objectives related to inclusive growth and financial inclusion.
- Less impact investment in India: There is need to grow the impact investment market & funds flow to these pro-social/pro-environmental businesses; and enable access for all to impact investment in order that capital markets serve the needs of society.
- Alignment with investors: Currently, it is a challenge for many enterprises to raise funds because they need
 investors aligning with the thought of having such unique investments while also being focussed on financial
 returns.

Benefit of Social Stock Exchange (SSE)

- It is an innovative measure to involve public participation in social causes through the equity route.
- It can be helpful in bringing in significant additional capital to support entrepreneurs working to improve the lives of underserved populations, thereby accelerating inclusive growth.
- It will bring together social enterprises and impact investors on a common platform.
- It make the **exercise much cheaper** for them by standardisation of the process and does away with the need to engage and negotiate directly.
- For non-profits companies, a SSE can enable **fund-raising as well as information on operations and financials** through standardised reporting.
- A fund-raising platform that has regulatory oversight can **improve credibility and help ameliorate the difficulties non-profits face** in fund-raising.

Challenges

• Lack of clarity on trading & tax benefit: There is no clarity about trading, tax benefit transferability and accountability of third parties availing of funds raised from this platform. There is also some confusion on whether the 'exchange' will involve trading in securities issued by non-profit bodies.

- **No proper records:** Most NGOs are not good at keeping records and maintaining a paper trail. This could affect channelisation and tracking of funds particularly in case of smaller players, who do not have the resources to manage and keep records.
- **No financial returns:** Such securities do not offer financial returns apart from the social impact return. In this case, the Return on investment (ROI) will most likely be the benefit to the social welfare objective the investor is contributing towards.
- **Limited to registered companies only:** Only registered companies can list on stock exchanges. There are other unregistered entities doing good work in health, education and policy advocacy.
- Accreditation: The biggest issue is still accreditation at all levels— among investors, social businesses, and
 the intermediaries that act as vital brokers and valuation experts in the field. Getting enough "genuine"
 social impact companies becomes difficult.

Way forward

- **Define the organisations**: The contours of a 'social enterprise' and a 'voluntary organisation working for the realisation of a social welfare objective' will have to be defined because, the wider the scope of these terms, the more diverse will the regulatory framework need to be.
- **Proper policies**: SEBI's extensive expertise notwithstanding, the extent of overhaul it will require over the existing infrastructure, the totality of the new laws, policies and formulations that need to be drafted and the time it will take to achieve and finally launch the SSE may be gauged only after the specifics have been brought forth.
- Proper ROI methodology: It would seem that trading in instruments issued by social welfare organisations
 will require an additional mechanism that calculates the value of each such instrument on the basis of the
 ROI methodology that is devised.
- **Education, training, and awareness**: This would allow social businesses to attract capital and set them apart as a special "asset class" like traditional for-profit investments.
- Creating social businesses: There are efforts underway to create and support social businesses, but we need
 more.
- **Research and development**: This knowledge would provide the right framework within which investors can make more holistic decisions that include social businesses and SSEs.
- **Regular assessment**: An assessment of how effective the current provisions are and what efforts are required to enable social enterprises to fully leverage them would be useful.
- **Coordination between different bodies:** Another task for the government is to work with NGOs and social enterprises and prepare them to absorb large funds.

3.8. MICROCREDIT

Why in news?

Recently, some experts have suggested that the existing systems of microcredit have a limited impact on the long-term wellbeing of the recipients.

Microcredit

- Microcredit refers to the **granting of very small loans** to impoverished borrowers, with the aim of enabling the borrowers to use that capital to become self-employed and strengthen their businesses.
- Loans given as microcredit are often given to people who may lack collateral, credit history, or a steady source of income.
- The core idea of microcredit is that a **small loan will provide access to the larger economy to people** who typically live outside the scope of the institutions on which the mainstream economy rests.
- Microcredit falls under the **larger umbrella of microfinance**, financial services for individuals who don't have access to traditional services of this kind.
- In India, the microcredit model has been dominated by the Self Help Group movement.
 - o It now has a savings account balance of Rs. 19,500 cr and credit outstanding of over Rs. 75,500 cr.
 - There are more than 5000 channel partners and 8.7 Million groups touching more than 100 Million rural households

 Recently, a review article published in, Ideas for India, a policy research portal claimed that certain flaws in how microcredit transactions occur has led to the outcomes having muted benefits in improving the lives of its beneficiaries in a meaningful way.

Benefits of microcredit

- **Poverty alleviation-** as these small loans helps them to begin production and attain self-sufficiency.
- Promoting Entrepreneurship- which lead to development of new ventures such as Lijjat Papad among others.
- **Help casual labour-** such as rural labourers to diversify their source of income by starting new work during lean seasons.
- **Women Empowerment-** Lending to microfinance borrowers, mostly women in rural areas, has increased by 900% over the last six years, from \$2 billion in 2012 to \$20 billion 2018.
- **Social Security-** as it can be used to dampen the effects of shocks like floods by providing people with a form of insurance that both increases production before the shock and provides a safety net after.

Issues in microcredit in India

- Lack of flexibility- Many microcredit programmes require that repayment starts almost immediately and then follows a strict weekly schedule. It makes it difficult for borrowers to use the money they receive for productive investments that may take time to be realised.
- **Non-maintenance of Credit History-** The rigidity surrounding repayment is largely a response to lack of information about the creditworthiness of clients. Many microcredit borrowers have little or no formal credit history, meaning lenders have been unable to screen out unproductive borrowers.
- Vulnerability of Microfinance Institutions- to even a small adverse development, as their finances remain
 fragile due to small size of these institutions. Unlike banks, which have multi products and an assured
 deposit base, micro lenders are dependent on markets for funds, which turn hostile at the smallest of events
 that affect business.
- Create further debt traps- when a small business fails and takes another loan to fulfil the previous one. It rather exacerbates the debts.

Steps taken towards microcredit in India

- The Self Help Groups Bank linkage (SHGBLP) programme- It is an initiative of NABARD to link the unorganised sector with the formal banking sector. Under this programme:
 - o banks were allowed to open savings accounts for Self-Help Groups (SHGs).
 - o banks can provide loans to the SHGs against group guarantee and the quantum of loan could be several times the deposits placed by such SHGs with the banks.
- The Livelihood and Enterprise Development Programme (LEDP)- for creating sustainable livelihoods amongst SHG members was introduced on pilot basis in select states, which now has been mainstreamed in all states in the country
- The India Microfinance Equity Fund (IMEF)- to support the Microfinance Institutions (MFIs).
- The Micro Units Development & Refinance Agency Ltd (MUDRA)- set up by the Government of India in 2015 with its total focus on microenterprise, has to hand-hold and facilitate the development process of smaller Microfinance Institutions and not for profit MFIs.

3.9. CHIT FUNDS (AMENDMENT) BILL, 2019

Why in news?

The Union Cabinet has approved the introduction of the Chit Funds (Amendment) Bill, 2019 in the Lok Sabha.

More on news

The Bill makes amendments to the Chit Funds Act, 1982, to facilitate orderly growth of the Chit Funds sector
and remove bottlenecks being faced by the Chit Funds industry, thereby enabling greater financial access of
people to other financial products.

Provisions under Chit Funds (Amendment) Bill, 2019

- Additional names for chit funds: The 1982 Act specifies various names which may be used to refer to a chit fund. These include chit, chit fund, and The Bill additionally inserts 'fraternity fund' and 'rotating savings and credit institution' to this list.
- Presence of subscribers through videoconferencing: The Act specifies that a chit will be drawn in the presence of at least two subscribers. The Bill seeks to allow these subscribers to join via video-conferencing.
- Increase in foreman's commission: Under the 1982 Act, the 'foreman' is entitled to a maximum commission of 5% of the chit amount.

The Bill seeks to increase the commission to 7%.

responsible for managing the chit fund.

- Aggregate amount of chits: The Bill has increased the limits of maximum amounts that can be collected under the chits by firms, associations or individuals..
- Application of the Act: At present, the 1982 Act does not apply to chits smaller than ₹100. The Bill seeks to

3.10. COAL INDIA

Why in news?

The Government of India is considering to break Coal India into separate listed companies to improve its working.

Background

- The Department of Investment & Public Asset Management (DIPAM) had sent a proposal to Coal India and the Ministry of Coal to list four of Coal India's biggest
 - production units, as well as its exploration arm.
- Coal India Limited is the dominant coal miner in the country. It made up 83% of domestic production and 63% of total coal supply (in tonnes) for fiscal year 2018-2019.
 - o The four units -- Mahanadi Coalfields, South Eastern Coalfields, Northern Coalfields and Central Coalfields -- account for more than three-fourths of the company's output, while constituting less than half of its workforce.
 - o But, coal mining has been characterised by the monopoly of CIL, lack of an effective regulatory mechanism, poor exploration efforts and sub-par safety records.
- Around 70 per cent of power generation is coal based. India is the third-largest producer of coal in the world, but also third-biggest importer of coal, which the government wants to change by boosting local coal production.

Concerns with Coal India

Unable to meet growing demand despite abundant resources- Coal India produced a record 607 million metric tons but falling short by 22% of a target proposed in 2017. The goal has been revised a few times since then, but output was still just below a revised target.

Chit fund

- A chit fund is a type of saving scheme where a specified number of subscribers contribute payments in instalment over a defined period.
- Each subscriber is entitled to a prize amount determined by lot, auction or tender depending on the nature of the chit fund.
- Typically, the prize amount is the entire pool of contribution minus a discount which is redistributed to subscribers as a dividend.
- With a reported 10,000 chit funds in the country handling over Rs 30,000 crore annually, chit fund proponents maintain that these funds are an important financial tool.
- However, these can be misused by its promoters and there are many several instances of people running such Ponzi schemes and then absconding with investor's money.

Regulation of chit funds: being part of the Concurrent List of the Indian Constitution; both the centre and state can frame legislation regarding chit funds.

- Neither RBI nor SEBI regulates the chit fund business.
- Under the Chit funds Act, 1982 all chit fund companies need to be registered with respective state government.

remove the limit of ₹100 and allows State government to set the limit.

About Coal India Limited

- Coal India Ltd. was formed in the year 1975.
- Before 1975, the Indian coal industry was plagued with a number of issues like low productivity, lack of strategic planning, lack of funds, low-grade technology and lack of regulation.
- Under government monopoly, coal production by Coal India Ltd. increased steadily.
 - However top-grade coal was still not mined extensively, prompting us to import it from countries like Australia, Indonesia and South Africa.

- Declining Production- which has fallen by 5.1 per cent and despatches by 2.9 per cent in July 2019 against the corresponding period of the last year.
- Decline in Capacity Utilization- due transportation bottlenecks, management vacancies, delays in procurement and strikes and bandhs
 - Inefficient organisation- CIL's output-per-man shift is estimated at one-eighth of Peabody Energy, the world's largest private coal producer.
- Delays in the projects- Till date, CIL's 54 coal-mining projects are facing delays due to various reasons such as contractual issues and delays in securing green clearances, among other factors.
- Under-utilization of funds- The Standing Committee on Coal had observed that CIL had utilised only 62% of the funds allocated to it till 2016.

Other Issues plaguing Coal Mining

- Unfavourable socio-economic environment in East India- The damage from open-cast mining is irreparable, rendering the land useless.
 - Deforestation has become rampant, hampering ecology in these areas.
 - People displacement has also increased due to infertile land and non-availability of water.
- **Civil unrest** is another important reason for not mining efficiently. Coal reserves are most highly concentrated in areas where Maoist guerrillas operate, making the area hostile for mining.
- Increasing illegal mining and exporting of coal- So while the nation bleeds for more coal, there are select few who engage in selfish malpractice like an illegal sale of coal for their personal gain. Litigation against them often goes on for years, so illegal mining hasn't been controlled yet.
- **Rising imports** imports of the coal have surged to a record over the same period.
 - The reasons include higher landed costs of domestic coal at distant locations (exacerbated by high railways transportation costs), better quality of imported coal and lower ash content, selected power plant boilers being designed to a particular quality of imported coal, and a lack of domestic coking coal production (for the steel sector).
- **Infrastructure** e.g. an overworked railway network has hampered transport of the fuel.
- Falling share in capital markets- CIL has a market cap of about \$28 billion, which are heading for a fifth straight year of decline.
- Lack of availability of the latest technological equipment for deep depths coal mining.
 - The machinery available with CIL called open-cast mining allows drilling mostly up to 300 meters below earth's surface, but about 40% of total coal reserves are located at a deeper depth which cannot be extracted using opencast mining.
 - Moreover, open cast mining is more preferred because it is easier, cheaper and safer than newer technology methods.
 - Hence the 40% reserves remain untouched while steel companies are forced to import coal.
- Lack of an accurate assessment and evaluation system of coal reserves distribution in the country.
 - Technology and systems available with CIL do not show a precise account of coal reserves, due to which they mine imperfectly.

Advantages of breaking up CIL

- Bring **competition** and need for innovation
- Take up methods to foresee demand-supply situation and set long-term goals.
- Can help increase production of coal to 1 billion tonnes a year by 2020 from around 539 million tonnes in the fiscal year.
- Government can divest some of its shares, which can bring more private participation and greater managerial expertise.

Challenges of breaking up CIL

- Face protests by labour unions
- There are **structural differences** between subsidiaries, which may not be addressed by mere change of management.
- There are a wide range of subtle cross-linkages, ranging from inter-subsidiary staff movement (management level), differences in dividend payouts etc, which will make breaking it up difficult.

Some of the recommendations of the Working Group on Coal-

• Coal companies should take possession of the entire area of land required for the life of the project at one instance to avoid delays in land acquisition.

- Special task force to grant necessary clearances such as mining lease, forest and environment clearances, and land acquisition. The number of levels and stages in the processes should be reduced.
- Opening up the sector for more private participation, especially with regard to captive mining.
- Setting up a regulatory authority, which would have powers to comprehensively handle coal resource development and regulation of its extraction and use.

Way Forward

A blanket approach of breaking a large corporation into parts may not be applicable in the case of Coal India limited due to various synergies and location specific cross-linkages present in different production units. Rather to improve the efficiencies and competition, there is a need to enhance private players, allow commercial mining and achieve a suitable number of players in public sector to optimize production.

Related news

- Recently, the Government allowed 100 per cent Foreign Direct Investment (FDI) under the automatic route in coal
 mining and associated infrastructure to help attract international players to create an efficient and competitive coal
 market.
- Presently, 100 per cent FDI under automatic route is allowed in coal and lignite mining for captive consumption in power projects, iron and steel and cement units.
- Now, the same has been allowed for sale of coal and mining, including associated processing infrastructure such as coal washery, crushing, coal handling, and separation (magnetic and non-magnetic).
- Currently, the Coal India Ltd. (CIL), private and public sector companies with captive mines were allowed to mine and sell 25 per cent of coal in the open market.
- FDI is expected to **improve mining lifecycle** as with the coming in of professional coal miners, overall improvement in coal mining technologies and process will be witnessed.
 - Also by raising domestic supply of the key raw material for power, steel and cement production there will be cost cutting and reduction in burgeoning imports.

• Other FDI reforms announced:

- o 100 per cent FDI under automatic route has been allowed in contract manufacturing to give a big boost to domestic manufacturing.
- On FDI in single-brand retail, the Cabinet also relaxed the definition of mandatory 30 per cent domestic sourcing norm.
 - ✓ Presently, the FDI Policy provides for 30 per cent of the value of goods have to be procured from India if the single brand retailing entity has FDI of more than 51 per cent.
 - ✓ With a view to providing greater flexibility and ease of operations, the Union Cabinet decided that all procurement made from India by such entity for that single brand shall be counted towards local sourcing, irrespective of whether the goods procured are sold in India or exported.
- It also allowed single-brand retailers to start online sales, waiving the previous condition of setting up a brick-andmortar store.
- While the current FDI policy provides for 49 per cent FDI under approval route in up-linking of News & Current
 Affairs TV channels, the Cabinet has decided to permit 26 per cent FDI under government route for uploading/
 streaming of news and current affairs through Digital Media on the lines of print media.

3.11. MARINE FISHERIES SECTOR

Why in News?

Recently, Marine Fisheries Regulation and Management (MFRM) Bill 2019 is circulated in the public domain for discussion.

Marine Fisheries sector in India

- Marine Fisheries is that **branch of fisheries which deals primarily with marine fishes and other sea products.** For E.g. Oil sardines, tunas, crabs, marine algae etc.
- India is the **second largest fish producer in the world** with a total production of 13.7 million metric tonnes in 2018-19.
- The sector has been showing a steady growth in the total gross value added and accounts for **5.23** % share of agricultural GDP.

- Indian fisheries and aquaculture is an important sector of food production providing nutritional security. besides livelihood support and gainful employment to more than 14 million people, and contributing to agricultural exports.
- It also helps in maintaining the contribution national economic development, tourism and recreation.

Challenges

- Issue with Deep sea Fishing: Deep sea fishing policy had been criticized by various fisher groups, mechanized fishing vessel owners, fish processors etc. due to opening of Indian seas to the foreign factory fishing ships.
 - Also, no suitable data is available about the deep sea resources.
 - The deep-sea fishing needs higher capital investment and recurring cost.
 - There is also non availability of skilled manpower for deep sea fishing.
- Unorganized marketing system: The existing marketing system in India does not have any forward or backward linkages.
 - There is a wide difference between fish sale price at landing centres and the retail
 - markets which indicates that the middlemen is benefitted with the substantial share of the prices.
- **Unutilised resources**: Most of the resources caught in the high
 - seas are discarded out at sea except for high value resources like shrimps and sharks.
- Lack of value addition technology: There is a huge gap in the technological expertise and further standardization of the developed technology by research institutes.
- Lack of Infrastructure facility: The infrastructure facility like Standard Boat building yards for construction of New boats and repair of existing crafts, exclusive fishing harbor etc. pose a huge challenge for this sector in fisheries.
- Declining catches and overfishing in coastal waters due to Climate change, Habitat degradation (industrial waste, domestic sewage, pesticides), Illegal, unreported and unregulated landings etc.

Marine Fisheries Regulation and Management (MFRM) Bill 2019

India has proposed Marine Fisheries Regulation and Management (MFRM) Bill 2019 as per its obligation under the United Nations Convention on the Law of the Sea (UNCLOS) 1982 and the World Trade Organisation (WTO) agreements.

- Covering the gap between centre and state: Since fisheries is a state subject, fishing in the internal waters (IW) and the territorial sea (TS) come within the purview of the states concerned. Other activities in the TS and activities, including fishing beyond the TS up to the limit of the EEZ, are in the Union list. No Central government, so far, has framed laws covering the entire EEZ.
- Social security: It proposes social security for fish workers and calls for protection of life at sea during severe weather events.
- Fishing in EEZ: The Bill prohibits fishing by foreign fishing vessels, thus nationalising EEZ. An Indian fishing vessel desirous of fishing in the EEZ, outside the TS, must obtain a permit.
- **Fisheries management plan:** It will ensure that the ecological integrity of the maritime zones of India, including prevention, control and mitigation of any form of pollution arising through fishing and fishing related activities is maintained.

Potential of Marine fisheries in India

- India has vast potential for fisheries considering long coastline of about 8118 km, and an Exclusive Economic Zone (EEZ) of 2.02 million sq Km apart from the inland water resources.
- The annual fishery potential of the country's EEZ is about 5 million tonnes.
- India has large coastal wetlands which cover an area of over 40,230 km².

Steps taken by government

- Blue Revolution: Integrated Development and Management of Fisheries approved by the Government provides for a focused development and management of the fisheries sector to increase both fish production and fish productivity from aquaculture and fisheries resources of the inland and marine fisheries sector including deep sea fishing.
- A draft national policy on Mariculture has been formulated to ensure sustainable farmed seafood production for the benefit of food and nutritional security of the nation.
- Government had notified National Policy on Marine Fishing 2017.
- "Letter of Permit"(LOP) system in the exclusive economic zone (EEZ) has been stopped in order to boost the livelihood of local fisherman.
- Traditional fishers have been exempted from the fishing ban implemented during monsoon period in the EEZ.
- Prohibited the use of LED lights and other artificial lights and practice of bull-trawling, purse seining and gill netting operations in the Indian EEZ to protect the marine ecology.

- Post harvest losses due to discard, spoilage, reduced quality.
- No social security: The fishing community does not get any proper social security benefits.

Way forward

- **Funding**: The funding from the Government needs to be channelized considering the importance and scope of the deep-sea sector in the coming years.
 - o It is suggested that refinancing from NABARD can be arranged by the Govt. by issuing a notification or the subsidy schemes may be made available to the interested entrepreneurs by the Govt.
- **Special insurance system** for the fishing community and cooperation in safety and security of fishermen with neighbouring countries should be paramount to averse the loss of many fishers lives.
- **Revival of cooperative sector** with constant engagement of center government would help in achieving the doubling the famers Income 2022.
- **Training:** Pro-active support, possibly through the provision of objective and competent advice and training, to facilitate industry privatization initiatives with a view to making it more efficient and competitive.
- Awareness: It is also essential to create awareness on the edible qualities and the nutrient values of the non-conventional resources among the public so as to generate a free market for many such deep sea resources.
 - Research and development programmes should be strengthened through projects on exploratory deep sea surveys.
- **Conservation of sea resources**: The Govt. should take steps to ensure conservation of threatened and endangered deep sea resources such as shrimp and lobsters through legal provisions.
- **Cooperative governance** between centre & state over different territories of sea is key to the sustainable management of marine fisheries, which should ideally go into the Concurrent List.

3.12. RENEWABLE HYBRID ENERGY SYSTEMS

Why in News?

India recently conducted two auctions for wind/solar hybrid projects.

About Renewable Hybrid energy system

- Hybrid energy system usually comprises of two or more renewable energy sources combined in such a way to provide an efficient system
- with appropriate energy conversion technology connected together to feed power to local load or grid.
- Various types of Hybrid Renewable Energy Systems include: Biomass-wind-fuel cell, a photovoltaic cell array coupled with a wind turbine, hydro-wind energy system etc.

Benefits

- Hybrid energy systems are inclined towards providing customized power solutions according to the diverse
 needs of the customer. They were devised to overcome the constraints of standalone systems and fulfil the
 need for a reliable power source. (see box)
- They are **beneficial in terms** of reduced line and transformer losses, reduced environmental impacts, increased system reliability, improved power quality and increased overall efficiency.
- Hybrid energy systems often yield greater economic and environmental returns than wind, solar or geothermal stand-alone systems.
 - For example: Hybrid energy systems run on solar energy to provide power in the daytime and use wind
 energy to provide power in the night time. Having been able to supply continuous power to clients,
 there is a reduced power storage cost.
- It is estimated that wind-solar storage hybrid systems **could generate round-the-clock power with cost as well as reliability levels** comparable to existing coal-fired power plants in the next 4-5 years.
- They can therefore become a viable solution to meeting future baseload power requirements, all **at zero** carbon emissions and future cost-inflation proof.

Issue in standalone renewable energy systems

- It relies on **intermittent sources**, producing energy only when the sun is shining or wind is blowing.
- Its output is constrained to specific hours of the day
- Its use leads to lower utilization of transmission lines.
- It creates issues in matching peak power demand with renewable output (e.g. in evening hours when solar energy is not available), and raise costs of transmission.

Challenges in implementing such system

- Technical challenges: The renewable energy sources, such as solar PV and FCs, need innovative technology
 to harness more amount of useful power from them. The poor efficiency of solar is major obstruction in
 encouraging its use.
- **High manufacturing cost:** The manufacturing cost of renewable energy sources needs a significant reduction because the high capital cost leads to an increased payback time.
- **Power loss**: It should be ensured that there should be minimal amount of power loss in the power electronic devices.
- Storage issues: The storage technologies need to increase their life-cycle through inventive technologies.

Way forward

- **Rightful use of storage**: If we can store some energy during excess renewable generation hours and release it into the grid during peak demand hours, the combined "hybrid" system can produce 24x7 clean energy in response to varying levels of demand through the day.
 - The storage can take many forms, such as batteries, pumped hydro or mechanical storage through flywheels.
- Ramping source of power: The intermittency of wind and solar could also be balanced by adding a fast; for example, an open cycle gas turbine. The overall output of the hybrid system can thus be matched against a required load on an hourly basis.
- **Technical advancement:** It is equally important to have proper R&D for such systems so that they can be used effectively.
- Collaboration with other countries for viable storage solutions.

Conclusion

This approach of using hybrid models would not only help in village electrification but it will also be more significant as its implementation is a smarter approach towards conservation of our environment ultimately making power grid smarter. To support this Ministry of new and renewable energy released a solar-wind hybrid policy in 2018 which provides a framework to promote grid-connected hybrid energy through set-ups that would use land and transmission infrastructure optimally and also manage the variability of renewable resources to some extent.

3.13. TOURISM INDUSTRY

Why in news?

Recently, the Prime Minister urged people to visit at least 15 tourist destinations within India by 2022.

Potential of Tourism for India

- Large number of domains and destinations in India- including heritage tourism, natural tourism, spiritual tourism, medical tourism etc.
- Economic Potential- towards employment generation, incoming foreign exchange and added income for the locals of these places.
- **Contribution to India's soft power-** in terms of people to people contact and stature in the global arena.

Steps taken towards it

- Augmenting Tourism Infrastructure- through schemes such as-
 - Swadesh Darshan Scheme- Under this scheme fifteen thematic circuits have been identified for development such as North-East India Circuit, Buddhist Circuit etc.

2015 1,432 in million

2016 1,615 2017 1,652

Major Issues with Tourism in India

- Infrastructural issues- including suitable lodging and connectivity to the tourism sites.
- Cleanliness concerns- owing to poor maintenance and dumping of waste.
- Lack of basic amenities- such as good quality food, safe drinking water, clean toilets among others.
- Safety concerns- especially pertaining to women safety. Also there is issue of terrorism, insurgency in some of the border states like Jammu and Kashmir, North-Eastern states.
- Environmental issues- where the local environment faces degradation owing to increasing tourist traffic.

- o **Prashad Scheme** (Pilgrimage Rejuvenation and Spiritual Augmentation Drive)- Under this, 25 sites have been identified for development in India such as Amravati, Ajmer, Varanasi etc.
- Adopt of Heritage Scheme- whereby outsourcing of the maintenance of some of the monuments have been done by the Ministry.
- Ensuring Ease of Travel- through
 - o **Issuance of e-Visa** in the areas of travel, business and medical reasons.
 - Multilingual Toll free tourism infoline- to provide information services and also guide the tourists during any emergencies such as medical, crime, natural calamities etc.
- Promotion and Publicity- the Ministry of Tourism promotes products and destinations of India through-
 - Organising and Participation in tourism related events such as Paryatan Pary, Bharat Pary
 - o Campaigning in the print, electronic, social, online and outdoor media,
 - o Producing brochures, maps, posters, promotional films etc.
 - Also launched the 'Incredible India 2.0' Campaign during 2017-18 to cover both major and emerging markets.
- Promotion of Service Quality Standards- through hotel classification into various stars (one to five), heritage, legacy vintage hotels etc.
- International Cooperation- the Ministry engages in various consultations and negations with organisations such as UN World Tourism Organisation (UNWTO), Economic and Social Commission for Asia and the Pacific (ESCAP) etc.

Way Forward

- Developing an all-encompassing **One Stop Solution** including information on tourism related services through a web based application and a Grievance Redressal Mechanism through Twitter and Tourist-Helpline
- The States/ UTs should adopt Adventure Tourism and Bed & Breakfast / Homestay Scheme Guidelines.
- There is a need to change the **perception of India in** the mind of foreign tourists, which will yield good results for promotion of tourism. The states should also organize surveys to understand how the foreign tourists perceive India and should work towards removing negative impressions.

3.14. SUGAR INDUSTRY IN INDIA

Why in News?

The Union cabinet recently approved the creation of a buffer stock of 4mt of sugar.

More about news

- The buffer stock will be created for one year from August 1, 2019, to July 31, 2020, for which the government would be reimbursing the carrying cost of about ₹ 1,674 crore to participating sugar mills.
- The **reimbursement under the scheme** would be met on **quarterly basis to sugar mills** which would be directly credited into farmers' account on behalf of mills against cane price dues and subsequent balance, if any, would be credited to the mill's account.
 - The step is aimed at increasing wholesale prices of sugar and improving cash flow to sugar mills, which
 in turn will help mill owners to clear the dues of farmers.
 - Since the 2019-20 marketing year is likely to commence with huge carryover/opening stock, building a sugar buffer stock will help maintain demand-supply balance and to stabilize sugar prices.
- The cabinet also approved a proposal on the fair and remunerative price (FRP) of sugar cane payable by sugar mills for the 2019-20 sugar season, at the same rate as was offered in 2018-19.

Sugar industry in India

- India is the largest producer of sugar including traditional cane sugar sweeteners, khandsari and Gur equivalent followed by Brazil.
- Sugarcane provides raw material for the second largest agro-based industry after textile.
- The sugar industry is an instrumental in generating the sizable employment in the rural sector directly and through its ancillary units.

- Broadly there are two distinct agro-climatic regions of sugarcane cultivation in India, viz., tropical and subtropical.
 - Tropical Sugarcane region: It includes the states of Maharashtra, Andhra Pradesh, Tamil Nadu, Karnataka, Gujarat, Madhya Pradesh, Goa, Pondicherry and Kerala.
 - Sub-tropical sugarcane region: Around 55 per cent of total cane area in the country is in the sub-tropics. U.P, Bihar, Haryana and Punjab comes under this region.

Challenges faced by Sugar Industry in India

- Low level of productivity of sugarcane:
 Due to inadequate irrigation facilities and untimely supply of quality seed material.

 Average rate of recovery in India is less than ten per cent which is quite low as compared to other major sugar producing countries.
- Inefficient govt policies: More problems of sugar industry are the result of the Government policy regarding to the policies on the cane prices, control of price of sugar, dual pricing etc.
- Pricing Mechanism: The production of sugar is influenced by the purchasing price of sugarcane depending upon the cost of cultivation. The industries price of the main raw material in turn depends upon the prices of competitive food crops on one hand and the cane price fixed by the Government on the other.
- Seasonal nature: The sugar industry has a seasonal character and the crushing season normally varies between 4 and 7 months in a year leaving the mill and the workers idle for almost half of the year
- Problem of By-products: An important problem of sugar industry is the utilization of by products specially bagasse and molasses. The industry faces problems in disposing these by-products especially under pollution control devices.

Sugarcane Pricing mechanism in India

- In India, the pricing of sugarcane is governed by the statutory provisions of the **Sugarcane (Control) Order, 1966** issued under the Essential Commodities Act (ECA), 1955
- There are mainly two prices for sugarcane
 - Fair and Remunerative Price (FRP): It is the cane price announced by the Central Government on the basis of the recommendations of the Commission for Agricultural Costs and Prices (CACP) after consulting the State Governments and associations of sugar industry.
 - State Advised Prices (SAP): Citing differences in cost of production, productivity levels and also as a result of pressure from farmers' groups, some states declare state specific sugarcane prices called State Advised Prices (SAP), usually higher than the SMP/FRP
- This dual sugarcane pricing distorts sugarcane and sugar economy and leads to cane price arrears
- **High SAPs** without any linkage with the output price becomes unviable
- Industry association recommends to remove the system of SAP; in case states announce SAP, such price differential should be borne by the state governments.

Factors for fixation of FRP

- Cost of production of sugarcane
- Inter-crop price parity
- Reasonable margins for the growers of sugarcane on account of risk and profits
- Recovery of sugar from sugarcane price at which sugar is sold by sugar producers
- The realization made from sale of by- products or their imputed value
- Recovery of sugar from sugarcane
- Price at which sugar is sold by sugar producers
- Availability of sugar to consumers at a fair price

Shifting trend of sugar industry to peninsular India

- Apart from Uttar Pradesh, in recent year many peninsular states like Maharashtra, Karnataka, Tamil Nadu etc. have emerged as major producer of sugar which has also caused sugar mill industries to shift to peninsular India.
- The **reason for this shift** is also due to better conditions available for cultivation in the peninsular part like
 - longer crushing period
 - o adequate rainfall
 - higher recovery rates
 - o higher sucrose content than northern India
 - $\circ\quad$ easier transportation access due to port areas etc.
- **High Prices of Sugar:** The inefficiency and uneconomic nature of production in sugar mills, low yield and short crushing season, the high price of sugarcane and the heavy excise duties levied by the Government these are responsible for the high cost of production of sugar in India.
- **Obsolete and old machinery**: Majority of the machines which are currently in use in sugar mills across India, mainly in states like Bihar and Uttar Pradesh, are obsolete and old.
- **Small and uneconomic size of mills:** Most of the sugar mills in India are of small size with a capacity of 1,000 to 1,500 tonnes per day. This makes large scale production uneconomic. Many of the mills are economically not viable.

- Regional imbalances in distribution: Over half of sugar mills are located in Maharashtra and Uttar Pradesh and about 60 per cent of the production comes from these two states. On the other hand, there are several states in the north-east, Jammu and Kashmir and Orissa where there is no appreciable growth of this industry. This leads to regional imbalances which have their own implications.
- Uncompetitive in global markets: The Indian sugar is uncompetitive in the global market as there is a fixed minimum support for the sugarcane with no impact arising from market forces. As a result, the export of excess output of sugar is not a viable proposition for the Indian sugar mills.

Way Forward

• Miniaturization of sugar industries: This will help group of small farmers to setup a small scale sugar industry themselves near their sugarcane fields. They need not to depend on anybody to sell their sugarcane.

Various Steps taken by Government

- Ethanol Blended Programme (EBP): It seeks to achieve blending of Ethanol with motor sprit with a view to reducing pollution, conserve foreign exchange and increase value addition in the sugar industry enabling them to clear cane price arrears of farmers. The Central Government has scaled up blending targets from 5% to 10% under the EBP.
- National Policy on Bio-Fuels, 2018: Under this policy sugarcane juice has been allowed for production of ethanol. Government fixed remunerative price of ethanol produced from C-Heavy molasses and B-Heavy molasses/sugarcane juice separately for supply under Ethanol Blended Petrol (EBP) during ensuing ethanol season 2018-19.
- Scheme for Extending Financial Assistance to Sugar Undertakings (SEFASU-2014): It envisages interest free loans by bank as additional working capital to sugar mills, for clearance of cane price arrears of previous sugar seasons and timely settlement of cane price of current sugar season to sugarcane farmers.
- Improve cane pricing: The ideal way to manage sugar surplus is to link the sugarcane price to output price.
 - The government should come up with a formula that arrives at the cane price after factoring the value of the output (including price of sugar, ethanol and power generated from bagasse)
- **Power generation:** Using cogeneration technology is another option through which companies can generate revenues by selling extra electricity generated as a by-product of sugar production to power distribution companies.
- Encourage public to use more jaggery and mechanization of jaggery plants
- License to farmers to produce alcohol from molasses
- Encourage all sugar industries to have co-generation plants
- Recommendation Rangarajan Committee on the Regulation of Sugar Sector in India
 - It suggests that sugar pricing should be based on a revenue sharing formula based on 75 per cent of sugar prices or 70 per cent of the price of sugar and major by products.
 - States should not declare State Advised Price (SAP). It suggested determining cane prices according to scientifically sound and economically fair principles.
 - All existing quantitative restrictions on trade in sugar should be removed and converted into tariffs.
 - o Removing the regulations on release of non-levy sugar.
 - States should encourage development of market-based long-term contractual arrangements, and phase out cane reservation area and bonding.
 - o The prices of the by-products should be market-determined with no earmarked end-use allocations.

3.15. CONSUMER PROTECTION ACT 2019

Why in News?

President gave assent to the Consumer Protection Act, 2019.

More in News

 The new Act, which would replace the Consumer Protection Act, 1986, is not an amendment to the 1986 law, but a new consumer protection law.

Issues with the Act

- The Act does not specify that the Consumer Disputes Redressal Commissions will comprise a judicial member. If the Commissions were to have members only from the executive, the principal of separation of powers may be violated.
- The Act does not specify whom the Consumer Protection Councils will advise. If the Councils advise the government, it is unclear in what capacity such advice will be given.
- The definition of 'consumer rights' in the Act is not simple and straight forward, so that consumers at least know what their entitlements are.

• It aims to address consumer vulnerabilities to new forms of unfair trade and unethical business practices in the fast-changing new-age economy.

Key Feature of the Act

- A consumer is defined as a person who buys any good or avails a service for a consideration. It does not include a person who obtains a good for resale or a good or service for commercial purpose. It covers transactions through all modes including offline, and online through electronic means, teleshopping, multilevel marketing or direct selling.
- The Act defines "consumer rights" as the right
 - o to be protected against the marketing of goods, products or services which are hazardous to life and property.
 - to be informed about the quality, quantity, potency, purity, standard and price of goods, products or services;
 - o to be assured of access to a variety of goods, products or services at competitive prices.
 - o It also includes the right to be heard and to be assured that the consumer's interests will receive due consideration at appropriate forum; and
 - the right to consumer awareness.
- Central Consumer Protection Authority will be set up to promote, protect and enforce consumer rights. It
 can issue safety notices for goods and services, order refunds, recall goods and rule against misleading
 advertisements.
 - The CCPA will have an **investigation wing**, headed by a Director-General, which may conduct inquiry or investigation into such violations.
- Consumer Disputes Redressal Commissions will be set up at the District, State and National levels for adjudicating consumer complaints. Appeals from the District and State Commissions will be heard at the next level and from the National Commission by the Supreme Court.
- **Consumer Protection Councils** will be established at the district, state and national levels to render advise on consumer protection.
- **Product liability means** the liability of a product manufacturer, service provider or seller to compensate a consumer for any harm or injury caused by a defective good or deficient service. A claim for compensation may be made for any harm caused, including:
 - o property damage
 - o personal injury, illness, or death; and
 - mental agony or emotional harm accompanying these conditions.

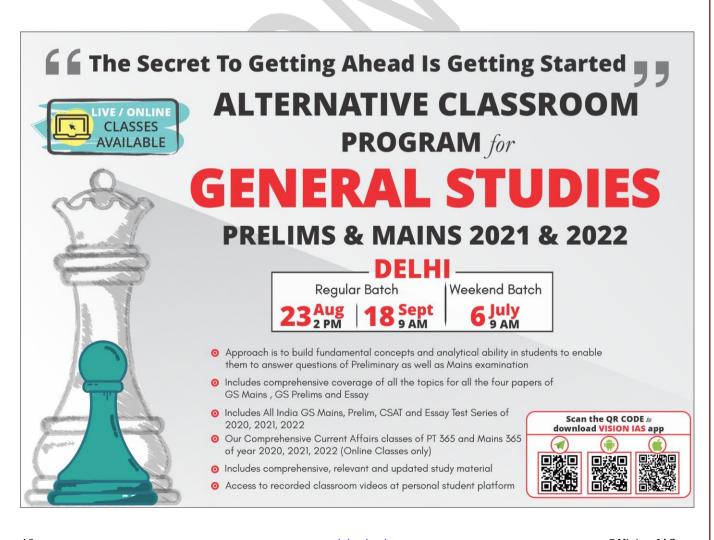
Comparison of the 1986 Act with the 2019 Act

	1986 Act	2019 Act
Ambit of law	All goods and services for	All goods and services, including telecom and housing construction,
	consideration, while free and	and all modes of transactions (online, teleshopping, etc.) for
	personal services are excluded	consideration. Free and personal services are excluded.
Unfair trade	Includes six types of such	The Act adds three types of practices to the list, namely:
practices	practices, like false	failure to issue a bill or receipt;
	representation, misleading	refusal to accept a good returned within 30 days; and
	advertisements.	disclosure of personal information given in confidence, unless
		required by law or in public interest.
		Contests/ lotteries may be notified as not falling under the ambit of
		unfair trade practices.
Product	No provision. Consumer could	Claim for product liability can be made against manufacturer, service
liability	approach civil court but not	provider, and seller
	consumer court	
Unfair	No provision.	The Act recognizes and addresses the menace of unilateral and unfair
contracts		contracts.
Regulator	No separate regulator	Establishes the Central Consumer Protection Authority
Pecuniary	District: Up to Rs 20 lakh; State:	District: Up to Rs one crore; State: Between Rs one crore and up to Rs
jurisdiction of	Between Rs 20 lakh and up to	10 crore; National: above Rs 10 crore.
Commissions	Rs one crore;	
	National: Above Rs one crore.	

Consumer	Complaints could be filed in a	Complaints can be filed in a consumer court where consumer resides
court	consumer court where sellers (defendant) office is located	or work.
E-commerce	No provision	Defines direct selling, e-commerce and electronic service provider. The central government may prescribe rules for preventing unfair trade practices in e-commerce and direct selling.
Mediation Cells	No legal Provision	Court can refer settlement through mediation

Conclusion

The Act is a much-needed step to overhaul the archaic consumer protection law that was increasingly becoming redundant in protecting the interests of Indian consumers in this age of digitization. The Act addresses consumer concerns arising from technological advancements in the marketplace, removes logistical hurdles for the consumers while initiating action, and broadens the scope of grounds for which action can be initiated.



4. SECURITY

4.1. INTEGRATED BATTLE GROUPS

Why in News?

The Indian Army plans to raise new integrated battle groups (IBGs) that can mobilize fast and strike hard across the borders with Pakistan and China, as part of its ongoing endeavor to reformat its entire war-fighting machinery and sharpen the "Cold Start" doctrine.

Background

- After the terrorist attack on the Parliament, the Indian military undertook massive mobilisation but the Army's formations which were deep inside took weeks to mobilise losing the element of surprise.
- The Army formulated its "Pro-Active Conventional War Strategy", colloquially called the Cold Start doctrine, after the slow mobilization of its "strike formations" at the border launch pads under Operation Parakram, which took almost a month after the terrorist attack on Parliament in December 2001.
- Army Chief had initiated four major studies to undertake overall transformation of the force which included restructuring of Army Headquarters; force restructuring which

Problems faced by Indian Army

- **Need effective defence planning-** where the forces do not work in silo-driven approach to defence planning.
- **Need force restructuring-** to achieve a better teeth-to-tail ratio. For this over 12.5 lakh-strong army needs to shed around 1.5 lakh personnel over the next six to seven years.
- Need to improve combat capabilities- including capacity to undertake conventional and hybrid warfare such as mandated under the cold start doctrine, hot pursuit activities, anti-terror operations etc.
- Constrained Capital Budget- Due to changed nature of warfare
 where technology, not manpower, is slated to play a bigger
 role in battles of the future. For the army alone, the ratio of
 revenue to capital expenditure is 81: 19 percent; of which 73
 percent of revenue expenditure is for pay and allowance. The
 implementation of One Rank One Pension has further left little
 for hardware modernization or capital acquisitions.
- Need to remove redundant logistic units- such as the signal regiments have undergone change due to change in electronic warfare. Similarly, the army does not need elements such as military farms.
- includes creation of Integrated Battle Groups (IBG); the cadre review of officers; and review of the terms and conditions of Junior Commissioned Officers and Other Ranks.
- The aim is holistic integration to enhance the operational and functional efficiency, optimize budget expenditure, facilitate force modernisation and address aspirations.

About Integrated battle groups (IBGs)

- IBGs are **brigade-sized**, **agile**, **self-sufficient combat formations**, which can swiftly launch strikes against adversary in case of hostilities.
- Each IBG would be **tailor-made based on Threat, Terrain and Task** and resources will be allotted based on the three Ts.
- They need to be light so they will be **low on logistics**. They will be able to **mobilise within 12-48 hrs based on the location.**
- They are battle formations with heavy firepower that will combine infantry, armour, artillery, engineers, logistics and support units to bring together all necessities to fight a war
- The first three IBGs to be set up in the plains of Jammu, Punjab and Rajasthan for the Pakistan border by October-November along the Pakistan border which will have elements from various formations of the Western Command.

Structure in Indian Army

- While a command is the largest static formation of the Army spread across a defined geography, a corps is the largest mobile formation.
- Typically, **each corps has about three brigades**. Brigades are the smallest battle formations in the Indian Army.
- The IBGs will be even smaller than brigades, to make them more flexible and allow for faster mobilisation of troops.
 - The idea is to reorganise them into IBGs which are brigade-sized units but have all the essential elements like infantry, armoured, artillery and air defence embedded together based on the three Ts.

- The two IBG configurations tested before the decision was finalised included one for offensive roles (strike corps) to carry out hostilities such as cross-border operations and one for defensive postures (holding corps) to withstand an attack from an enemy side.
 - The former will be more armour (tank)-intensive for thrusts across the border, and the latter will be infantry-centric to hold ground.
- The establishment of these groups will do away with the older formation of troops, which included around eight to 10 brigades, each with three to four battalions. Instead, an IBG will have just about six battalions.
- The **IBGs**, with about 5,000 troops each, will be carved out of some of the around 50 divisions (which have about 15,000 soldiers each) under the 14 corps (40,000 to 60,000 troops each) in the 12.3-lakh strong Army.

Significance of the move

- Swift movement of forces: Indian Army aims to be able to move both troops and equipment swiftly and stealthily into enemy territory at short notice, not leaving the rival side with time to tackle the IBGs.
- Better integration of forces and selfsufficiency: These specialised groups will ensure better integration and selfsufficiency as compared to the existing formations. During hostilities, the current system requires a brigade to wait to be augmented by various types of units, such as artillery and logistics, which raises its time to mobilise. This won't be the case with IBGs, which will be self-sufficient and inbuilt with all such units, and hence, easier to mobilise.
- Lean and mean Army: These groups are part of the overall move to make the
 Army lean and mean which will help in

Army lean and mean which will help in better expenditure planning, better synchronization, better preparedness to deal with various issues etc.

Other steps taken

- Restructuring the Army's officer cadre- including bringing down the age of key commands, harnessing the higher life expectancy and motivation of the personnel
- Creation of a new post of Deputy Chief for Military Operations and Strategic Planning- to deal with military operations, military intelligence, strategic planning and operational logistics.
- Merger of separate verticals- of the DCOAS (planning and strategy) and the Master General Ordnance (MGO) into one office of the DCOAS (Capability Development and Sustenance)
- Setting up new wings for vigilance and human rights issuesunder the command of Major General rank officers. This is in accordance with the Army's commitment to probity and transparency.
- Setting up new information warfare wing- to deal with the needs of the future battlefield, hybrid warfare and social media reality. Hybrid warfare is a military strategy that employs political warfare and blends conventional warfare, irregular warfare and cyber warfare with other influencing methods, such as fake news, diplomacy, lawfare and foreign electoral intervention.

4.2. CYBER SECURITY POLICY

Why in news?

Recently, the 12th India Security Summit was organised by ASSOCHAM on the theme "Towards New National Cyber Security Strategy".

About Cyber Security Policy 2013:

The Policy proposed to:

- Set up different bodies to tackle various levels of threats, along with a national nodal agency to coordinate all cybersecurity matters.
- Create a National Critical Information Infrastructure Protection Centre (NCIIPC)
- Create a workforce of around 500,000 trained in cyber security.
- Provide fiscal benefits to businesses to adopt best security practices.
- Set up testing labs to regularly check safety of equipment being used in the country.
- Create a cyber ecosystem in the country, developing effective public-private partnerships and collaborative engagements through technical and operational cooperation
- Build indigenous security technologies through research.

Progress under the Cyber Security Policy-

- An elaborate National Cyber Security assurance framework is under implementation.
- The **National Cyber Security Coordinator** was appointed directly under the **PMO** has led to improved coordination amongst various agencies.
- A NCIIPC has been set up- and there is a regular dialogue with the key sectors of the economy.
- **Public-private partnership is being developed** There is an active dialogue between the government and the private sector.
- Cyber Security Research and Development (R&D) policy has also been under active consideration of the government.
- India is pursuing active cyber diplomacy by setting up cyber security dialogues with several countries and is participating in several international forums including the UN on cyber security.

Challenges, which exist and mandate the need of a new Cyber Security Policy

- Roles and responsibilities- Still there is some ambiguity in responsibility of organisations for cyber security.
 - National Technical Research Organisation has been entrusted with this responsibility, which doesn't come under any ministry and operates directly under Prime Minister's Office (PMO).
 - The interplay between Ministry of Defence (MoD), Ministry of Home Affairs (MHA), the Armed Forces, and the intelligence agencies, both internal and external, **needs to be clearly demarcated.**
 - Lack of Unity of Command- which defines who will carry out offensive cyber operations in a conflict scenario and the rules of engagement.
 - Lack of Standards and Protocols- across the country in the cyber domain.

• Issues with National Cyber Security Coordinator-

- o It does not have any executive power since it is not under any Ministry.
- o It is not in the loop for cyber operations undertaken by the intelligence agencies.
- Its faces lack of staff.
- **Coordination in Public-Private Partnership-** There is a serious mismatch of understanding between the civil sector and the government agency of cyber security.
 - Perception of Private Agencies- the private sector is only interested in grabbing the order, but are not serious enough in developing Indian solutions and thus do not invest much in R&D.
 - Perception of Public Agencies- there is very little understanding of cyber security in the top echelons of the government agencies. Also, the procedures are too bureaucratic, time consuming and the vendors are usually treated appropriately.

Way Forward and broad contours of new Cyber Security Policy

- On Public-Private Partnership-
 - Set up a **permanent mechanism** for private public partnership.
 - o Put in place appropriate policy and legal frameworks to ensure compliance with cyber security efforts.
 - © Establish India as a **global hub of development** of cyber security products, services and manpower.
- Develop **credible code breaking capacity** which the countries like USA, UK, Russia, China possess.
- On Cyber Operations in tactical battle area-
 - Collect intelligence by rapidly exploiting captured digital media.
 - Gaining access to closed networks in or near the area of operations, including extracting and injecting data.
 - Using electronic warfare systems as "delivery platforms for precision cyber effects".
- Creating accountability in Research Organisations- such as the Defence Research and Development Organisation (DRDO), Bhabha Atomic Research Centre (BARC) and Indian Space Research Organisation (ISRO), which can be asked to submit regular Return on Investments in various cyber security fields.

4.3. INDIA'S TRANSITIONS FROM DEFENCE MARKET TO EXPORT HUB

Why in news?

Recently, in its largest ever single export order, the Ordnance Factory Board (OFB) will supply 50,000 artillery shells used with the Bofors guns to the United Arab Emirates (UAE).

Background

- India is at a crucial juncture of its journey towards self-reliance in defense production which started primarily with imports, then progressed towards licensed gradually production from the 1970s, took substantial form in 1980s and 1990s and now we are talking indigenous design, development, manufacturing and export capabilities. Major defence items being exported now are personal protective items, offshore patrol vessels, helicopters and radio sets.
- According to the Stockholm International Peace Research Institute (SIPRI), India was the largest

importer of military equipment in the world, accounting for 13% of the total global arms import between 2012–16. It is more than both China and Pakistan. The report also points out that India increased its arms imports by 43% between 2007–11 and 2012–16. The biggest contributor to Indian exports has been the US, accounting for nearly Rs 5,000 crore worth of exports, followed by old arms partner Israel and the European

• The draft Defence Production Policy, 2018, has set a target of \$5 billion (RS 35000 Crore) in defence export by 2025.

Defence Exports: An Overview

- Increasing self-Reliance: According to a recent statement in Parliament by Minister of State for Defence, in 2015-16 the total capital expenditure for
 - defence procurement was ₹62,341.86 crore. Of this, 62% procurements came from domestic suppliers. Only ₹23,192.22 crore was spent on purchases from foreign vendors.
- Expanding Budget: Defence attaches are being given an annual budget of up to \$50,000 each for promoting exports of Indian made defence products from both the public and private sector by participating in exhibitions, conducting market studies, organizing seminars and distribution of publicity material.
- Source Diversification: A new plan for an 'Open General Export Licence' to give India

Defence Export Sector

- The defence exports have increased exponentially –
 from Rs 4682 crore in 2017-18 to 10745 in 2018-19 –
 on the back of recent policy liberalization. With the
 growing trend of shipments in recent years, exports of
 defence products will exceed the Rs 35,000 crore
 target by 2024-25.
- In the current financial year, exports worth Rs 5600 crore have already been processed, with a bulk of these being by the **private sector**. Of the Rs 11,000 crore odd worth of exports last financial year, the private sector contributed to over Rs 9812 crores.
- The government plans to give the defence sector a \$
 25 billion share in the \$ 1 trillion Indian manufacturing economy to be reached by 2025.

Open general export licence (military goods, software and technology) provides licence for the export of a wide range of military equipment to low-risk destinations.

- These licences are available in the public domain and must be used by exporters.
- Use of these licences removes the need to apply for an individual export control licence.

Recent Reforms in Defence Sector to boost Exports:

- The provision of 'in-principle' approval for export incorporated in the Standard Operating Procedure (SOP) so that domestic players can explore opportunities in overseas markets.
- Setting up of 'Defense Exports Steering Committee' (DESC) for taking
 decisions on proposals of export permissions particularly related to the
 export of indigenously developed sensitive defense equipment and for
 monitoring overall progress of defense exports.
- Setting up of Defense Investor Cell, Society for Indian Defense Start-ups, innovations for defense excellence platform (iDEX), different startup challenges, hackathons etc.
- Decision to establish defense industrial corridors in UP and Tamil Nadu.
- Department of Defence Production has provided a list of 51 items to the industry lobbies to identify how many of them can be manufactured in India and made available for exports.
- It has also proposed a series of amendments to the Defence Offset
 Guidelines to open up new avenues for discharge of offset obligations
 by foreign vendors. Among the new avenues are: investment in
 specified projects in defence, aerospace and internal security such as
 testing labs, testing ranges and skill centres.
- further access to the global market will be launched. It will enable Indian companies to export certain equipment to identified nations. The nations that India believes have the maximum potential of purchasing military equipment include Vietnam, Thailand, Bahrain, Bangladesh, Afghanistan, UAE and Malaysia.
- **Product Diversification:** India is looking to encourage private and public sectors to go beyond export of components to platforms where large-scale value addition can be done. According to the ministry data, most of the exports are for components, with parts for small arms topping the chart.

- **Favourable conditions for exports:** Exports growth has been boosted by the low cost of production in India and offset obligations being discharged. The increase in exports comes after recent changes in policy that have made it easier for companies to get official permissions.
- Introducing Policy reforms in the sector: Key Policy reforms of the MoD include: Strategy for Defence Exports, Defence Procurement Procedure (DPP 2016), simplified Make-II Procedure, Defense Offset Policy, 'ease of doing business' reforms, revision in licensing process (nearly two third of the items have been made licence-free especially on the component side), new strategic partnership policy etc. All these moves will have a long-term implication on India's defense manufacturing and export potential.
 - **Opening the Defence Sector:** Since the government liberalised Foreign Direct Investment in the defence sector, nearly Rs 4,000 crore of FDI has come in this sector.
- **Encouraging Private Participation and MSMEs**: In the last four and a half years, the contribution of small and medium scale sector to defense production has grown by 200 percent. The Government had been taking several steps to encourage the private sector, MSMEs in particular, in defence production under the existing production policy and some "notable changes" had been brought in the recent policy.
 - OFB and defence PSUs are planning to outsource about 3000 items which will give boost to MSMEs sector.
 - o The government had also allowed **suo-motu defence products development** and production.
 - Defence investor cell, an online cell created by the government, acts as a guide to get information, understand issues, etc. The MSMEs have particularly benefited from the cell in the last 10 months.

Way Ahead

- We need to invest in research and development, production facilities and quality standards to compete on platforms globally, coupled with strong export compliance programmes and intellectual property right protection measures to ensure defence exports continue to be a long-term success story.
- The Indian manufacturing economy is likely to reach USD 1 trillion in next five years of which it is expected that USD 25 billion would come from the defence sector and further USD 5 billion to be generated by exports.
- The economic, as well as strategic dividends of being a good defense exporter are numerous and for the first time, India seems to make some serious efforts in this direction.
- A continuous policy push, crucial administrative reforms and the responses from the industry give this hope that India can develop an ecosystem which is required for the growth and sustainability of our defense sector.

4.4. DEFENCE FINANCING

Why in news?

Recently, the Union Cabinet added a **new Term of reference (ToR) of the 15th Finance Commission (FC)** which requires the commission to examine if a separate mechanism for funding of defence and internal security ought to be set up.

Background

- **Dwindling defence Budget:** Though the government has allocated Rs 4.31 trillion for **defence spending** (including military pensions of Rs 1.12 trillion), as a proportion of GDP, the allocation is inching steadily lower. In 2014-15, defence allocations, accounted for 17.1 % of the central government's spending, or about 2.28 % of GDP. This year, the Defence Budget will comprise 15.5 % of government expenditure and only 2.04 per cent of GDP.
- Therefore, the latest addition to the 15th FC's ToR calls for the FC to examine the possibility of allocation of adequate, secure and non-lapsable funds for defence and internal security of India.

India's Defence Budget: Concerns and Scope

• India's challenging security environment: More recently, the Indian Army has released its Land Warfare doctrine which emphasizes a two-front threat scenario (China-Pakistan) for which the Indian Army has to be prepared against.

- As per CAG's Report, India do not have sufficient funds for emergency necessary purchases, and the army did not have sufficient war reserves to fight a high-intensity war for more than ten days.
- Need to upgrade the armed forces rapidly for modern-day threats: Modernisation involves the acquisition of new state-of-the-art platforms, technologies and weapon systems to upgrade and augment Defence capabilities. The current defence allocation is far too meagre to make any meaningful progress in this regard.
 - Modernisation of both Pakistan and China is going on in full swing, therefore it is important that we remain deterrent as far as these are concerned.
- Lack of Capital Expenditure/Resource Crunch: India's defence budget in recent years has been falling, but more significantly, an increasing component of the funds are being allocated towards
 - salaries, pensions and other operating expenses. And given the demographic trends, the nation's pension bill is becoming larger, even surpassing the salary bill. Thus, only a third (INR 1.03 trillion) is allocated for capital expenditure, which goes into modernization of the military.
- To achieve the grater indigenisation: Large number of systemic changes outlined in **Defence Procurement Procedure of 2016** have been aimed to achieve greater indigenisation and, in this view, Army have also identified as many as **25 projects for Make in India**. However, there is **no adequate Budget** to support this. As a result of which, many of these may end up foreclosed.

Way Ahead

In view of India's more pressing socio-economic needs Indian armed forces will have to become smarter in how they manage their dwindling resources. For this:

- Focussing on strategic defence Policy: Indian defence policy remains constrained by its inability to fundamentally restructure its armed forces to meet the requirements of modern warfare. Defence reforms are needed urgently then the increasing defence allocation in annual budgets. The post-Pulwama situation made it clear that for all the out-of-the-box thinking and effective execution, Indian armed forces lacked the killer punch, given their lack of upgradation.
- Need for armed forces to be a leaner, meaner fighting force within budgetary constraints: Rationalizing manpower in the armed forces should be a priority.
 - Recently, the Indian Army initiated a restructuring exercise with the aim of cutting back up to 100,000 soldiers and reducing its revenue budget, which is expected to rise to over 90% of the total in the coming years.
 - The central reform entails replacing division-sized forces with bulked-up brigades called Integrated Battle Groups or IBGs.

Why is the latest tweak in FC's Terms of References being criticised?

- Likely protests from the states on apprehensions of States being squeezed out of funding: Sequestering funds for defence from the Centre's gross tax revenues means a reduction in the overall tax pool that is shared with states. This is likely to be protested by the states, several of whom are arguing for an increase in their share in taxes collected to 50 per cent from the current 42 per cent.
- Raises questions over the fiscal prudence of the Central Government: As defence being a Union subject the Centre's request to the FC for greater resources means that it has limited ability to ramp up expenditure on items in the Union list. This is partly because the Centre's expenditure on items in the State and Concurrent Lists has been increasing over the years.

International Examples

China's People's Liberation Army (PLA) has already initiated its most wide-ranging and ambitious restructuring since 1949, which includes reducing the size of the PLA by 300,000 soldiers, increasing the size of its navy and air force, and restructuring seven military regions into five theatre commands.

This exercise is intended to enhance the PLA's ability to conduct joint operations on land, at sea, in the air, and in the space and cyber domains.

5. ENVIRONMENT

5.1. CLIMATE CHANGE AND LAND

Why in news?

Recently, the Intergovernmental Panel on Climate Change (IPCC) released its Special Report on Climate Change and Land (SRCCL).

Details

- This report presents the most recent evidence on how the different uses of land like forests, agriculture, urbanisation are affecting and getting affected by climate change.
 - The report's full name is Climate Change and Land, an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems.
 - o This is the **first time** that the IPCC has focused its attention solely on the **land sector**.
 - It is part of a series of special reports. The aim of these special reports is to provide "an assessment on a specific issue". They complement the main "assessment reports" that the IPCC publishes every five or six years.
 - The second special report on **oceans and the cryosphere** is due in September this year. The IPCC also published a special report on 1.5C of warming in October 2018.
 - These reports were sought by governments to get a **clearer picture of specific aspects** of climate change.
- Usually, the discussion on climate change has given more thrust to curbing vehicular and industrial emissions. The IPCC report warns that clean energy, clean transport and reduction emissions alone will not cut global emissions enough to avoid dangerous warming beyond 2 degrees Celsius.

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Observations		
Climate Change and Land		
Negative Impacts		
• Climate change can affect the land through both gradual changes in temperature and rainfall patterns, as well as changes in the "distribution and intensity of extreme events".		
patterns, as well as changes in the "distribution and intensity of extreme events".		
Three main processes where climate change impact land-		
 Coastal erosion as affected by sea level rise and increased storm frequency/intensity. 		
 Permafrost thawing responding to warming. 		
 Increased wildfires responding to warming and altered precipitation regimes. 		
• Climate Change is also influencing species invasions and the degradation that they cause.		
• When rainfall patterns change, it is expected to drive changes in vegetation cover and composition.		
o For example, in Central India, there has been a threefold increase in widespread extreme rain		
events during 1950-2015, which has influenced several land degradation processes, not least soil		
erosion.		
• Increased Heat waves threaten the already drought-prone areas. Extreme heat events can reduce		
photosynthesis in trees, restrict growth rates of leaves and reduce growth of the whole tree.		
Global warming will exacerbate heat stress thereby amplifying deficits in soil moisture		
Positive Impacts		
• CO2 fertilisation- where higher levels of CO2 in the atmosphere bolsters plant growth and land		
improvement.		
Longer growing seasons in high latitudes due to warmer seasons of spring and autumn.		
Negative Impacts		
 Around 23% of global greenhouse gas emissions were released from 2007-16. 		
Source of CO2 emissions- Deforestation and other types of vegetation loss.		
Source of Methane- Livestock production, Rice farming and other smaller sources like animal		
manure, waste burning and peat lands in the northern hemisphere.		
Source of Nitrous Oxide- Nearly two-thirds emission come from agriculture and most of it come from		
the application of nitrogen fertiliser.		
Positive Impacts		
• From 2008-17, the land absorbed 30% of the world's greenhouse gas emissions. It happens when-		
 Trees and other types of vegetation carry out photosynthesis. 		

• Soil gains carbon through plant material, crop residues and animal manure.

• The ability of the land to absorb greenhouse gases is currently being aided by "increasing atmospheric CO2 concentration and a prolonged growing season in cool environments".

Desertification

- Drylands are particularly vulnerable to land degradation because of scarce and variable rainfall as well as poor soil fertility.
- The people residing these drylands are **vulnerable** because their livelihoods are predominantly dependent on agriculture; one of the sectors most susceptible to climate change.
 - Global warming is projected to reduce crop yields across dryland areas.
- Thus, it will provide an added incentive for people in these areas to migrate to other places. This can increase the costs of **labour-intensive SLM** [sustainable land management] practices.

Other Impacts

- On the **livelihoods of people** around the world, particularly those living in vulnerable and poverty-stricken regions.
- In many of the poorest parts of the world, **poverty, land degradation and vulnerability** to extreme events linked to climate change all go hand-in-hand.
- There is clear link between climate-related land degradation, migration and conflict. E.g. conflicts in both Rwanda and Sudan.

Climate Change and Food Security

How can climate change affect food security?

- Climate change is putting the world's food supply at risk.
- With more extreme weather events, stable food production will increasingly be imperilled, threatening the poorest populations first.
- There is evidence that pests and diseases are boosted due to climate change.
- Desertification could affect rangelands where cattle are reared.
- Crop yields are already falling in some areas, deserts are spreading and plant diversity is waning.
- Cereal prices could increase by 1-29% by 2050 as a result of climate change
- Reduction in nutritional quality of staple crops- due to increased atmospheric concentrations of carbon dioxide (CO2).
 - Wheat grown at CO2 levels of 546-586 parts per million (ppm) has 5.9-12.7 per cent less protein,
 3.7-6.5 per cent less zinc, and 5.2-7.5 per cent less iron. Similarly, the report points out for rice varieties.
 - This could put about 600 million people, living in low-income countries, especially in Asia, at risk of low nutrition.

How Food System is aiding Climate Change

- The push to use **more of the world's land to produce crops and lumber** is contributing to climate change by eliminating natural wetlands and reducing forests that capture greenhouse gases.
- The current farming practices, of both crop and livestock, are unsustainable and are responsible for a significant amount of greenhouse gas emissions (GHG) and is also worsening climate change.
- The global food system is responsible for 21 to 37 per cent of the world's GHG emissions. This includes agriculture (10-12 per cent), land use (8-10 per cent), and storage, transport and processing (5-10 per cent).
- Food wastage (from harvesting, processing, and storage) also contribute 8-10 per cent of GHG emissions. The global food loss and waste has increased from around 540 metric tonnes in 1961 to 1630 Mt in 2011.
- Rapid agricultural expansion has led to destruction of forests, wetlands and grasslands and other
 ecosystems. Soil erosion from agricultural fields, the report estimates, is 10 to 100 times higher than
 the soil formation rate.

How could 'negative emissions' affect land, food and wildlife?

Negative
emissions are a
group of
methods that
aim to remove
CO2 from the
atmosphere
and store it in
the land or
ocean.

- They range from the natural-sounding planting trees, for example to the technologically advanced, such as using machines to suck CO2 from the air (known as direct air capture, or DAC)
- Many of the modelled pathways for limiting global warming to 1.5C rely heavily on a technique called "bioenergy with carbon capture and storage" (BECCS).
 - This technique involves growing crops, using them to produce energy and then capturing the resulting CO2 emissions before storing them in the ground or sea.
 - o If BECCS is pursued at the level "necessary to remove CO2 from the atmosphere at the scale of several billion tonnes of CO2 per year"

Sustainable development, Gender and the role of Indigenous Communities

- In rural areas, women face higher vulnerability to climate change and its potential land-based solutions than men.
 - E.g. the need to adapt to climate change on farms in Australia and Canada falls disproportionately on women's

- workloads. Whereas in Ethiopia, research found that male-headed households had access to a wider set of adaptation measures than female-headed households
- The indigenous knowledge can play a key role in understanding the impacts of climate change on land in regions without long-term instrumental data records.

Summary of Recommendations for Policy Makers

- Many activities for combating desertification can contribute to climate change adaptation with mitigation co-benefits, as well as to halting biodiversity loss with sustainable development co-benefits to society.
- Sustainable land management, including sustainable forest management, can prevent and reduce land degradation, maintain land productivity, and sometimes reverse the adverse impacts of climate change on land degradation.
- Policies that operate across the food system, including those that reduce food loss and waste and influence dietary choices, enable more sustainable land-use management, enhanced food security and low emissions trajectories (high confidence). Such policies can contribute to climate change adaptation and mitigation, reduce land degradation, desertification and poverty as well as improve public health.
- Acknowledging co-benefits and trade-offs when designing land and food policies can overcome barriers to implementation.
- Delaying climate mitigation and adaptation responses across sectors would lead to increasingly negative impacts on land and reduce the prospect of sustainable development.

5.2. INTERLINKING OF RIVERS

Why in news?

Recently, the Union Government has approved the **Kosi-Mechi river-interlinking project**.

More on the Kosi-Mechi River Interlinking Project

- It is the country's second major river interlinking project after Ken-Betwa of Madhya Pradesh.
- This interlinking project envisages diversion of part of surplus water of Kosi river through existing Hanuman Nagar barrage to the Mahananda basin.
- Mechi is an important tributary of Mahananda river. Its basin however remains mostly deficient in providing adequate water for irrigation.
- It is a green project as it involves no displacement of population and there is no acquisition of any forestland.
 - No National Park, Wildlife Sanctuary, Ecosensitive areas, etc. are present within 10 km radius of the project.

Arguments in favour of Interlinking of Project

About National River Linking Project (NRLP)

- The **core idea behind interlinking** is transfer of **'surplus'** water from one basin to another **'deficit'** basin.
- The NRLP is being managed by India's National Water Development Agency (NWDA), under the Union Ministry of Water Resources.
- The Inter-link project has been split into three parts:
 - A northern Himalayan rivers inter-link component
 - o A **southern** Peninsular component
 - An intrastate rivers linking component
- Under the National Perspective Plan (NPP) prepared by Ministry of Water Resources, NWDA has already identified
 14 links under Himalayan Rivers Component and 16 links under Peninsular Rivers Component for inter basin transfer of water based on field surveys and investigation and detailed studies.
- The government has identified **four priority links** for the preparation of detailed project reports (DPR) under the Peninsular Component:
 - the **Ken-Betwa link** project (UP and M.P.),
 - the Damanganga-Pinjal link project (Maharashtra and Gujarat),
 - the Par-Tapi-Narmada link project (Maharashtra and Gujarat)
 - the **Godavari-Cauvery link** project (Andhra Pradesh and Tamil Nadu).
- **Judicious Use of Water Resources-** to ensure greater equity in the distribution of water by enhancing its availability in drought-prone and rainfed areas.
 - Will prevent flow of fresh river water into sea. For example, the **Godavari-Krishna project** will lift Godavari waters that now flow into the sea.
- Address the issue of Water Stress- as per Niti Aayog, India is facing its 'worst' water crisis in history and that demand for potable water will outstrip supply by 2030 if steps are not taken.

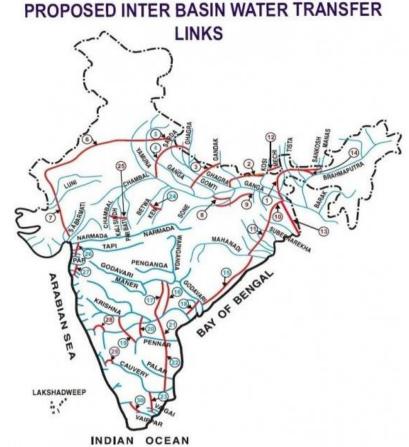
- Can improve the irrigation coverage- such as this project will provide irrigation to large command areas spread across the districts in north Bihar.
 - The NPP is envisaged to give the benefits of 25 million ha of irrigation from surface waters and 10 million ha by increased use of ground waters, raising the ultimate irrigation potential from 140 million ha to 175 million ha.
 - o It also targets to decrease farmers' dependency on uncertain monsoon rains and bringing millions of hectares of cultivatable land under irrigation.
 - o It will also aid the achievement of **second green revolution**.
- Power generation- It is also seen to lead to the generation of 34 million KW of power.
- **Disaster Management-** as it can help in swift diversion of waters in both floods and droughts.

Arguments against the Interlinking of Project

- Artificial change of course- Rivers living eco-systems that have evolved over hundreds of thousands of years. Shifting their course like roads and power lines may lead to unintended consequences.
 - Only by maintaining "minimum flow requirements" the river ecosystem can be conserved.
- Bypass the crucial dryland areas-There are concerns that the intended projects might bypass the core dryland areas of central and western India, which are located on elevations of 300 to 1000 metres above mean sea level.
- Impact on Environment- including large-scale submergence of forests and destruction of habitat for wildlife as happened in the Ken-Betwa link.
- Impact on rivers- water discharge in 23 out of 29 rivers will reduce considerably, they say. E.g. The Ganga will see a 24% decrease in flow. Its tributaries Gandak (-68%) and Ghaghara (-55%) will be the worst affected.
- Lead to shoreline loss- as per a study, it will lead significantly reduce the sediments deposited by the rivers in deltas. Fertile deltas will be under threat, with coastal erosion expected to threaten the land and livelihoods of local economies that support 160 million people.
- Impact on Monsoons- The continuous flow of fresh river water into the sea is what helps maintain a low salinity layer of water with low density in the upper layers of the Bay of Bengal. This is a reason for the maintenance of high sea-surface temperatures (greater than 28 degrees C), which create low-pressure areas and intensify monsoon activity.
- **Increased vulnerability-** Rare ecosystems and vital agricultural areas would become more vulnerable to storm surges, river flooding, and heightened salinity.
- **Federal contentions-** as water is a state subject. States that have surplus water are not ready to give it to other states and there is a huge logjam, which is cropping up time and again because of this.



The future projects should be on the lines of this **green interlinking project** where there is minimal adverse impacts as discussed above.



5.3. OCEAN ENERGY

Why in news?

Recently, the **Ministry of New and Renewable Energy** has declared **Ocean Energy** as renewable energy.

Background

- The Ocean Thermal Energy Conversion (OTEC) has a theoretical potential of 180,000 MW in India subject to suitable technological evolution.
 - The total identified potential of tidal energy is about 12,455 MW, with potential locations identified at Khambat & Kutch regions, and large backwaters, where barrage technology could be used.
 - The total theoretical potential of wave energy in India along the country's coast is estimated to be about 40,000 MW.
- A variety of different technologies are currently under development throughout the world to harness this energy in all its forms. In this direction, the Government has been trying to utilize the Ocean Energy Capacity.
- The Ministry of New and Renewable Energy received some applications by some private players, for projects in this field, but they wanted clarity on the status of Ocean Energy as Renewable Energy.
 - The Ministry of New and Renewable Energy has thus clarified to all the stakeholders that energy produced using various forms of ocean energy such as tidal, wave, ocean thermal energy conversion among others shall be considered as renewable energy and shall be eligible for meeting the non-solar Renewable Purchase Obligations (RPO)
 - Under the RPO, distribution companies (DISCOMs) are required to have certain proportion of clean energy supplies. The proportion is fixed by state power regulators. The DISCOMs can also buy renewable energy certificates in lieu of mandated clean energy supplies, from the developers or renewable power generators.

Technologies- Technology although currently under-utilised, ocean energy is mostly exploited by just a few technologies: Wave, tidal, current energy and ocean thermal energy.

- Tidal Energy The tidal cycle occurs every 12 hours due to the gravitational force of the moon.
 - The difference in water height from low tide and high tide is potential energy.
 Similar to traditional hydronower generate

Challenges in Ocean Energy in India-

- Lack of indigenous technologies- India had planned to set up an OTEC plant way back in 1980, off the Tamil Nadu coast, but with the foreign vendor closing down its operation, it had to be abandoned.
- Costly project- OTEC is capital intensive and is economical only at very large scales.
 - E.g. The capital cost for tidal energy power plants is very high due to high civil construction and high-power purchase tariff.
- Insufficient incentives- by the government for the private players such as acquisition of technology and knowhow of the ocean energy.
- Environmental Concerns- due to inadequate study and data, it is difficult to estimate the impact of wave power generation on marine ecosystem.

- Steps taken by the Government
- The technology programme has been launched by the Ministry
 - to accelerate and enhance support for the resource assessment and deployment of ocean energy in the country and
 - to harness it for power generation and to overcome the barriers.
- It is open to **public and private sectors** to carry out projects in India.
- Industry lead R&D proposals are invited from stakeholders, for solving problems in Indian conditions.
- Basic R&D is being looked after by the Ministry of Earth Sciences (example: National Institute of Ocean Technology, Chennai).
- All the stakeholders desirous of utilizing Ocean Energy are invited by MNRE for demonstration projects of proven technologies under Research, Design, Development and Demonstration (RDD&D) programme/policy of the Ministry, in force at the time.
- Similar to traditional hydropower generated from dams, tidal water can be captured in a barrage across an estuary during high tide and forced through a hydro-turbine during low tide.
- To capture sufficient power from the tidal energy potential, the height of high tide must be at least five meters (16 feet) greater than low tide.
- The Gulf of Cambay and the Gulf of Kutch in Gujarat on the west coast have the locations in the country where potential exists.

- Wave Energy- is generated by the movement of a device either floating on the surface of the ocean or moored to the ocean floor.
 - Wave conversion devices that float on the surface have joints hinged together that bend with the waves. This kinetic energy pumps fluid through turbines and creates electric power. Stationary wave energy conversion devices use pressure fluctuations produced in long tubes from the waves swelling up and down.
 - This bobbing motion drives a turbine when critical pressure is reached. Other stationary platforms
 capture water from waves on their platforms. This water is allowed to runoff through narrow pipes that
 flow through a typical hydraulic turbine.
- **Current Energy-** Marine current is ocean water moving in one direction. Tides also create currents that flow in two directions.
 - Kinetic energy can be captured from marine and other tidal currents with submerged turbines that are very similar in appearance to miniature wind turbines. Similar to wind turbines, the movement of the marine current moves the rotor blades to generate electric power.
- Ocean Thermal Energy Conversion (OTEC)- uses ocean temperature differences from the surface to depths lower than 1,000 meters, to extract energy.
 - A temperature difference of only 20°C can yield usable energy. Research focuses on two types of OTEC technologies to extract thermal energy and convert it to electric power: closed cycle and open cycle. In the closed cycle method, a working fluid, such as ammonia, is pumped through a heat exchanger and vaporized. This vaporized steam runs a turbine. The cold water found at the depths of the ocean condenses the vapor back to a fluid where it returns to the heat exchanger.
 - o In the open cycle system, the warm surface water is pressurized in a vacuum chamber and converted to steam to run the turbine. The steam is then condensed using cold ocean water from lower depths.

5.4. COMPOSITE WATER MANAGEMENT INDEX

Why in news?

Recently, the NITI Aayog released the Composite Water Management Index (CWMI) 2.0 to assess and improve the performance in efficient management of water resources.

About Composite Water Management Index

- The CWMI 2019 measures the performance of States on a comprehensive set of water indicators and reports relative performance in 2017-18 as well as trends from previous years (2015-16 & 2016-17).
- States and Union Territories (UTs) have been scored on the Index which comprises nine themes, and a total of 28 indicators across themes, and have been divided into three categories: non-Himalayan states, North-Eastern and Himalayan states, and Union Territories (UTs).

Key findings of the Report

Related news

Recently, India has been placed as the **thirteenth most water-stressed country** as per the Aqueduct Water Risk Atlas released by the World Resources Institute (WRI).

- A region is said to be under 'water stress' when the demand for water there exceeds the available volume or when poor quality restricts use.
- Key findings of the Atlas
 - Both surface water and groundwater in India was highly exploited. Groundwater levels, in fact, declined at more than eight centimetres per year between 1990 and 2014 in northern India.
 - Chandigarh was the most water-stressed, followed by Haryana, Rajasthan and Uttar Pradesh.

Recently, union government has launched 'Samagra Shiksha-Jal Suraksha' drive as an impetus to Jal Shakti Abhiyan (JSA) which was launched in July 2019.

- It aims to create awareness about water conservation among all school students in the country.
- The Department of School Education & Literacy, Ministry of Human Resource Development is the implementing agency.
- A majority of Indian states are demonstrating progress- 80% of the states (19 out of 24) have shown improvement in their water management scores over the last three years.
 - High-performing states continue to lead on the Index- such as Gujarat and Andhra Pradesh.
- **But improvement is piecemeal-** as the improvement demonstrated by states and UTs is not consistent across themes, and average state performance declined on four themes.

- o **Improvement is also insufficient in states where it is most required-** Apart from Haryana, Goa, and Telangana none of the other low-performing states have advanced beyond the 50-point mark in the last three years.
- The low-performing states bear the largest burden of national population and economic production- The 16 low-performing states collectively account for ~48% of the population, ~40% of agricultural produce, and ~35% of economic output for India.
- Source augmentation and restoration of water bodies: Overall performance on surface water restoration

slipped during FY 17-18 compared to FY 16-17, due to the decline in the performance of Maharashtra, Chhattisgarh, and Nagaland.

- Source augmentation (Groundwater): Overall, states have displayed improvement in recharge of their groundwater resources between FY 15-16 and FY 17-18, but the median continues to remain below 50% of the total achievable score.
- Participatory irrigation practices: Overall, performance declined marginally in the last three years. Despite most states having legal frameworks to promote Water User Association (WUA) involvement, actual implementation of WUA responsibilities (such as involvement in O&M of irrigation assets) remains low.
- Sustainable on-farm water use practices:
 Overall, states have failed to show any
 significant improvement in on-farm water use
 efficiency. This is a pressing concern given the
 large-scale national push towards the adoption
 of micro-irrigation.
- Rural drinking water: Overall scores declined in FY 17-18 from a low base in FY 16-17 (less than 50% of the total achievable score), largely due to poor performance on the new service delivery indicators introduced under the theme this year.
- Urban water supply and sanitation: While
 water access remains high on average,
 significant gaps exist in wastewater treatment.
 States have shown improvement in creation of
 wastewater treatment capacity, but utilization
 of this capacity remains low.

Some Successful Case Studies

- Mukhya Mantri Jal Swavlambhan Abhiyan (MUSA), Rajashtan- It is multi-stakeholder programme which aims to make villages self-sufficient in water through a participatory water management approach. It focuses on converging various schemes to ensure effective implementation of improved water harvesting and conservation initiatives.
- Mission Kakatiya, Telangana- It aims to restore over 46,000 tanks across the state and bring over 20 lakh acres land under cultivation. Over 22,500 tanks had been restored till March 2018 as per reports.
- Jakhni Village, Bundelkhand, Uttar Pradesh- From one
 of the most water scarce regions of India, villagers of
 this village have drastically changed their water
 situation by putting rigorous water conservation
 efforts. It included construction of farm ponds,
 restoration/rejuvenation/restoration of water bodies,
 collection and utilization of grey water, raising of farm
 bunds, and intensive plantation of trees.

Significance of CWMI

- It proposes a policy shift in water resources management, from the conventional style of investment in major infrastructure projects, to undertaking grass-root level activities with participation of local communities which could ensure equitable access of water.
- It will help build pressure on states who have not performed well to improve their water management techniques as this is directly linked to agriculture prosperity in different states.
- Data from Index can be used by researchers, entrepreneurs, and policymakers to enable broader ecosystem innovation for water in India.
- Policy and governance: An increase in theme averages suggests a growing focus by states on water as a subject as well as the use of regulatory frameworks for better resource management. However, water pricing and data centres remain improvement areas for most states.

5.5. NATIONAL RESOURCE EFFICIENCY POLICY

Why in news?

Recently, the Ministry of Environment, Forest and Climate Change placed the **Draft National Resource Efficiency Policy (NREP) 2019** in public domain.

Background

• As one of the fastest growing economies in the world, India has increased its material consumption to six times, from 1.18 billion tonnes (BT) in 1970 to 7 BT in 2015.

- o It is expected to further increase owing to increasing population, rapid urbanization and growing aspirations.
- o In this context, **enhancing resource efficiency** and promoting the **use of secondary raw materials** has emerged as a strategy to ensure sustainable development.
- **Resource efficiency (RE)** implies judicious use of earth's limited resources to achieve maximum benefit for sustained human wellbeing while minimizing the adverse impacts on environment.
 - It reduces waste, drives greater resource productivity, delivers a more competitive economy, addresses emerging resource scarcity issues, and helps reduce the environmental impacts associated with both production and consumption.
 - o **6Rs Principle** is key to drive resource efficiency and refers to **reduce**, **reuse**, **recycle**, **refurbish**, **redesign** and **remanufacture**.
- The **Draft National Resource Efficiency Policy (NREP)** envisions a future with environmentally sustainable and equitable economic growth, resource security, healthy environment (air, water and land), and restored ecosystems with rich ecology and biodiversity.
- It is guided by the principles of
 - o Reduction in primary resource consumption to 'sustainable' levels, in keeping with achieving the Sustainable Development Goals and staying within the planetary boundaries
 - o Creation of higher value with less material through resource efficient and circular approaches
 - Waste minimization
 - Material security, and creation of employment opportunities and business models beneficial to the cause of environment protection and restoration.

Potential of Resource Efficiency

Economic Potential-

- o Can help material savings of Rs. 60.8 billion in manufacturing sector alone.
- o Can reduce import dependence for critical minerals to improve the country's trade balance.
- o Can improve resource availability that is critical to the growth of industries.

Social Potential-

- Can reduce conflict and displacement in mining areas, as well as improve health and welfare of local communities due to reduced extraction pressures.
- o Can improve affordability of and access to resources critical for poverty reduction. E.g. recycled aggregates and other secondary raw materials.
- Can contribute towards preserving resources for future generations

• Environmental Potential-

- Can reduce ecological degradation and pollution associated with mining due to reduced extraction pressures.
- Can lead to reduction in GHG emissions from extraction, manufacturing and use phase.
- o Can provide opportunities for restoration of landscape and water bodies.

Salient Features of the NREP 2019

- Priority resources, materials and sectors- across the life-cycle are intended to be covered here such as
 - o Resources and materials: Metals, non-metallic minerals, air, water, land, biomass, fossil fuels.
 - Sectors: Construction, transport, plastic, packaging, electrical and electronic equipment, agriculture, metal industry (steel, aluminium etc.), textile, renewable energy, food etc.
 - Wastes: Municipal solid waste, plastic packaging, waste electrical and electronic equipments, industrial waste.
- Indicators- to track the progress on resource efficiency
 - o Resource Productivity ratio of monetary output to resource input
 - Domestic Material Consumption total amount of materials consumed by the economy
 - Domestic Material Extraction input from natural environment to be used in the economy
 - o **Direct Material Input** direct input of materials for use in economy
 - o Waste recycling related indicators- e.g. secondary raw materials recovered, recovery rate etc.

Institutional Set-up

- National Resource Efficiency Authority (NREA)- to be constituted under the provisions of Section 3(3) of the Environment (Protection) Act, 1986, will be mandated to drive the agenda of resource efficiency across the country. It will have a collaborative structure with a core working group and a members group with other stakeholders.
- o Shared responsibility of Stakeholders- such as-
 - ✓ **Role of Government-** in developing and implementing resource efficiency strategies, facilitate data compilation, setting up of infrastructure (e.g. Material Recycling Zones) among others.
 - ✓ **Role of Manufacturers and service providers-** in integrating design for recovery and recyclability in the product and formulating end-of-life management policy.
 - ✓ **Role of Consumers-** in creating demand for resource efficient products and services, engage in shared use of products and environmentally safe disposal of their end of life products.
 - ✓ **Role of Civil Society Organizations-** in awareness generation (especially amongst the informal sector) and advocacy of secondary material use.
 - ✓ Role of Recyclers- in maintaining required statutory norms and standards for occupational Health, Safety and Environment at premises. Also provide opportunities to the informal sector to become part of their formal setups.
 - Role of Academia- in introduction of courses on concepts like 'Circular Economy' and 'Resource Efficiency' in schools and colleges. Further research and training programs can also be brought.

Policy Instruments

- Addressing regulatory gaps- so as to integrate resource efficiency and circular economy across life cycle stages. For this proper guideline, mandatory quality and design standards need to be in place. Also new concepts like environmental liability can be utilized.
- Design of innovative market-based instruments- like taxes must incorporate the cost of externalities, tax exemptions for components using recycled material, tax sops for eco-labelled products and rationalization of tax regime to make secondary raw materials price-competitive.
- Green Public Procurement- e.g. Public tenders that include quotas for locally sourced materials could be designed. A comprehensive and well-designed national level Sustainable Public Procurement (SPP) policy can be implemented.
- Supporting recycling and recovery structures- e.g. Material Recovery Facilities (MRF) needs to be set up
 equipped with best available technology systems for efficient end-of-life collection.
- Strengthening product responsibility- Extended Producer Responsibility (EPR) systems should be accompanied by reporting and monitoring mechanisms and could be supported by the creation and accreditation of more Producer Responsibility Organizations (PROs).
- Creation of resource efficient business models- by incorporation of Viability Gap Funding (VGF), seed funding for circular business models, dedicated Green fund among others.

Conclusion

Natural resources form the backbone of any economic development. Resources not only help in meeting our basic needs, but also fulfil human aspirations for a better quality of life, higher standards of living. This policy framework if implemented in its letter and spirit can reap large dividends.

5.6. ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

Why in news?

Recently, the Ministry of Environment, Forest and Climate Change released the **Environmental and Social Management Framework (ESMF)** in public domain.

Background

• The draft Environmental and Social Management Framework (ESMF) is part of a World Bank-funded project named **ENCORE** (Enhancing Coastal and Ocean Resource Efficiency Program) which aims to strengthen integrated coastal zone management in all coastal States and Union Territories of India.

- The ESMF has been prepared with an objective to manage the social and environment impacts through appropriate measures during the planning, design, construction and operation of various sub-projects of ENCORE.
 - o It is a tool for ENCORE Program to screen the subprojects to categorise them based on defined criteria and to decide on how to manage these using either full-fledged ESIAs (Environmental and Social Impact Assessment) and ESMPs (Environmental and Social Management Plan) or some generic efforts are required.

• It aims to ensure the following:

- Integration of environmental and social aspects into the
 - decision-making process at all stages of the sub-projects.
- Enhancement of sustainable environmental and social outcomes through sensitive planning, design and implementation of sub-projects,
- Avoidance or minimization of impacts on cultural properties and natural habitats through careful planning and safeguards,
- Restoration of the livelihoods and living standards of the subproject affected people and compensate any loss of livelihood or assets,
- Adoption of higher work safety standards, occupational and community health and safety.
- The Society of Integrated Coastal Management (SICOM), under MoEFCC is the National Project Management Unit (NPMU) for ICZMP and ENCORE Programs.

Salient Features of ESMF

- **ESMF Adoption Framework-** which include various steps like: Screening and initial environmental and social examination, Environment and social review, implementation of environmental and social measures etc.
- **Resettlement Policy Framework-** Every Project Authority shall undertake a survey for identification of the persons and their families likely to be affected by the project.
 - o Based on the social impact assessment survey, will prepare an action plan to mitigate or minimize the adverse impacts as identified during the survey.
 - The draft mitigation plan in form of resettlement action plan (RAP) will be again disseminated among the affected individuals / community.
- Indigenous Peoples Planning Framework (IPPF)- There has to be a social assessment and free, prior and informed consultation process leading to the broad community support by tribal for the project, and the development of an instrument for indigenous peoples in the form of a Tribal Peoples Plan (TPP).
- **Gender Action Plan-** will be prepared to analyse the gender issues during the preparation stage of sub project and design interventions.
 - Any project must address the constraints on women's participation in project design, construction, and monitoring and evaluation (M & E).
 - The project must also focus on the linkage between gender and poverty, by identifying, for example, households headed by females and those households' special needs.
- Labour Management Framework- since during the construction phase of the project of the different interventions in the States and UTs, labourers will be hired. This framework has to be in place to ensure that-

Need for an ESMF

- Depending on the nature and location, the project initiatives such as coastal protection measures, waste management, development of infrastructure facilities for livelihood support etc., are likely to result in positive and negative impacts on the project area during their construction and O&M phases.
- These impacts **assume importance** when the project locations are in the **proximity to sensitive areas.**
 - E.g. the Bombay high court struck down the Coastal Regulation Zone (CRZ) clearance for its Coastal Road, which is part of the Eastern Freeway to be constructed to provide an alternate speedy connect between South Mumbai and Western suburbs.
- Hence, there is a need for **systematic safeguards management** with pre-defined framework for risk mitigation.
- As all project locations and activities are not finalized, in order to identify and manage associated environmental risks, it is required to prepare an ESMF for the project.
- e ESMF manages potential adverse impacts through a guide consisting of a set of **methodologies**, **procedures** and **measures** to facilitate adequate **environmental management** (risk management and impacts) of works related to the project and whose specific location is unknown or may change during project implementation.

- o Potential impacts associated with influx of labourers on the host population and receiving environment are minimized
- o Provision of safe and healthy working conditions, and a comfortable environment for migrant labour
- o To ensure compliance with the national labour laws.
- **Grievance Redress Mechanism-** for the ENCORE Program incorporates an integrated system with Grievance Redressal Cell (GRCs), with necessary officers, officials and systems, at the SPMU in all the states and UTs.

Conclusion

- This should work like a living document and shall be updated as and when required according to the changing scenarios and challenges. It has to be a continuous process rather than a "one-off" investment action.
- So far **three coastal States**, namely Gujarat, Odisha and West Bengal, have prepared such plans for sustainable coastal management with support from the World Bank. Such plans should be prepared for the selected coastal stretches in other States/UT as well.

5.7. KUSUM

Why in News?

Recently, The Union Ministry of New and Renewable Energy (MNRE) has issued **operational guidelines for the implementation** of Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM Kusum) Scheme.

Background

- As a part of Intended Nationally Determined Contributions (INDCs), India has committed to increase the share of installed capacity of electric power from non-fossil-fuel sources to 40% by 2030.
- Large Scale Solar power generation projects are being installed to achieve the **target of 100 GW of Solar Power generation by 2022**.
- It has also been planned to simultaneously develop decentralized Solar energy and other renewable
 energy generation Plants of capacity up to 2 MW which could be connected directly to existing sub-stations
 of Distribution Company.
- Such plants near these sub-stations may be developed, preferably by farmers, giving them an opportunity
 - to increase their income by utilising their barren and uncultivable land for solar or other renewable energy based power plants.
- Besides, developing decentralized renewable power, it is planned to replace Agriculture Diesel pumps with Solar Water pumps and Solarise Grid connected Agriculture pumps.
- Solarization of the pumps can reduce dependence of these pumps on conventional sources of energy supplied by DISCOMs and thus reducing their burden of subsidy on agriculture consumption of Electricity.
- Hence, KUSUM was launched in February which has provision for the decentralised renewable energy plants,
 Solar agriculture water pumps and solarisation of existing Grid connected Agriculture pumps.

Benefit of the scheme

- It will have substantial environmental impact in terms of savings of CO2 emissions.
- Component-B of the Scheme on standalone solar pumps may result in saving of 1.2 billion liters of diesel per annum and associated savings in the foreign exchange due to reduction of import of crude oil.
- It will also have **direct employment potential** for skilled and unskilled workers.
- It will also **provide additional source of income to farmers** who will be in a position to sell the surplus power to DISCOMs.

About KUSUM Scheme

- The scheme aims to provide energy security along with financial and water security to farmers.
- It would **encourage farmers to generate solar power in their farms** and use the clean energy to replace their diesel water pumps.
- It targets to add decentralised solar power capacity of 25,750 megawatt by 2022.
- The approved scheme comprises three components:

Components	Details		
Component A:	Mandate- Under this component, solar or other renewable energy based power plants (REPP)		
setting up of	of capacity 500 kW to 2 MW will be setup by individual farmers/ group of farmers/		
10,000 megawatt	cooperatives/ panchayats/ Farmer Producer Organisations (FPO) referred as Renewable Power		
of decentralised	Generator (RPG).		
ground/ stilt-	• Transmission of Power- The RPG will be responsible for laying of transmission line and comply		
mounted grid-	with grid connectivity and other regulations.		
connected solar or	Power Purchase Agreement- shall be executed between the DISCOM and RPG with all the		
other renewable	necessary conditions. The RPG shall also provide the bank guarantees to the DISCOMs. If the		
energy-based	RPG is not able to generate minimum energy then it will be liable to pay compensation.		
power plants.	DISCOMS to be provided performance-based incentives of Rs 0.40 per unit for five years		
	1,000 MW to be taken up on pilot basis first		
Component B: Off-	• Mandate- Under this Component, individual farmers will be supported to install 17.50 lakh		
grid solar	standalone solar Agriculture pumps of capacity up to 7.5 HP for replacement of existing diesel		
pumps	Agriculture pumps in off-grid areas.		
	• Requirements of Solar Pumps- It will be mandatory to use indigenously manufactured solar		
	panels with indigenous solar cells and modules.		
	• Centre and state to share 30 per cent of pump cost each; farmer to provide the remaining 40		
	per cent (can access bank loan for up to 30 per cent of the cost)		
Component C:	Mandate- Under this Component, individual farmers having grid connected agriculture pump		
Solarization of	will be supported to solarise pumps. The farmer will be able to use the generated solar power		
grid-connected	to meet the irrigation needs and the excess solar power will be sold to DISCOMs.		
electric pumps	Quality Assurance and Evaluation Mechanism- Systems installed under this Programme should		
	meet technical specification and construction standards as specified by BIS and MNRE from		
	time to time.		
	Allowed solar PV capacity up to two times the pump capacity in kW terms, to enable sale of		
	excess power to discoms.		
	Procurement based incentive of Rs 0.60 per unit for discoms to purchase of surplus power		
	Both net-metering and on-way transfer of power allowed.		
	• Centre and state to share 30 per cent of pump cost each; farmer to provide the remaining 40		
	per cent (Can access bank loan for up to 30 per cent of the cost)		

Challenges

- **Increased Groundwater exploitation:** Increased dependence on groundwater for irrigation has resulted in improving agricultural yields, but it has also led to depletion of groundwater resources at an alarming rate.
 - Scheme fails to mandate or even suggest remote monitoring of pump use and groundwater withdrawal, particularly in states/regions with fast depleting aquifers.
 - Free electricity through a large number of solar pumps will increase the chances of over-exploitation of water and risks the water table even in safe zones.
- Missing measures to ensure efficient DISCOM participation: The scheme provides DISCOMS with a procurement-based incentive of Rs 0.40 per unit for five years (or Rs 6.6 lakh per MW) to ensure efficient DISCOM participation. However, such an incentive is missing in the case of on-grid pumps.
- Increase subsidy burden: Although KUSUM aims to reduce subsidy burden of state discoms, it does not have any clear goals or provisions to ensure subsidy reduction. The subsidised solar pumps are being installed without accompanying cuts in agricultural supply or a reduction in subsidy. The result may, therefore, be an increase in total subsidy burden on states.
- Missing the intended beneficiary: The solar pump schemes have so far mostly failed to benefit their
 intended target group small farmers. Most of the subsidised solar pumps had been installed by large
 farmers. The KUSUM scheme proposes installing solar plants on farm land. This option will require large
 investment which will likely exclude small farmers.
- Missing financing mechanism: The scheme requires up to 40 per cent financing by the farmer, of which 30 per cent may be available by banks. This requires development of an efficient financial ecosystem, currently missing in rural India. The guidelines fail in suggesting how it will be done.
- **Unclear Selection of beneficiary**: Off-grid and on-grid components of the KUSUM scheme call for priority being given to small and marginal farmers, however objective criteria for beneficiary selection is not defined. It is left to the state implementing agencies to select beneficiaries.

Way forward

- Monitoring groundwater extraction: Solar pump schemes should accompany explicit and strict measures of
 monitoring and control to manage groundwater extraction. Funds for solar pump schemes should be
 extended only to states willing to take such measures.
- **Increase agricultural tariffs:** Solarisation of feeders may be the most economical solution, but needs to be accompanied by gradual increase in agricultural tariffs and limits on hours of power supply.
- **Mini grid model:** Off-grid pumps should be considered only in exceptional cases, for unelectrified regions with relatively high water-table, and utilisation should be increased through a mini-grid model in which excess electricity can be used in households or for other economic uses.
- **Target and incentivise small and marginal farmers:** Clear targets must be set to provide solar pumps to small and marginal farmers. Providing access to financing is a crucial support needed by this segment.
- **Regulatory measures:** Efficient DISCOM operations should be ensured by regulatory mandates for regular reporting on installations, operations, evacuation, billing and payment to farmers.
- On-grid pumps are an alternative for water-scarce regions with high farmer distress, but **adequate and one-way power flow (as opposed to net meter)** is necessary to limit water withdrawal.
- Address the state disparity issues: KUSUM should aim to reduce the existing disparity among States with re
 gard to solar pumps deployment and irrigation access. The disparity highlights poor State budget allocation
 towards solar pumps and the lack of initiative by State nodal agencies.
 - To encourage more equitable deployment of 17.5 lakh grid pumps by 2022, the Centre should incentivise
 States through target linked financial assistance, and create avenues for peer learning.

5.8. CITES COP18

Why in news?

The 18th meeting of the Conference of the Parties to the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) took place in Geneva, Switzerland.

More on news

- The Indian star tortoise, smooth-coated otters and Asian small-clawed otters was upgraded to CITES Appendix I giving it the highest level of international protection from commercial trade.
- The Tokay gecko (Gekko gecko) and 18 species of sharks and rays was included for the first time under Appendix II.
 - The gecko is used in Chinese traditional medicine and traded throughout south-east Asia in dried form or preserved in alcohol.
- Giraffes have been accorded protection from unregulated trade i.e. it is placed in Appendix II of CITES

About CITES

- CITES, aims at regulating the international trade of specimens of endangered animals and plants, in particular by monitoring their exportation, re-exportation, importation, transit, transshipment or possession for any ends in the countries that are a party to CITES.
- CITES was drafted after a resolution was adopted at a meeting of the members of the International Union for Conservation of Nature (IUCN) in 1963.
- The Convention is **legally binding** on the Parties in the sense that they are committed to implementing it; however, it does not take the place of national laws.
- CITES has three Appendices.
 - Appendix I includes species threatened with extinction. Trade in specimens of these species is permitted only in exceptional circumstances e.g. Tiger, Himalayan brown bear, elephant, and Tibetan antelope.
 - Appendix II includes species not necessarily threatened with extinction, but in which trade must be controlled in order to avoid utilization incompatible with their survival e.g. Hippopotamus, bigleaf mahogany, and the gray wolf.
 - Appendix III a species included at the request of a country which then needs the cooperation of other countries to help prevent illegal exploitation, e.g. walrus, Hoffmann's two-toed sloth, and the redbreasted toucan.

5.9. LEGAL RIGHTS TO RIVERS

Why in News?

There were calls to confer legal rights to rivers.

Background

- The concept of granting legal rights to non-human entities is not new, but it has only recently begun to be implemented for nature.
 - In 2008, Ecuador granted legal rights to nature in its constitution, explicitly recognizing the rights of nature, and empowering "all persons, communities, peoples and nations [to] call upon public agencies to enforce the rights of nature.
- More recently, the approach has been applied to specific natural features, namely rivers: the Whanganui in New Zealand, the Ganges and Yamuna Rivers in India and the Rio Atrato in Colombia.

Why conferring legal rights to rivers is needed?

- Protection of rivers: Ascribing legal rights to rivers helps counter pollution, may revive water bodies.
- Recognising nature: Granting nature legal rights establishes nature as a legal equal to humans, which is a profound cultural and legal shift in terms of how we relate to, and interact with, the environment.
- Attitudinal & behaviour change: It will also change the way humans treat these ecologically important river.
- Expansion of environmental law: Protecting the environment through judicial process is one of the lasting legacies

Legal rights to Ganga and Yamuna

In 2017 High Court of the State of Uttarakhand in India declared that 'the Rivers Ganga and Yamuna are legal persons with all the corresponding rights, duties and liabilities of a living person in order to preserve and conserve river Ganga and Yamuna.

- Covering all natural features: Court extended legal rights to the 'Glaciers including Gangotri and Yamunotri, rivers, streams, rivulets, lakes, air, meadows, dales, jungles, forests wetlands, grasslands, springs and waterfalls' of the Himalayas, in order to preserve and conserve these natural features.
- Loco Parentis: The Director NAMAMI Gange, the Chief Secretary of the State of Uttarakhand and the Advocate General of the State of Uttarakhand are declared persons in loco parentis as the human face to protect, conserve and preserve Rivers Ganga and Yamuna and their tributaries.
 - These Officers are bound to uphold the status of Rivers Ganges and Yamuna and also to promote the health and well-being of these rivers
- Environmental jurisprudence: The Ganga and Yamuna obtained legal rights. Granting legal rights to rivers (and water-bodies) opens up a new area of environmental jurisprudence.

Legal Rights for Nature: Two Approaches

- Nature rights: Within this framework, nature can only have 'nature rights', which are specific to the organism or ecosystem, for example, a bee has bee rights, a river has river rights, and so on.
- Legal personhood: Legal rights are not the same as human rights, and so a "legal person" does not necessarily have to be a human being.
 - Giving nature legal rights means the law can see "nature" as a legal person, thus creating rights that can then be enforced.
 - Legal personhood also includes the right to enter and enforce contracts, and the ability to hold property.

judicial process is one of the lasting legacies of the rapid expansion of environmental law. Earlier approaches have often obscured the particular interests of "nature" behind the effects of environmental degradation on human interests.

Argument against giving legal right to rivers

- **Ambiguity in defining rivers:** There are vast number of rivers in India but there is no proper definition of a river, hence it becomes difficult to list out the rivers for conferring legal rights.
- **No proof of concept:** There is a great deal of uncertainty about what this novel legal development will mean in practice.
- **Enforcement challenges:** While the court can direct particular individuals to be the human face of the rivers, it has no power to provide funding to support this new role, which creates real enforcement challenges
- Unnecessary litigations and increasing workload of judiciary: This has the potential to significantly broaden
 the rights associated with Rivers well beyond the legal rights. For example, an environmental activist has
 reported the 'murder' of the Ganges and Yamuna Rivers to the police, on the basis that the rivers were too
 polluted to be considered 'alive'.

- **Jurisdiction issues**: Ganges and Yamuna rivers extend beyond the borders of the state of Uttarakhand, this would make it difficult for the state government to be responsible for the entire river.
- **Clash with other rights**: One of the challenges for the creation of legal rights for rivers is how the new rights for the river will interact with the legal rights of other people, including rights to water and land.

Way ahead

Legal rights are only worth having if they can be enforced. To enforce legal rights for a river, several practical factors must be accounted for.

- First, an **individual or organization must be appointed to act on a river's behalf**, to uphold the rights of, and speak for nature
- Second, capacity in the forms of time, money, and expertise may need to be made available so that the rights of the river can be upheld in court.
- Third, river representatives and funding sources are likely to **need some form of independence from state** and **national governments**, as well as sufficient real-world power to take action, particularly if such action is politically controversial.

5.10. GOGABEEL

Why in news?

Recently, Gogabeel, has been declared as Bihar's first 'Community Reserve'.

About Gogabeel

- It is an **ox-bow lake** in Bihar's Katihar district.
- It is formed from the flow of the rivers Mahananda and Kankhar in the north and the Ganga in the south and east.
- Among the threatened species, the Lesser Adjutant falls in the vulnerable category; and three species, the Black-necked Stork, White Ibis and White-eyed Pochard are under the near threatened category.
- Other species reported from this site include Black Ibis, Ashy Swallow Shrike, Jungle Babbler, Bank Myna, Red Munia, Northern Lapwing and Spotbill Duck.
- In 2004, Gogabeel, including the neighbouring Baghar Beel and Baldia Chaur, were given the status of an IBA (Important Bird Area of India).

What is a Community Reserve?

- It is a category of protected areas which was introduced in the Wildlife (Protection) Amendment Act of 2002.
- It is an **inhabited area** which typically act as **buffer zone** to or connectors and **migration corridors** between established national parks, wildlife sanctuaries and reserved and protected forests of India. Parts of the land in this area are privately owned.
- Such areas are designated as **conservation areas if they are uninhabited** and completely owned by the Government of India but used for subsistence by communities
- These categories were added because of reduced protection in and around existing or proposed protected areas due to private ownership of land, and land use.
- **State Government** after consulting with the central government and the local communities, declares any area as community or conservation reserve.
- Currently there are 127 community reserves in India and maximum in the state of Meghalaya.

Ox-bow lake

It is a crescent shaped lake formed when a wide U-shaped meander of a river is cut off from the main stem of the river, resulting in a separate body of water.

6. SOCIAL ISSUES

6.1. NATIONAL MEDICAL COMMISSION ACT 2019

Why in News?

Recently, President gave assent to National Medical Commission (NMC) Act 2019.

Background

Prof. Ranjit Roy Chaudhury committee (2015)
recommended structurally reconfiguring the
(Medical Council of India) MCl's functions and
suggested the formation of a National Medical
Commission.

Medical Council of India

- It is a statutory body, established under Indian Medical Council Act 1956.
- It regulates
 - standards of medical education.
 - o permission to start colleges, courses or increase the number of seats.
 - standards of professional conduct of medical practitioners such as registration of doctors etc.
- Various other committees such as **Lodha Panel (2016) and Arvind Panagariya** have also previously suggested scrapping of the MCI.
- Government earlier superseded the MCI through the Indian Medical Council (Amendment) Ordinance, 2018. The powers of the MCI were also switched from the elective council body to the board of governors.
- Recently, the government also passed the **Indian Medical Council (Amendment) Bill of 2019** to further continue the interim provisions of the ordinance.
- The National Medical Commission (NMC) Act, 2019 seeks to replace the MCI with a National Medical Commission and overhaul the medical education system.
- However, there are certain sweeping provisions in the Act that has led doctors to protest against the act.

Reasons for the introduction of the Act

- Poor doctor-population ratio: India has a doctor-population ratio of 1:1456 as compared with the WHO standards of 1:1000.
- Poor distribution of doctors: In addition, there is a huge skew in the distribution of doctors working in the Urban and Rural areas with the urban to rural doctor density ratio being 3.8:1.
- Poor condition in rural areas: Consequently, most of rural and poor population is denied good quality care leaving them in the clutches of quacks. It is worth noting that at present 57.3% of personnel currently practicing allopathic medicine does not have a medical qualification.

Issues with MCI

- It failed to produce sufficient number of doctors.
- Shortage of teachers in medical colleges and poor regulation of undergraduate and postgraduate courses.

Issues faced by medical education in India

- Lack of seats: There still exists a disproportionate relationship between the number of students and available medical seats.
- Rapid and uneven growth of medical colleges: Number of medical colleges has more than doubled during last 25 years. New private medical colleges account for most of the growth and it has also led to increase in demand of medical education with high tuition fee.
- Accreditation standards: Accreditation by MCI is compulsory but requested information emphasizes documentation of infrastructure and human resources (head counting) rather than measures of quality of medical education and outcomes.
- Shortage of medical teachers: There is 30-40% shortage of medical teachers. In last 3 years, numbers of medical colleges have gone up to 38, thus requiring 4000 more teachers additional to already shortage of medical teachers.
- High cut off rates, unavailability of medical equipment, and poor return on investment (ROI) are some of the challenges which are steadily deteriorating medical education in the country.
- Lack of accountability, alleged corruptions and failure to discharge mandated responsibilities.
- It will help to address issues faced by medical education in India.

About NMC Act

- The Act seeks to proposes to repeal the Indian Medical Council Act, 1956 and replace the Medical Council of India (MCI)
- It provides for a **medical education system** which ensures:

- availability of adequate and high-quality medical professionals
- adoption of the latest medical research by medical professionals
- o periodic assessment of medical institutions
- an effective grievance redressal mechanism.
- Constitution of the National Medical Commission: The Act sets up the National Medical Commission (NMC). Also, within three years of the passage of the Act, state governments will establish State Medical Councils at the state level.
 - The NMC will consist of 25 members, appointed by the central government.
 - o A **Search Committee** which will be nominated by the central government will recommend names to the central government for the post of Chairperson, and the part time members.
 - Members of the NMC will include:
 - the Chairperson (must be a medical practitioner)
 - Presidents of the Under-Graduate and Post-Graduate Medical Education Boards
 - ✓ General of Health Services, Directorate General of Health Services
 - Director General, Indian Council of Medical Research
 - ✓ five members (part-time) to be elected by the registered medical practitioners from amongst themselves from states and union territories for a period of two years.
- Medical Advisory Council: Under the Act, the central government will constitute a Medical Advisory Council.
 - The Council will be the **primary platform** through which the states/union territories can put forth their views and concerns before the NMC.
 - Further, the Council will advise the NMC on measures to determine and maintain minimum standards of medical education.
- Autonomous boards: The Act sets up autonomous boards under the supervision of the NMC. Each autonomous board will consist of a President and four members, appointed by the central government. These boards are
 - Under-Graduate Medical Education Board and Post-Graduate Medical Education Board to set standards and regulate medical education at undergraduate level and postgraduate level respectively.
 - o Medical Assessment and Rating Board for inspections and rating of medical institutions and
 - Ethics and Medical Registration Board to regulate and promote professional conduct and medical ethics and also maintain national registers of (a) licensed medical practitioners and (b) Community Health Providers (CHPs).
- Limited licensing: Under the Act, the NMC may grant a limited license to certain mid-level practitioners connected with the modern medical profession to practice medicine. These mid-level practitioners may prescribe specified medicines in primary and preventive healthcare.
- Entrance examinations: There will be a uniform National Eligibility-cum-Entrance Test for admission to under-graduate and post-graduate super-specialty medical education in all medical institutions regulated under the Act. The NMC will specify the manner of conducting common counselling for admission in all such medical institutions.
- National Exit Test (NEXT): The Act also mentions that National Exit Test, which is to gain a licence to practise after MBBS, can also serve as an entrance examination to post-graduate level.
- Regulation of fees: The Act also proposes for the NMC to "frame guidelines for determination of fee and other charges" for 50% of seats in private medical institutions and deemed to be universities.
 - Currently, state governments determine fees for 85% of seats in such institutions and the rest are left for the management.

Functions of the National Medical Commission

- framing policies for regulating medical institutions and medical professionals
- assessing the requirements of healthcare related human resources and infrastructure
- ensuring compliance by the State Medical Councils of the regulations made under the Act
- framing guidelines for determination of fees for up to 50% of the seats in private medical institutions and deemed universities which are regulated under the Act.

Benefit of the Act

- **Improved medical education system**: The Act aims to provide for a medical education system that improves access to quality and affordable medical education, ensures availability of adequate and high quality medical professionals in all parts of the country.
- Addressing shortage of doctors: Countries such as Thailand, United Kingdom, China, and even New York
 have permitted Community Health Workers/Nurse Practitioners into mainstream health services, with
 improved health outcomes. Since India have shortage of doctors and specialists, the task shifting to Midlevel Provider will relieve the overburdened specialists.
 - o Chhattisgarh and Assam have also experimented with the Community Health Workers. They have performed very well and there is no ground of concern if the quality of personnel is regulated tightly.
- **Regulation of fees:** IMC Act, 1956 has no provision for regulation of fees. As a result, some states regulate the fees of some seats in private colleges through MoUs signed with college managements.
 - Nearly 50% of the total MBBS seats in the country are in government colleges, which have nominal fees.
 Of the remaining seats, 50% would be regulated by NMC. This means that almost 75% of total seats in the country would be available at reasonable fees.
 - In the spirit of federalism, the State governments would still have the liberty to decide fees for remaining seats in private medical colleges on the basis of individual MOUs signed with colleges on the basis of mutual agreement.
- **Transparency:** Act will help to ensure transparency and accountability in education system and control through NMC.

Why it is being opposed?

- **Centralisation of power:** Act seeks to form NMC, which will be the overarching body on medical education and research and for the practitioners. It is complete abandonment of federalism and autonomy of medical education.
- **Interference from Bureaucracy:** Bureaucracy can have upper hand in all the important bodies where appointment is being done by Centre.
- **Opaqueness in the selection process:** There is no provision of election for all the chief posts of these multiple bodies.
- Less control of States: States have been reduced to mere advisory roles from being in governance mode. Also, due fees regulation by commission States are led to a no-holds barred situation for private medical colleges.
- Oversized body: Scale of the commission would make matters worse. Advisory council will comprise more than 100 members, including 24 members of the commission. Reaching consensus will become difficult.
- Ambiguity over NEXT exam: It seems that those who don't clear the exam will not be allowed to practise at
 all, which is huge. Last year, 1.15 lakh students undertook PG entrance exam but only 80,000 qualified. The
 others are still practising as MBBS doctors. This Act would altogether stop that. It will lead to acute shortage
 of doctors when our country is already facing so.
- Interference by third party in inspection/ corruption: According to the Act, not only can members of the board inspect, but it may "hire and authorise any other third party agency or persons for carrying out inspections. So far, medical colleges were only inspected for approval by the Medical Council of India (MCI), but this responsibility has now been entrusted upon Medical Assessment and Rating Board. This will append the corruption of which the MCI was accused
- Unclear provision of community health providers (CHPs): the government failed to define who would be those CHPs. IMA vehemently opposed this step as this would legalise quackery.

Way forward

- Voluntary and grade based NEXT exam: If at all, an exit exam was to be given, it should have been made voluntary and grade-based. So, if a MBBS practitioner wants grade-accredited, s/he could have taken it, as is the precedent in some countries.
- **Trained team of auditors**: Inspection should be done with doctors' designated bodies to keep it corruption free.

- **More stakeholders involvement**: In order to ensure fair decision making all stakeholders should be given the importance and also the role of state should be increased.
- Other suggestions for medical education in India
 - To achieve higher standards of medical education, our goal should be to re-evaluate each and every aspect;
 - o create an efficient accreditation system;
 - o promote an equal distribution of resources,
 - o redesign curricula with stricter implementation and improved assessment methodologies.

6.2. POPULATION POLICY

Why in news?

Recently, there has been a demand to adopt a **new population policy** for the country.

Background

- Recently, on the World Population Day (July 11th), some concerns were raised that there has been a
 "population explosion" in the country. Also, there has been a popular demand from various corners to
 implement certain measures to implement population control such as-
 - Call for enacting population control laws
 - o Annulling the voting rights of those having more than two children.
- However, the Economic Survey 2018-19 has rebutted these observations. As per it, India is set to witness a "sharp slowdown in population growth in the next two decades".
- The fact is that by the 2030s, some States will start transitioning to an ageing society as part of a well-studied process of "demographic transition" which sees nations slowly move toward a stable population as fertility rates fall with an improvement in social and economic development indices over time.
 - The National Family Health Survey (NFHS)-4 revealed that 24 states in the country have already achieved replacement level fertility (2.1).
 - India's declining fertility can largely be attributed to key determinants like increasing emphasis on women's education and their participation in the labour force.
- In this background, it is said that rather merely focussing on population stabilization, there is a need to focus on other components of the population policy.

Population Policy of India

- Over the years, India has achieved a steady decline in its fertility rates and a slowing down of its population growth.
- India has the distinction of being the first country in the world to launch a national programme, emphasizing family planning to the extent necessary for reducing birth rates "to stabilize the population at a level

Steps taken to control the Population Growth in the country On-Going Interventions

- Quality care in Family Planning services by establishing Quality Assurance Committees at state and district levels.
- Improving contraceptives supply management up to peripheral facilities.
- Demand generation activities in the form of display of posters, billboards and other audio and video materials in the various facilities.
- National Family Planning Indemnity Scheme' (NFPIS)
 under which clients are insured in the eventualities of
 deaths, complications and failures following sterilization
 and the providers/ accredited institutions are indemnified
 against litigations in those eventualities.
- Compensation scheme for sterilization acceptors- under the scheme MoHFW provides compensation for loss of wages to the beneficiary and also to the service provider (& team) for conducting sterilisations.

New Interventions under Family Planning Programme

- Scheme for **Home delivery of contraceptives** by ASHAs at doorstep of beneficiaries.
- Scheme for ASHAs to ensure spacing in births.
- Introduction of the new device and methods, which are more **effective** and give boost to **spacing** of births.
- Jansankhya Sthirata Kosh (National Population Stabilization Fund) has adopted the following strategies as a population control measure
- Prerna Strategy- to push up the age of marriage of girls and delay in first child and spacing in second child the birth of children in the interest of health of young mothers and infants.
- Santushti Strategy: it invites private sector gynecologists and vasectomy surgeons to conduct sterilization operations in Public Private Partnership mode.

consistent with the requirement of national economy"

- The National Population Policy 2000 (NPP 2000) affirms the commitment of the government towards voluntary and informed choice and consent of citizens while availing of reproductive health care services and continuation of the target free approach in administering family planning services.
- Under this policy, various **less developed states** have seen improvement in parameters such as Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh, Odisha, Chhattisgarh, Jharkhand and Assam.
 - o Their demographic indicators began to be **monitored** relentlessly.
 - o For the first time the **decadal growth rate** in these states has reduced.
 - o The **age of marriage** went up, so preventing thousands of maternal and new-born deaths and stillbirths.
 - The **hospital-based deliveries** have doubled in some states with near-tripling in Madhya Pradesh and Odisha, especially due to the National Rural Health Mission (NRHM).

Need of a new Population Policy for India

- **Creation of wrong perception-** by associating population growth with carious issues of the country and more people chase fewer and fewer resources.
 - Lead to conflicts- as this perception can quickly degenerate into a deep class or religious conflict that pits the poor, the weak, the downtrodden and the minorities against the more privileged sections.
- Lack of success on various parameters- of the National Population Policy 2000 such as-
 - The Infant Mortality Rate (IMR) was to have been reduced to 30 per thousand live births and the Maternal Mortality Ratio (MMR) to less than 100 per 1 lakh live births. Today, in 2015, five years after the goals were to have been realised, India has achieved neither.
- Skewed female and child sex ratio- which is spreading from urban into rural areas.
 - O Discriminatory social barriers like the absence of women's ownership rights over land and property are responsible for the continuing son preference.
- **Migration-** can lead to issues of **sons of soil doctrine** (insider vs outsider conflict) as well as strain on the infrastructure, housing and water availability.
- Ageing- The growing population of the elderly and the increase in life expectancy accompanied by chronic diseases have the potential to deflect resources from the primary task of providing education, skill development and increasing employability.
 - o In the next 10 years, the elderly will account for 12% of the country's population.
 - o There are issues faced by elderly in availing benefits of old-age homes and protective laws.
 - Dependency ratios are increasing rapidly while the joint family system has disintegrated.
 - o The market of caregivers is today unregulated, expensive and undependable.

Way Forward

- The **new population policy** should be such, which cut across sectoral paradigms and address the above issues.
- There should be focus on **young population** (below 35 years), which could have great socio-economic developmental outcomes for the nation in years to come.
 - It includes greater access to education and livelihood opportunities and meeting the health needs of this
 population, including their reproductive needs.
- The two-pronged approach of health system strengthening and population control may work in states such as Bihar and UP, but for other states that are near or under replacement fertility, more resources should move into health system strengthening and core health priorities—non-communicable diseases, drug availability, and human resource deployment etc.
- There is need to focus on **smaller states** as well. E.g. The **Sample Registration System**, which tracks deaths and births in a sample of villages and urban blocks, should also generate data on MMR for **smaller states or union territories (UTs)**. It currently tracks only larger states.
- A common minimum programme agreed upon by a multi-stakeholder consensus involving all political
 parties could be a way forward. It could effectively address misalignment between central and state efforts,
 as well as delays and derailments due to regime changes.

6.3. MENTAL HEALTHCARE

Why in news?

Recently, there has been a discussion over the gap between the requirements and availability of facilities in the mental healthcare sector in India.

Background

- According to a recent National Mental Health survey, approximately 150 million people in India need care for their mental health condition.
 - It further says that between 70 and 92 percent of these cases failed to receive treatment.
- The World Health Organisation says India has the **highest number of teenage suicide** rates globally.
- The mental health it forms part of Sustainable Development Goal 3, which emphasises well being of all.

Issues with Mental Healthcare in India

- Lack of awareness about the issue- More than 80% of people do not seek any professional help in India.
- Lack of infrastructure
 - o **Capital-** The amount spent on mental healthcare is just 0.06% of health budget.
 - o Human- There is a requirement of 13500 psychiatrists but only 3827 are available. Against the requirement of 20250 clinical psychologists only 898 are available. Similarly, there is an acute shortage of paramedical staff also.
- Changing Social Discourse- With rising urbanization and globalization, there is also a small shift towards a nuclear family. With a smaller family, there is a larger pressure on the children contributing into depression.
- of Social stigma because lower awareness is also a deterrence to help the mentally ill patients.
 - People suffering from any kind of mental health issue are considered 'lunatics' by the people due to the lack of awareness, ignorance and blatant apathy. This leads to a vicious cycle of shame, suffering and not to mention, isolation of the patient.
 - Conditions of Prisonershaving mental health problems hasn't

Mental Healthcare Act, 2017

- Rights of person with mental Illness- every person shall have a right to access mental health care and treatment from mental health services run or funded by the appropriate government at an affordable price, free for homeless and BPL.
- Advance Directives: given by mentally ill person regarding her treatment and who shall be her nominated representative
- Central and State Mental Health Authority: These bodies are required to regulate various provisions relating to mental health establishments, professionals, law enforcement officials and other issues.
- Suicide is decriminalized- person attempting suicide will be treated as mentally ill and will not be treated under IPC
- Mental Health Review Commission: will be a quasi-judicial body that will periodically review the use of and the procedure for making advance directives and advice the government on protection of the rights of mentally ill persons.
- Mental Health Review Board to protect the rights of persons with mental illness and manage advance directives.
- A person with mental illness shall not be subjected to electroconvulsive therapy without the use of muscle relaxants and anaesthesia.
- improved despite provisions in the Mental Healthcare Act.
- Increasing competitiveness- in various fields such as education sector and due to lack of employment opportunities leading to mental health concerns.
- Lack of implementation- only 19 States have implemented the Mental Healthcare Act till now.

Steps taken

- National Mental Health Programme (NMHP)- implemented since 1982, the Government is supporting implementation of the District Mental Health Programme (DMHP) in 517 districts of the country for detection, management and treatment of mental disorders/illness.
 - Manpower development schemes for establishment of Centres of Excellence and strengthening/ establishment of Post Graduate (PG) Departments in mental health specialties.
- Government of India has launched a National Mental Health Policy 2014 -
 - Universal access to mental healthcare institutions.

- O Strengthen leadership in the mental health care.
- o Gives out role for central and state governments, local bodies and civil society organizations.
- Government has recently come out with Mental Health Care Act 2017 with the aim of avoiding discrimination and improving their autonomy in their decisions.
- **Karnataka government** has launched a dedicated helpline called Arogyavani that acts as a counselling and redressing any type of grievances.

Way Forward

- A community-based solution inspired by Asha workers model can be adapted to serve the mentally ill
 population efficiently. Also, more and more professionals should be trained in this field to decrease the everincreasing gap.
- To end the stigma, there is a **need to empower the people suffering** from various mental health issues. Steps can also be taken to connect the people suffering from such diseases with each other by forming a network, such that no one feels alienated or alone.
- Other steps which can be taken include-
 - Changes in the school curriculums and the examination patterns.
 - o Interaction with mental health care patients.
 - o Improving awareness among parents and counseling them too about depression.

6.4. RATIONALISATION OF SCHOOL

Why in News?

Recently Punjab Education Dept formed rationalisation policy for school teachers in state. It has been introduced to **ensure proper pupil-teacher ratio (PTR)** as well as optimum utilisation of the available strength of the teaching faculty in the best interest of students.

Background

 When Sarva Shiksha Abhiyan (SSA) was started there was a huge infrastructure gap in the country adversely affecting the goal of universal elementary education.

Rationale behind rationalisation policy

- Low enrolment: The existence of too many schools, mostly low in enrolment, is creating problems in terms of quality of teaching and infrastructural facilities offered by these schools.
- Large number of small schools: India has three times more schools than China but falls short in qualitative indicators.
- Limited finance and resources with states: Due to limitation of state resources and surplus small schools, it has adversely affect the provisioning of resources, learning process and monitoring and supervision.
- Consequently, SSA provided 2.06 lakh primary and 1.61 lakh upper primary schools upto 2016-17.
- Section 6 of Right of Children to Free and Compulsory Education (RTE) Act, 2009 also provided children's access to elementary schools within the defined area or limits of neighbourhood.
- States are now increasingly realising that surplus schools, in excess of neighbourhood requirement, have somehow been established which are adversely affecting the provisioning of resources, teaching learning process, monitoring and supervision.

About Rationalisation of Schools

- Rationalisation of Schools policy may vary from the need for opening of a new school in one habitation, to maintain status quo in another habitation, merging of more than one small school into one bigger school in another habitation and /or relocation of school from one habitation to another habitation depending on the local specific situation.
- Objectives of Rationalisation of Small Schools
 - o To ensure access of all children to fully functional neighbourhood schools.
 - o To improve the quality of education, and to ensure the retention of children in schools.
 - To make all schools RTE Act 2009 compliant.
 - To consolidate the resources for the best interest of the child

Rationalisation of Schools in India

- Many states such as Andhra Pradesh, Rajasthan, Odisha, Himachal Pradesh, and Maharashtra have attempted school rationalisation (under names such as consolidate schools, mainstreaming, amalgamation, and integration) at primary and upper primary levels.
- In 2017, Ministry of Human Resource Development also issued **Guidelines for Rationalization of Small School across States for Better Efficiency.**
- The **draft National Education Policy (NEP) released in May 2019** has identified the issue of isolation of small schools and has proposed a potential solution through the creation of **'school complexes'**.
- **Economic Survey 2018-19** also suggests that the number of school going children in India will decline by 18.4% between 2021 and 2041 and there is significant rise in number of schools per capita with low enrolment (less than 50 students).
 - Hence it is recommended to consolidate/merge elementary schools (located within 1-3 kms radius of each other) in order to keep them viable rather than building new ones.

Benefits of such policy

- **Bigger schools:** It is claimed that one big school is better than two smaller schools; bigger schools provide a wider range of curricular and extracurricular offerings.
- Better infrastructure and conducive environment: It will enable provisioning of better infrastructure facilities and enable targeted improvements in learning levels.
 - Sports programs and extracurricular activities flourish in consolidated schools because of combined funding.
- Better governance: It can be a tool for improving governance and efficiency in public schools.

Global Models of school consolidation • United States of America (USA)

- United States of America (USA): The consolidation of schools and school districts was a major pivot of structural and systemic reforms.
 - From 1930 to 1970, nearly two-thirds of all schools in the USA were consolidated, resulting in an average five-fold increase in school size and increasing professionalisation of education bureaucracies.
- Canada: School consolidation formed an essential component of educational reforms to address issues such as low student enrolment and higher expectations in terms of student and teacher performance.

Issues related to policy

- **Changes in Enrolment:** There is some evidence that school consolidation can have a negative impact on school enrolment or attendance due to increased distances.
 - There are also differences **in enrolment trends across gender** as girls are not able to access the schools due to distances.
- **Better services by smaller schools:** In contrary to issues of small schools, they usually provide closer relations between faculty and administration, a smaller teacher-pupil ratio, and an enhanced potential for individualized instruction.
- Other major concerns
 - Less participation in decision-making by teachers and administrators
 - Less human contact, producing frustration and alienation and weakening morale of both students and school staff

Way forward

- **Proper planning:** Detailed planning for consolidation based on secondary data, child mapping, and mandatory consultations with all stakeholders and local governance institutions should be undertaken to avoid any negative impact of consolidation.
- Coordination between 3 tier government: The central, state, and local governments should act as facilitators for consolidation and desist from following a one-size-fits-all approach. Consolidation should be a local exercise, best carried out by local authorities.
 - The state government should act as facilitators in the process by providing school data analytics and visualisation platforms, capacity-building of local authorities, and financial support.
- Improve other parameters: The government needs to take on improving school infrastructure on a war footing, like it did for Sarva Shiksha Abhiyaan. It also needs to improve teacher training and inculcate elearning.

- The following guiding principles could be followed for school consolidation and restructuring:
 - o **Create before you destroy**: Construct functional school infrastructure and appoint teachers in the consolidated school prior to shutting down schools.
 - o No child should be left behind: Access to every child and means to participate should be ensured.

6.5. INSTITUTE OF EMINENCE

Why in news?

The Union government granted the institute of eminence (IoE) status to 14 more higher educational institutions taking the list to 20

More on news

- Empowered Expert Committee (EEC) appointed by Government under the Chairmanship of Shri N Gopalaswami recommending 15 Public institutions and 15 Private institutions for considering to give status of Institutions of Eminence.
- Since the scheme has only provided for 10 Public and 10 Private Institutions, the UGC has examined the list of 15 Public and 15 Private Institutions using transparent and verifiable criteria.

The following were the principles used for identifying the Institute of Eminence

- Since the thrust of the scheme is to prepare institutions for the global rankings, no existing institution which has NOT figured in any of the global/national ranks shall be recommended for the IoE status.
- Only after exhausting the above criterion, if any slot remains vacant, consideration shall be given to 'yet to be established (Greenfield)' proposals

About Institute of Eminence

- Aim: The aim of the scheme is to bring higher educational institutions selected as IoEs in top 500 of world ranking in the next 10 years and in top 100 eventually overtime.
- Objective: Objective is to provide world class teaching and research facilities to Indian students within the country and enhance general level of education of the country

The salient features are

- Greater autonomy viz. to admit foreign students up to 30% of admitted students;
- To recruit foreign faculty upto 25% of faculty strength;
- To offer online courses upto 20% of its programmes;
- To enter into academic collaboration with top 500 in the world ranking Institutions without permission of UGC;
- Free to fix and charge fees from foreign students without restriction;
- Flexibility of course structure in terms of number of credit hours and years to take a degree;
- Complete flexibility in fixing of curriculum and syllabus, etc. has been provided to IoEs.
- **Financial support:** Each Public Institution selected as IoE will be provided financial assistance up to Rs. 1000 Cr over a period of five years.
 - o **In case of the private institutions, there will be no financial support,** but they will be entitled for more autonomy as a special category Deemed University.
- **Greenfield Institutions:** The Greenfield Institutions would get 3 year period to establish and operationalise the institution, and thereafter, EEC will consider giving IoE status to such institutions.

6.6. DIGITAL DIVIDE IN INDIA

Why in News?

According to new study, India's digital divide is preventing the Digital India programme from achieving its desired outcomes.

What is Digital Divide?

- It means discrepancy between people who have access to and the resources to use new information and communication tools, such as the Internet, and people who do not have the resources and access to the technology.
- It also means discrepancy between those who have the skills, knowledge and abilities to use the technologies and those who do not.

The digital divide can exist between those living in rural areas and those living in urban areas. between between the genders, educated and uneducated, between economic classes, global and on a between more and less industrially developed nations.

Digital divide in India

- Globally 12 percent more men used the internet than women in 2017, while in India only 29% of total internet users are females.
- Although India has 220
 million smartphone users and is the second largest smartphone market in the world, the overall penetration is still just about 30 per cent of the population.

widens the digital divide.

Determinants of Digital Divide in India

innovation.

internet in rural areas.

even if they have access of mobiles and internet.

Poverty: When people have low income, they cannot afford technology

Illiteracy: The education is strong compliment to the use of technologies like

internet and the relevant education levels are secondary and tertiary levels

as they are expected to upgrade the national capacity for adaptation and

Knowledge divide: Knowledge divide is directly related to digital divide.

Given the high levels of literacy in rural India and very low levels of English

speaking and computer savvy population, there is a dire need to develop

softwares in local languages in order to ensure higher and faster adoption of

Electrification: There is close relationship between the level of

electrification and digital divide. Rural India has low electricity coverage in

comparison to urban India. Further the cost of electricity is very high. In

Digital infrastructure: The distribution of digital infrastructure becomes

highly skewed in different states, urban-rural areas etc. which further

such condition; one cannot afford the use of computers and internet.

- There is a huge rural- urban and inter-state digital divide in India.
- Similarly, many states like north-eastern states, Uttar Pradesh, Bihar, Jharkhand, Orissa, Chhattisgarh and Assam lag behind other states in the use and development of ICTs.
- The internet connectivity promotes social & economic inclusion, efficiency and innovation.

Impact of Digital Divide

- Low female representation: Du1e to huge digital divide in gender, thousands of Indian girls in these far-flung areas are refused access to Information and Communications Technology (ICTs), which is a primary cause of low female representation in jobs.
- **Denial to education**: This lack of equal opportunities to access online services and information deprive people of higher/quality education and skill training that could help them contribute to the economy and become leaders on a global level
- Non delivery of welfare schemes: As many schemes have started using ICT in their delivery, at the same time due to digital divide it will create more problem.

Way forward

- Focus on education: Make primary and secondary education especially for girls and women accessible even in the remotest parts of India.
- Generating awareness: Digital divides could be bridged to an extent by bringing greater awareness among citizens about the use of digital technology which could help in reducing information inequality in society.
- Digital literacy and access: The digital divide can be bridged only if communities have access to digital channels and are aware of how to use them. As part of the Digital India

Some Steps taken by Government

- Bharat Net is the initiative to provide broadband in rural India by connecting 250,000 gram panchayats with high speed fibre optic networks.
- Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA): It will empower the citizens to operate computer or digital access devices, thus, enabling them to use IT and related services especially Digital Payments.
- SWAYAM: To bridge the digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy.
- GSAT 29: It is a multi-beam, multiband communication satellite of India which helps in bridge the digital divide of users.

programme, 250,000 access points are being set up for delivering various electronic services to villages.

 Make digital services more affordable: One of the ways to bring about greater penetration of digital technology in society is to make it more affordable. Promoting greater market competition in Internet

- provision and encouraging public-private partnerships in building ICT infrastructure could increase the affordability of digital technology and thereby improve access to it.
- **Technology advancement suited to rural India:** There is a need to promote technologies which are best suited to rural India.
- Address linguistic barriers: There is dominance of English language in software and internet. There is a need
 to promote the use of national language and local languages at least in government websites so as to make
 computers and internet more users friendly.
- Infrastructure: Promotion of telecommunication infrastructure in rural India is the most important condition for bridging the rural-urban digital divide and Indian government can play a significant role in creating the IT infrastructure in rural India.
- Collaboration with private sector: Meaningful collaborations with the private sector, out-of-the-box thinking to maximise technological innovations and following a consistent, singularly-focused approach towards the larger objective, are key.

6.7. MOB LYNCHING

Why in news?

Rajasthan assembly recently passed antimob lynching bill.

Mob Lynching in India

- Lynching is an illegally authorized way
 of punishing somebody by an informal
 group. It is most often also referred as
 informal public executions by a mob who
 wish to punish an alleged transgressor,
 or to intimidate a group.
- Lynching is an egregious manifestation of prejudice, intolerance, and contempt towards the rule of law.
- Supreme Court in Tehseen Poonawalla vs Union of India, 2018 issued directions on the preventive, remedial and punitive measures to be adopted by the central and the state governments.
- Apart from Rajasthan, West Bengal government has also introduced bill against mob lynching.

• Till now there is no national law on anti-mob lynching.

Issues with mob lynching

- **Against rule of law**: The process of adjudication takes place within the courts of justice, and not on the streets.
- Against human rights: The lynching by mob create an atmosphere where human beings are dehumanised, freedom of speech, expression and personal choices are endangered and plurality and diversity is not accepted.
- **Fuel communalism and casteism**: as in most cases, victims are the most vulnerable people of society nomadic tribes, religious minorities, lower castes etc.
- **No database to analyse trends**: As per Ministry of Home Affairs there is no record keeping on public lynching. Thus, making it difficult to draw conclusions and possible solutions to the problem.
- Rise in causes that fuel the tendency towards such incidents
 - Loss of faith of people in the judicial/democratic system of governance especially the poor and marginalized. So, they are tempted to deliver instant justice in their own ways.

Current legal provisions for mob lynching

- Section 223(a) of the Code of Criminal Procedure enables a group of people involved in the same offence to be tried together.
- The Indian Penal Code (IPC), 1860 also has some proximate sections related to hate speech and hate crimes under Sections 153A (promoting enmity between different groups and doing acts prejudicial to maintenance of harmony), 153B (imputation, assertions prejudicial to national integration).

Need of a separate law

- **Deterrence**: A dedicated law would help create enough deterrence against such heinous crime.
- Ensure governance: The killing of human being by a crowd out to enforce mob justice puts a dent on democratic society and questions governance capabilities of the state. Thus, it needs to be punished.
- **Deal with multi-dimensional challenges**: such as vigilantism, lynching due to spread of rumor etc.

However, some experts feel that the lynch mob is a law and order challenge and there are enough provisions in IPC related to murder, attempt to murder, acts done by several persons in furtherance of common intention etc. to tackle such menace if implemented strongly and effectively.

- Socio-political framework: it involves people with little or no education, deep fissures and mistrust, political patronage to achieve narrow political gains, rising intolerance and growing polarization.
- Misinformation and propagandas spread through platforms like Facebook, WhatsApp: For e.g. recent rumours regarding child lifters have incited many impulsive and unplanned acts of violence across the country.
- The incapability/unwillingness of law enforcement agencies to act against mob crimes further encourages it to take the law into their own hands frequently. Public officials and police departments should be held accountable for showing incompetence rather than putting onus on social media platforms completely
- o Dispersion of responsibility and guilt unlike sense of responsibility in individual action.

Way forward

- **Supreme Court** has denounced the **horrendous acts of mobocracy** and gave certain directions to deal with such crimes.
 - Appointment by states of senior police officers as nodal officers in districts,
 - o Identification of vulnerable and sensitive regions
 - o More efficient patrolling of highways in these areas
 - Lodging of FIRs without delay
 - o Compensation schemes for victims and their families
 - Designated fast track courts to try the culprits
 - o Prompt departmental action against police officers and administrative officials who fail to uphold the law.
 - A special law to be framed by Parliament, creating a separate offence of lynching.
 - Many of these directions have been incorporated in the Bill passed by Rajasthan assembly.
- Setting example and ensuring prosecution and punishment: Mob lynching points to a disruption that reflects the loss of trust in state capabilities in justice delivery. Thus, such reiterative brutality and assaults on personal liberty and the right to life needs to be suppressed and punished so that perpetrators know that they would not be able to get away with it.
- Focus needed on social/attitudinal change: through reaching out to local communities to keep peace and check trouble makers from spreading rumours, creating awareness regarding misuse of social media by mass campaigns with help of civil society etc.
- Strengthening administration and governance to ensure public confidence in state institutions: by strengthening local intelligence networks, swifter response from police, proactive flagging of rumors.
- **Holding Social media platforms accountable**: WhatsApp should change its platform to enable privacy in messages between individuals and tracking identity where forwarded message is to public.
- Adopt innovative practices as adopted in various states: For example
 - Telangana police has trained a team of 500 police officers to tackle the fake news menace. These
 officers go to villages to spread awareness about social issues. Police personnel have also been added to
 local WhatsApp groups in villages to spot rumors that could lead to violence.
 - The **West Bengal police** took to Twitter to dispel a rumor that government had sanctioned a five-day holiday on account of Eid, nixing attempts to incite communal tension.

6.8. COMMON SERVICE CENTERS (CSC)

Why in news?

National Small Industries Corporation (NSIC) has signed an MoU with Common Service Centres (CSC) e-Governance Services India for enhancing new offerings for the MSME sector by synergizing each other's competence.

About CSC

- It is an initiative of **Ministry of Electronics & IT**. CSCs are the access points for delivery of various electronic services to villages in India.
- The CSCs provide high quality and cost-effective video, voice and data content and services, in the areas of e-governance, education, health, telemedicine, entertainment as well as other private services.

- Under CSC 2.0 scheme launched in 2015 seeks to set up at least one CSC in each of the 2.5 lakh GPs across the country by 2019.
 It forms a part of Digital India programme.
- The CSCs:
 - cater to regional and linguistic diversity of the country, thus enabling the Government's mandate of a socially, financially and digitally inclusive society.
 - o **promote rural entrepreneurship** and builds rural capacities and livelihoods.
 - increase community participation and collective action which would lead to sustainable socio-economic development through bottom up approach.
 - help to decrease digital divide in India.

Successful Models of CSCs in India

- Gujarat model: All of the eGram centres functional in Gujarat since 2007 are governed by the eGram Vishwagram Society established as an entity directly under the Ministry of Panchayat Raj.
- Kerala Model: Akshaya project implemented by the Kerala IT Mission combines the power of State machinery, the reach of Panchayats and the entrepreneurial spirit of Akshaya operators to steer the project.

Challenges in implementation of CSC in India

- Lack of implementation machinery: With limited push within the government for the required budgetary and manpower support, the project is still managed by a very small team within the MeiTy.
- Lack of infrastructure: for implementation of CSC scheme.
- Accountability Gap: The PPP model of the CSCs presently lacks a strong grievance redressal mechanism in case of failure in providing a G2C service for any reason.
- **Limited access**: Although more than 90,000 centers are operational, yet the services offered are accessed only by a small number of populations.

Way Ahead

- Shift to B2C model: Currently CSC business model is more G2C (Government to Citizen) whereas to create sustainable business model it needs to be B2C (Business to Consumer), which will be based on local demands.
- Adapt newer technology: It need to increase its focus on new courses on artificial intelligence, blockchain, machine learning in nominal fee.
- Infrastructure: Infrastructure development/roll out targets for licensed telecom service providers can be coordinated with the CSC footprints, especially taking into account broadband as part of Universal Service to connect underserved communities in India.
- Coordination with other bodies: Local content and applications, such as eEducation, eHealth, eAgriculture can be developed in close coordination with relevant UN Agencies, such as UNESCO, WHO, FAO, respectively, which will transform the CSCs into Broadband Community Centers.

6.9. STATE OF FOOD SECURITY AND NUTRITION IN THE WORLD, 2019

Why in News?

Recently United Nations released The State of Food Security and Nutrition in the World, 2019.

About State of Food Security and Nutrition in the World

 It is issued annually by the Food and Agriculture Organization of the UN (FAO), the International Fund for Agricultural Development (IFAD), UN Children's Fund (UNICEF), the World Food Programme (WFP) and the World Health Organization (WHO).

SDG 2

- **Goal 2.** End hunger, achieve food security and improved nutrition and promote sustainable agriculture
- Target 2.1: By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round
 - Indicator 2.1.1: Prevalence of undernourishment
 - Indicator 2.1.2: Prevalence of moderate or severe food insecurity in the population, based on the Food Insecurity Experience Scale (FIES).
- This year's report, for the first time comes with estimates of the prevalence of moderate or severe food insecurity based on the Food Insecurity Experience Scale (FIES).

 This indicator provides a perspective on global food insecurity relevant for all countries of the world: one that looks beyond hunger towards the goal of ensuring access to nutritious and sufficient food for all.

Findings of the report

- The report highlights that after decades of declining, hunger is again on the rise.
 - More than 820 million people in the world are still hungry today, underscoring the immense challenge of achieving the Zero Hunger target by 2030.
 - Global level of the prevalence of undernourishment has remained virtually unchanged in the last three years, at a level slightly below 11 percent.

- Moderate food insecurity: People experiencing moderate food insecurity do not have regular access to nutritious and sufficient food – even if they are not necessarily suffering from hunger, they are at risk of various forms of malnutrition and poor health.
- Severe food insecurity: People facing severe food insecurity, on the other hand, have likely run out of food, experienced hunger and, at the most extreme, gone for days without eating, putting their health and well-being at grave risk.

Drivers of the rise in hunger

- Conflict
- Climate and exposure to increased climate extremes and more variability
- Economic effects and how economic slowdowns and downturns are affecting food insecurity
- In Asia, despite great progress in the last five years, **Southern Asia is the highest sub region with almost 15%** of prevalence of undernourishment.
- In high-income countries, too, sizeable portions of the population lack regular access to nutritious and sufficient food.
- Over **2 billion people** (26.4 percent of the world population) do not have regular access to **safe**, **nutritious** and **sufficient food** and these people live in low- and middle- and high-income countries;
 - 17.2 percent of the world population, or 1.3 billion people, have experienced food insecurity at moderate levels.
 - 9.2 percent of the world population (or slightly more than 700 million people) were exposed to severe
 levels of food insecurity in 2018, implying reductions in the quantity of food consumed to the extent
 that they have possibly experienced hunger.
- Globally, the prevalence of stunting among children under five years is decreasing, while the number of stunted children has also decreased from 165.8 million in 2012 to 148.9 million in 2018.
- Globally, **7.3 percent (49.5 million) children under five years of age are wasted**, two-thirds of whom live in Asia
- In 2018, **childhood overweight affected 40.1 million children under five worldwide**; while in 2016, nearly two in five adults (38.9 percent) were overweight, representing 2 billion adults worldwide.
- One in seven live births (20.5 million babies born globally) was characterized by **low birthweight** in 2015 many of these low birthweight babies were born to adolescent mothers.
- Overweight and obesity are on the rise in almost all countries, contributing to 4 million deaths globally.
- Women have a higher chance of suffering from food insecurity than men, with the largest gender gap being
 in Latin America.

Way forward

- The report calls for action to safeguard food security and nutrition through economic and social policies that
 help counteract the effects of economic slowdowns and downturns including guaranteeing funding of
 social safety nets and ensuring universal access to health and education.
 - Countries need to protect incomes in the short term, particularly for the most affected households, through social protection programmes, public works programmes, or policies aimed at stabilizing food prices.
 - At the same time, they need to avoid cuts in essential social services.
- Given the rising importance of global trade in food and agricultural commodities, trade policy also needs to
 feature prominently in the minds of policymakers when promoting economic transformation that helps
 achieve food security and nutrition objectives.
- Integrating food security and nutrition concerns into poverty reduction efforts, while **increasing synergies** between poverty reduction and hunger eradication, helps accelerate both goals.

7. SCIENCE AND TECHNOLOGY

7.1. GRAVITATIONAL LENSING

Why in news?

Recently, the NASA has announced that plan to use the phenomena of gravitational lensing in its research.

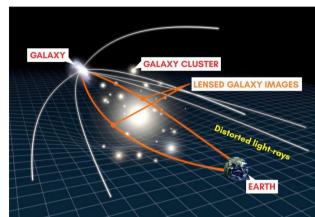
More on news

The National Aeronautics and Space Administration (NASA) is using the James Webb Space Telescope to

conduct wide range of investigations across the fields of astronomy and cosmology.

 Recently, NASA announced that they plan to investigate how new stars are born. For this, they will take the help of a natural phenomenon called "gravitational lensing".

 This programme is called **TEMPLATES** (Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star Formation).



About Gravitational lensing

 It is a phenomenon, which occurs when a huge amount of matter, such as a massive galaxy or cluster

of galaxies, creates a **gravitational field that distorts and magnifies the light** from objects behind it, but in the same line of sight.

- These large celestial objects will magnify the light from distant galaxies that are at or near the peak of star formation. So, in a way these objects act as natural, cosmic telescopes and are called gravitational lenses.
- As a result, the galaxies appear **much, much brighter than they actually are**, because they've been highly magnified up to 50 times.

Applications of Gravitational Lensing

- **Study the galaxies, which are very far away-** and can be seen otherwise with even the most powerful space telescopes.
- Observe invisible things in the Universe- since dark matter doesn't emit or absorb light on its own, so it can't be observed directly. Using this effect, it can be worked out how much dark matter exists in the universe.
- **Understand the star formation-** by studying how those galaxies are forming their stars, and how that star formation is distributed across the galaxies.
- **Understand the past** e.g. The Milky Way today forms the equivalent of one Sun every year, but in the past, that rate was up to 100 times greater. Using this effect, the scientists can look billions of years into the past in order to understand how our Sun formed.

7.2. SRINIVAS RAMANUJAN

Why in News?

Scientists from Technion — Israel Institute of Technology have developed a concept named the **Ramanujan Machine**, after the Indian mathematician.

About Ramanujan Machine

- It is an algorithm that reflects the way Srinivasa Ramanujan worked during his brief life.
 - Throughout his life, Ramanujan came up with novel equations and identities including equations leading to the value of pi and it was usually left to formally trained mathematicians to prove these.
- The purpose of the machine is to come up with conjectures in the form of mathematical formulas that we can analyze.

- In most computer programs, humans input a problem and expect the algorithm to work out a solution. But with the Ramanujan Machine, it works the other way around.
 - Feed in a constant, say the well-known pi, and the algorithm will come up with an equation involving an infinite series whose value, it will propose, is exactly pi.

About Srinivas Ramanujan

- He was one of India's greatest mathematical geniuses born in Madras (1887-1920).
- With very little formal training, he engaged with the most celebrated mathematicians of the time, particularly during his stay in England (1914-19), where he eventually became a **Fellow of the Royal Society** and earned a research degree from Cambridge.
- He discovered **Ramanujan number i.e. 1729** which is the smaller number which can be expressed as the sum of two cubes in two different ways- $1729 = 1^3 + 12^3 = 9^3 + 10^3$.
- Ramanujan made substantial contributions to the analytical theory of numbers and worked on elliptic functions, continued fractions and infinite series.
 - Some of the other major contributions include solving of cubic & quadratic equations, proof of Goldbach's conjecture, calculation Euler's constant to 15 decimal places, investigating relations between integrals and series, studying highly composite numbers, fermat theorem (states that a prime number of the form 4m+1 is the sum of two squares), divergent series, Bernoulli Numbers etc.

7.3. HYDROTHERMAL CARBONISATION

Why in news?

Recently, IIT Kharagpur has developed Hydrothermal Carbonisation technology which can generate energy from solid waste with high moisture content.

About Hydrothermal Carbonisation

- The technology is aimed at **conversion of wet biomass into hydro-char (a coal like fuel)** under suitable temperature and pressure conditions.
- The hydro-char, rich in carbon and high calorific content, can be utilized as fuel, as an alternative for coal, as feedstock for gasification, as a soil additive for nutrient enrichment, or as an adsorbent for activated carbon.
- Its by-products include ash which can be applied as a plant nutrient enhancer because of its phosphorus content, and also a potassium loaded liquid that can be used for watering plants.

Why India needs such technology?

- High percentage of wet waste: Of the 55 million tonnes of Municipal Solid Waste generated every year in India, 85% is biodegradable waste which has a very high moisture content ranging between 60 and 70 per cent of the total.
- **Realisation of target**: the technology will help India in achieving the renewable energy target of 10 GW bio power by 2022.
- Indegenisation of technology: This technology is already in use in Japan and Germany. And the development has led to India having its own technology.

8. CULTURE

8.1. MEGALITHIC CULTURE

Why in News?

Recently, new menhirs were found on the Pothamala hills on the Kerala-Tamil Nadu border.

More about news

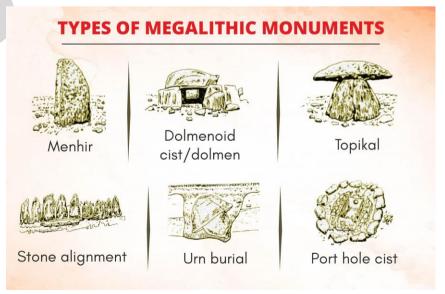
- Pothamala hills houses hundreds of cobbled stone structures, pointing to the existence of a structured graveyard of a prehistoric civilisation dating back around 3,000 years.
- These menhirs are the largest-ever recorded Menhirs in Kerala.
- Menhirs are monolithic slabs that are erected above the ground and may be small or gigantic in height.
- Menhirs are endemic to certain regions only and are a feature of megalithic culture.

Megalithic culture in India

- Megalithic culture refers to the cultural remains found in the megaliths and from the habitation sites associated with them.
 - Megaliths include different kind of monuments that have one thing in common-they are made of large, roughly, dressed slabs of stone.
 - Such monuments have been found in many parts of the world in- Europe, Asia, Africa, and in Central and South America.
- In the Indian subcontinent, Megaliths occur in the far south, the Deccan plateau, the Vindhyan Arravalli ranges and the north west.
 - Megalithic sites in India are dated to period ranging from 1300 BCE to 12 century CE.
 - Megaliths in **Vindhyas** referred to a **pre-iron chalcolithic context**, **peninsular India** are associated with **iron period**.
 - The practice of making megaliths continues among certain tribal communities of India such as the Khasis of Assam and the Mundas of Chotanagpur.
- Megaliths **reflect certain burial styles** that emerged at different times in different places and continued for quite some time.
 - The origin of some of these burial practices can be traced to a **Neolithic-chalcolithic context**. For instance, pit and urn burials are found in the South Indian neolithic-chalcolithic sites and two burials marked by stones have been found at Watgal, Karnataka.
 - However, unlike burials of the Neolithic chalcolithic phase, which tend to be within the habitation, megalithic burials are located in a separate area. The separation of abodes of the living and the dead is

significant, and is indicative of a **shift in social organization**.

- The three basic types of Megaliths are the chamber tombs, unchambered tombs, and megaliths not connected with burials.
- Various types of megalithic monuments found are menhirs, dolmenoid cist/dolmen, topikal etc. (See infographic).
- Megaliths in India cannot be treated as representing a single, homogenous or contemporaneous culture.



8.2. GI TAGS

Name	State	Salient Features
Palani Panchamirtham	Tamil Nadu	 It is an 'abhishega prasadam' (food that is a religious offering) for Lord Dhandayuthapani Swamy, the presiding deity of Arulmigu Dhandayuthapani Swamy Temple, situated on Palani Hills, Palani Town in Dindigul District of Tamil Nadu. It is a combination of five natural substances, namely, banana, jaggery sugar, cow ghee, honey and cardamom in a definite proportion. It is prepared in a natural method without addition of any preservatives or artificial ingredients and is well known for its religious fervour and gaiety. This is the first time a temple 'prasadam' from Tamil Nadu has been bestowed with the GI tag. It is prepared under the guidance given by the CFTRI (Central Food Technological Research Institute) Mysore, a government of India undertaking.
Tawlhlohpuan	Mizoram	 It is a medium to heavy, compactly woven, good quality fabric from Mizoram and is known for warp yarns, warping, weaving & intricate designs that are made by hand. Tawlhloh, in Mizo language, means 'to stand firm or not to move backward'. It holds high significance in the Mizo society, is produced throughout the state of Mizoram, Aizawl and Thenzawl town being the main centre of production.
Mizo Puanchei	Mizoram	 It is a colourful Mizo shawl/textile, from Mizoram. It is an important marriage outfit in the state. It is also the most commonly used costume in Mizo festive dances and official ceremonies. The weavers insert the designs and motifs by using supplementary yarns while weaving to create this beautiful and alluring textile.
Tirur	Kerala	 Tirur betel vine is mainly cultivated in Tirur, Tanur, Tirurangadi, Kuttippuram, Malappuram and Vengara block panchayaths of Malappuram District, Kerala and is valued both for its mild stimulant action and medicinal properties (remedy for bad breath and digestive disorders). It is unique for its significantly high content of total chlorophyll and protein in fresh leaves. It is also commonly used for making pan masala for chewing. Eugenol is the major essential oil in Tirur betel leaf contributing to its pungency.

9. ETHICS

9.1. RIGHT TO DISSENT

Why in news?

Recently Prime Minister emphasised the **value of dissent** and **constructive criticism** in a democracy.

Understanding Dissent

- Dissent is a sentiment or philosophy of nonagreement or opposition to a prevailing idea (e.g., a government's policies) or an entity (e.g., an individual or political party which supports such policies).
- In some political systems, dissent may be formally expressed by way of opposition politics, while politically repressive regimes may prohibit any form of dissent, leading to suppression of dissent and the encouragement of social or political activism.
- Dissent is often related to two other concepts, critical thinking and toleration.
- Dissent is a powerful source for developing effective public reasoning, itself necessary for determining the legitimacy of the actions and institutions of a given state as well as the customs and practices of a given society.
- The toleration of dissenting religious practices can often be a vital force for expanding the scope of inclusion and consent within a state, thereby increasing the legitimacy of the laws and policies of a given state.

Significance of Right to Dissent

• Cornerstone of Democracy: Democracy is favoured is when we will be truly free." -Justice A.P Shah as the most acceptable form of governance because a citizen has a right to dissent without fear of victimisation — as long as such dissent does not lead to inhuman or unconstitutional action. Right to dissent comes within the ambit of Right to freedom of

speech and expression enshrined in the constitution.

 Highlighting the importance of dissent in democracies, the Supreme Court (SC) said that "Dissent is the safety valve of democracy.

- Protests play a crucial role in the civil, political, economic, social and cultural landscape of any progressive democracy. Peaceful resistance such as of Gandhi, Martin Luther King and Nelson Mandel, has been pivotal in bringing about radical positive transformation in the country's socio-political fabric.
- **Dissent as a fundamental human trait:** Disagreeing with each other is a **fundamental human trait**.

 Philosophers argue that a child meaningfully attains its sense of the self its recognition of 'I' and the

Famous sayings and quotes

"In questions of science, the authority of a thousand is not worth the humble reasoning of a single individual."

Galileo Galilei

"Give me the liberty to know, to utter, and to argue freely according to conscience, above all liberties". – **John Milton.**

"If there is anything that links the human to the divine, it is the courage to stand by a principle when everybody else rejects it." — **Abraham Lincoln**

"One has a moral responsibility to disobey unjust laws."-Martin Luther King Jr.

"Few people are capable of expressing with equanimity opinions which differ from the prejudices of their social environment. Most people are incapable of forming such opinions.": **Albert Einstein**

"It is the first responsibility of every citizen to question authority." — **Benjamin Franklin**

"Silence becomes cowardice when occasion demands speaking out the whole truth and acting accordingly."

Mahatma Gandhi

"The strength of a nation is not gauged by the uniformity of opinion of its citizens or a public profession of patriotism. The true strength of a nation is revealed when it does not feel threatened by its citizens expressing revolutionary views; when there is a free and open press that can criticise the government; and when citizens do not resort to violence against their fellow citizens, merely for expressing a contrary view. That is when we will have achieved liberty of speech. And that is when we will be truly free." -Justice A.P Shah

Ethics of Dissent: There is a fundamental ethical principle involved in dissent and hence any society which muzzles dissent is acting unethically. **Two ethical principles** associated with dissent.

- Dissent in relation to non-violence, a principle which is integral to Indian practices of dissent from ancient times to Gandhi and Ambedkar.
- Dissent as an ethical means of protecting all those who are oppressed and are marginalised in a society. The ethical principle here is that the worse off in a society have greater right to dissent and protest even when the more privileged may not agree or sympathise with that dissent.

concept of 'mine' — when it first begins to say 'no'. Free speech thus is seen as integral aspect of each individual rights to self-development and fulfilment.

- o Further, we will have a stronger identity of what our society and nation are through forms of dissent. Any society which eradicates dissent has only succeeded in eradicating itself.
- Dissent giving way for creation on new knowledge and new understanding: Science as well as philosophies are not possible without dissent since it is by finding flaws with the views of others that new knowledge is created. Similarly, Buddha and Mahavira were dissenters first and philosophers next.

Safeguarding right to dissent

- Reforming the legal architecture: The government should set up an independent commission to review all laws that criminalise speech and take steps to repeal or amend them to bring them in line with international human rights norms and India's treaty obligations. So long as bad laws remain on the books, they will serve as tools for governments or local power-holders to harass critics and clamp down on free speech.

courts, should be better trained about peaceful expression standards so that they dismiss cases that infringe on protected speech.

Sensitising the administrative machinery: The government needs to prioritise training for the police to ensure they do not file inappropriate and irrelevant cases. Judges, particularly in the lower

unconstitutional. The SC observed that when it comes to democracy, liberty of thought and expression is a cardinal value that is of paramount significance under our constitutional scheme.

Providing open channels of communication vital for democracy and governance. Clogged channels and garbled information flows cause incalculable harm both to the governed and those who govern. Role of Civil Society thus becomes important as in a democracy, NGOs provide a platform to dissent in an informed and reasoned manner. They provide a mechanism for the ruled to keep a check on the rulers.

Various Judicial Pronouncements with regard to Right to freedom of speech and expression (Including Right to dissent)

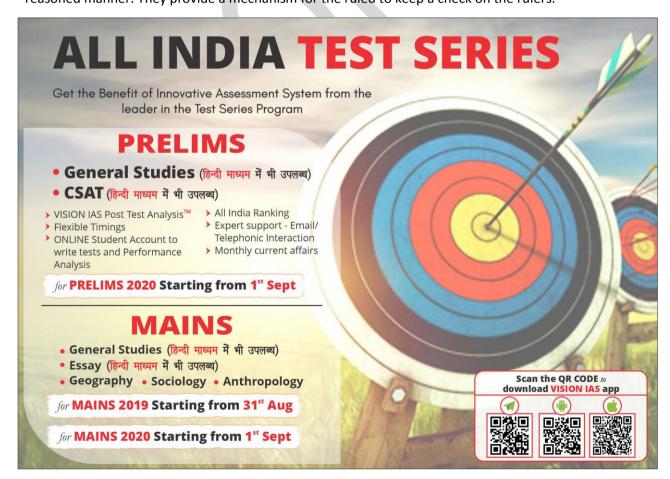
Maneka Gandhi v. Union of India Case (1978) the SC held

that the freedom of speech and expression has no

geographical limitation and it carries with it the right of a

citizen to gather information and to exchange thought

with others not only in India but abroad also. Shreya Singhal v. Union of India Case, 2015: A landmark judgement in which Section 66A of IT Act, was declared



10. NEWS IN SHORT

10.1. HONG KONG PROTESTS

- Hong Kong has seen months of protests sparked by a controversial plan to allow extraditions to mainland China.
- The existing extradition law states that it does not apply to "the Central People's Government or the government of any other part of the People's Republic of China".
- But the proposed changes would have allowed for the Hong Kong government to consider requests from any country for extradition of criminal suspects, even countries with which it doesn't have an extradition treaty and including mainland China, Taiwan and Macau.
- These protests have brought into focus the "one country, two systems" deal under which Hong Kong is governed.
- When Hong Kong was handed over to China in 1997 by Britain, both sides agreed that the city would remain a semi-autonomous region under the Basic Law, its mini-Constitution, for 50 years.
- The Basic Law provides people in Hong Kong more political freedoms than their counterparts in mainland China.
- There is a relatively free press, an unregulated Internet and a less-controlled judiciary in Hong Kong. But China has increasingly tried to exert its influence on the city in recent years, raising concerns of the city's pro-democracy groups.
- The protest movement is leaderless. Protesters are now demanding greater democracy and an inquiry into alleged police brutality during past demonstrations.

10.2. SABKA VISHWAS - LEGACY DISPUTE RESOLUTION

- Recently the Sabka Vishwas-Legacy Dispute Resolution Scheme, 2019 was notified.
- The Sabka Vishwas (Legacy Dispute Resolution) Scheme is a one-time measure for liquidation of past disputes of Central Excise and Service Tax (that are subsumed in GST and are pending in litigation at various forums).
- The scheme also offers an opportunity to the taxpayers to pay the outstanding tax and be free of any other consequence under the law.
- The scheme comes with a validity of 4 months starting from September 1, 2019 to December 31, 2019.

10.3. ANGIKAAR CAMPAIGN

 Ministry of Housing and Urban Affairs (MoHUA) recently launched 'Angikaar Campaign' to bring the

- beneficiaries of PMAY (U) under the fold of other central schemes.
- The campaign will be rolled out in all Pradhan Mantri Awas Yojana (Urban) cities on 2nd October 2019 and culminate on the occasion of Human Rights Day, 10th December, 2019.
- It has been launched for facilitating social behaviour change through community mobilisation, focusing on issues such as water & energy conservation, waste management, health, tree plantation, sanitation and hygiene for beneficiaries of completed houses under PMAY (U).
- For this purpose, the campaign will converge with schemes/services of various urban missions and other central ministries dealing with these subjects.
- The convergence would especially focus on **Ujjwala** for gas connection and **Ayushman Bharat** for health insurance to the beneficiaries of PMAY (U).

10.4. PROJECT SU.RE

- Project SU.RE was recently launched by the Union Textile Minister, along with Clothing Manufacturers Association of India (CMAI), United Nations in India, and IMG Reliance.
- Project SU.RE is Indian apparel industry's largest commitment to move towards sustainable fashion.
 SU.RE stands for 'Sustainable Resolution' – that contributes to a clean environment.
- It aims to contribute to the UN Sustainable Development Goals 2030, especially SDG-12 for responsible consumption and production.
- It will address the needs of an increasingly conscious consumer who would prefer to buy from a brand that is environmentally conscious and engages in environmental protection.

10.5. MEGHDOOT APP

- Recently, the Ministry of Earth Sciences and Ministry of Agriculture have launched a mobile application MEGHDOOT that will provide location, crop and livestock-specific weather-based agro advisories to farmers in local languages.
- The app would provide information in the form of images, maps and pictures. It has been integrated with WhatsApp and Facebook as well to help farmers share advisories among themselves.
- It has been developed by experts from the India Meteorological Department and Indian Institute of Tropical meteorology and the Indian Council of Agricultural Research.

10.6. INAPH PROJECT

 National Dairy Development Board (NDDB) has developed an Information Network for Animal Productivity & Health (INAPH).

- It is an IT application that facilitates the capturing of real time reliable data on Breeding, Nutrition and Health Services of all indigenous, nondescript, crossbred as well as exotic milch animals delivered at farmer's doorstep.
- The objective is to enable proper identification of animals and traceability of their products.
- Each animal will be provided a thermoplastic polyurethane ear tag bearing its 12-digit UID (Pashu Aadhaar).
- The data being captured by it includes the species, breed and pedigree of the particular animal, apart from information relating to its calving, milk production, artificial insemination (AI), vaccination and feeding/nutrition history.
- Through this, farmers, processors, animal husbandry department officials and healthcare professionals can devise appropriate strategies for livestock management.
- It will also help to address major issue of zoonotic diseases and other challenges which are impediments to accessing global markets for Indian livestock products.

10.7. REGULATORY SANDBOX

- The draft enabling framework for regulatory sandbox was recently released by the RBI while the decision to setup a regulatory sandbox had been announced earlier.
- A sandbox is a closed testing environment designed for experimenting safely with web or software projects
- The concept is being used in the digital economy arena, in the form of regulatory sandboxes, which are testing grounds for new business models that are not protected by current regulation, or supervised by regulatory institutions.
- Innovators can use it to mimic the characteristics exhibited by the production environment on a realtime basis to help simulate responses from all the relevant systems.
- It is particularly relevant in the fintech world. The purpose is to adapt compliance with strict financial regulations before getting the necessary regulatory approvals for a mass launch.
- In this way, it helps maintain balance between the development of fintech sector and consumer protection.

10.8. SULPHUR DIOXIDE EMMISSIONS

- A report by Greenpeace has found that India is the largest emitter of sulphur dioxide (SO₂) in the world, contributing more than 15 per cent of global anthropogenic emissions.
- The largest source of SO₂ in the atmosphere is the burning of fossil fuels by power plants and other industrial facilities.

- Smaller sources of SO₂ emissions include: industrial processes such as extracting metal from ore; natural sources such as volcanoes; and locomotives, ships and other vehicles and heavy equipment that burn fuel with a high sulphur content.
- The primary reason for India's high emission output is the expansion of coal-based electricity generation over the past decade. The vast majority of power plants in India lack flue-gas desulfurization technology to reduce their air pollution.
- In combination with other pollutants and moisture, Sulphur dioxide is responsible for the formation of high resistance, visible corrosion layers on all except most noble metals (e.g. silver and gold) and alloys.
- The SO₂ gas contributes to the formation of acid rain. It is also a precursor for sulphate aerosols, a type of suspended particle that can affect the properties of clouds and also lead to outbreaks of haze and other health and climate problems.

10.9. TIDEWATER GLACIERS

- According to recent study, Underwater melting of tidewater glaciers is occurring 100 times faster than previously thought.
- About Tidewater Glaciers
 - They are valley glaciers that flow all the way down to the ocean.
 - Tidewater glaciers meet the ocean at the calving front where ice undergoes melting by the ocean (submarine melting) and icebergs calve off into the sea.
 - Increased rate of underwater melting is due to factors like burning of fossil fuels, oil and gas drilling, Ice breaking ships etc.
 - The increased rate of melting might lead to consequences like extreme flooding, biodiversity loss, disappearing of Coral Reefs, scarcity of fresh water etc.
- What is the difference between sea ice and glaciers?
 - Sea ice forms and melts strictly in the ocean whereas glaciers are formed on land. Icebergs are chunks of glacial ice that break off glaciers and fall into the ocean.
 - When glaciers melt, because that water is stored on land, the runoff significantly increases the amount of water in the ocean, contributing to global sea level rise.
 - Sea ice, on the other hand, is often compared to ice cubes in a glass of water: when it melts, it does not directly change the level of water in the glass.

10.10. TARDIGRADE

- The Israeli spacecraft Beresheet which recently crashed landed on moon had thousands of Tardigrades on board.
- Tardigrade also called water bear or moss piglet refer to any of more than 1,100 species of free-living

- **tiny invertebrates** belonging to the phylum Tardigrada.
- They are considered to be close relatives of arthropods (e.g., insects, crustaceans).
- They are near microscopic animals about 1 mm (0.04 inch) or less in size.
- Tardigrades are toughest and most resilient creatures on Earth, can survive in extreme hot and cold temperature conditions. It is the only animal to have survived all five extinctions known to man.
- They live in a variety of habitats: in damp moss, on flowering plants, in sand, in fresh water, and in the sea
- Under unfavourable conditions, they go into a state
 of suspended animation called the "tun" state—in
 which the body dries out and appears as a lifeless
 ball (or tun).
- In this state their metabolism may decline to as little as 0.01 percent of its normal rate. Tardigrades can survive as tuns for years, or even decades, to wait out dry conditions.
- They typically eat fluids from plant and animal cells. They are also known to eat bacteria.

10.11. RUSSIA SENDS HUMANOID ROBOT INTO SPACE

- Recently, Russia sent the humanoid robot Fedor, also known as Skybot F850 to International Space Station. It will spend 10 days in space to assist astronauts.
- Fedor is Russia's first robot in space. Previously in 2011 NASA sent up Robonaut 2, a humanoid developed with General Motors and in 2013 Japan sent up a small robot called Kirobo, developed with Toyota which holds conversations in Japanese.

10.12. ICAR-FUSICONT

- Scientists from the 'Indian Council of Agricultural Research' (ICAR) have created an innovative technology called ICAR-FUSICONT to control disease named 'Panama Wilt' affecting banana crop in regions of Uttar Pradesh and Bihar.
- The disease Panama Wilt is **caused by a fungus** resulting in the loss of crop by more than 50%.

10.13. SHAGUN

- Recently, Ministry of Human Resource
 Development launched one of world's largest
 Integrated Online Junction for School Education
 'Shagun'.
- It is an over-arching initiative to improve school education system by creating a junction for all online portals and websites relating to various activities of the Department of School Education and Literacy in the Government of India and all States and Union Territories.

- People can directly give their feedback about schools which will further increase the public participation and will ensure accountability and transparency.
- Note: This is different from another initiative of MHRD "Shala Gunvatta (Shagun) Portal" which monitors progress of implementation of the various components of Sarva Shiksha Abhiyaan while also capturing and sharing of best practices from States and UTs.

10.14. BIO-METRIC DATA BASED SEAFARER IDENTITY DOCUMENT

- India has become the first country in the world to issue Biometric Seafarer Identity Document (BSID).
- The new facial biometric technology is a marked improvement over the two fingers or iris-based biometric data.
- The issuance of SID involves the collection of biometric and demographic details of the seafarers, their verification and then issuance of the card to them.
- The new document will give a foolproof identification to our seafarers which will facilitate their movement, provide ease of getting jobs and help in identifying them from any location in the world.
- A record of each SID issued will be maintained in a national database and its related information will be internationally accessible.
- In India the BSID project has been taken up in collaboration with Centre for Development of Advanced Computing (CDAC), Mumbai.
- The new card is in confirmation of the Convention No. 185 of the International Labour Organization on BSID. India ratified the Convention in October 2015.

10.15. WORLD ANTI-DOPING AGENCY

- The World Anti-Doping Agency (WADA) has suspended the National Dope Testing Laboratory's (NDTL) accreditation for a period of up to six months due to non-conformities with the International Standard for Laboratories.
- WADA was set up as a foundation under the initiative of the International Olympic Committee in 1999.
 - It seeks to promote and coordinate the fight against doping in sport internationally.
 - o It monitors the World Anti-Doping Code.
 - UNESCO's International Convention against Doping in Sport helps in ensuring the effectiveness of the code. India is a signatory to the convention.
 - As the Code is a non-government document that applies only to members of sports organizations, the Convention provides the legal framework under which governments can address specific

- areas of the doping problem that are outside the domain of the sports movement.
- At national level, National Anti Doping Agency (NADA) was set up in 2005 as registered society under the Societies Registration Act of 1890.
 - It is an autonomous body under the Ministry of Youth Affairs and Sports.
 - The primary objectives are to implement antidoping rules as per WADA code, regulate dope control programme, to promote education and research and creating awareness about doping and its ill effects.
- National Dope testing Laboratory is a body under Ministry of Youth Affairs and Sports responsible for analytical testing of samples and research in the field of dope analysis.

10.16. NATIONAL ESSENTIAL DIAGNOSTIC LIST

- Recently, the Indian Council of Medical Research (ICMR) finalised India's first National Essential Diagnostics List (NEDL).
- This list aims to bridge the current regulatory system's gap, which does not cover all the medical devices and in-vitro diagnostic device (IVD).
 - Even though WHO's Essential Diagnostics List (EDL) acts as a reference point for development of national EDL, India's diagnostics list has been customised and prepared as per landscape of India's health care priorities.
- With this, India has become the first country to compile such a list that would provide guidance to the government for deciding the kind of diagnostic tests that different healthcare facilities in villages and remote areas require.
 - It builds upon the Free Diagnostics Service Initiative and other diagnostics initiatives of the Health Ministry to expand this basket of diagnostic tests.
 - It also encompasses tests relevant for new programmes such as Health and Wellness Centres (HWCs) under the Pradhan Mantri Jan Arogya Yojana.

10.17. SUPRA

- Science and Engineering Research Board has developed a newly approved scheme SUPRA (Scientific and Useful Profound Research Advancement).
 - It has sole objective of funding exploration of new scientific and engineering breakthroughs with global impact with long-term impact on our fundamental scientific understanding.
 - It is designed to attract high quality research proposals consisting of new hypotheses or challenge existing ones and provide 'out-of-box' solutions.

- Funding will be provided normally for a period of three years, which could be extended to 2 years (5 years total) as assessed by an expert committee.
- SERB is a statutory body under Department of Science and Technology to promote and fund research in different scientific disciplines.

10.18. PASHMINA PRODUCTS RECEIVE BIS CERTIFICATION

- Recently, the Bureau of Indian Standards (BIS) has published an Indian Standard for identification, marking and labelling of Pashmina products to certify its purity.
- The **Changthangi or Pashmina goat** is a special breed of goat indigenous to Ladakh.
- They are raised for ultra-fine cashmere wool (which grows as a thick, warm undercoat on the goat), known as Pashmina once woven.
- The textiles are handspun and were first woven in Kashmir.
 - The nomadic Pashmina herders (called Changpa) live in the hostile and tough terrain of Changthang and are solely dependent on Pashmina for their livelihood.

10.19. NATIONAL ORDER OF MERIT

- Recently, Guinea conferred 'The National Order of Merit', its highest award, on President Ram Nath Kovind.
- He was awarded for his exceptional contribution to the advancement of overall relations and development of mutual cooperation between India and Guinea and for promoting friendship and partnership between the people of both the countries.

10.20. CHILD WELL BEING INDEX

- Recently, Child Well Being Index was released by World Vision India (an NGO) and IFMR LEAD (a research institute in India).
- The score is calculated using 24 indicators divided into 3 categories of Healthy individual development, positive relationships and protective contexts.
- Kerala, Tamil Nadu and Himachal Pradesh topped the index while Meghalaya, Jharkhand and Madhya Pradesh featured at the bottom.
- Among the UTs, Puducherry was best performing.

10.21. ACTION PLAN FOR ANTIMICROBIAL RESISTANCE

- MP has become the second state in India after Kerala to develop an action plan to manage antimicrobial resistance (AMR).
- The Madhya Pradesh State Action Plan for Containment of Antimicrobial Resistance (MP-

- SAPCAR) focuses on a 'One Health' approach to containing AMR through key strategic priority areas and multi-sectoral involvement.
- It is in line with the National Action Plan on AMR (NAP-AMR) which calls for states to develop state level action plans to ensure on-the-ground implementation.

10.22. SAN SADHAN HACKATHON

- It was jointly organised recently by Ministry of Jal Shakti and the Department of Empowerment of Persons with Disabilities, in collaboration with Atal Innovation Mission, NITI Aayog, Bill & Melinda Gates Foundation, and 91springboard.
- It is an initiative under Swachh Bharat Mission to make smarter, more accessible and easier to use toilets for Persons with Disabilities.
- Shortlisted researchers, startups, student innovators, technology enthusiasts and industry experts will have to develop a toilet prototype during the twoday hackathon.

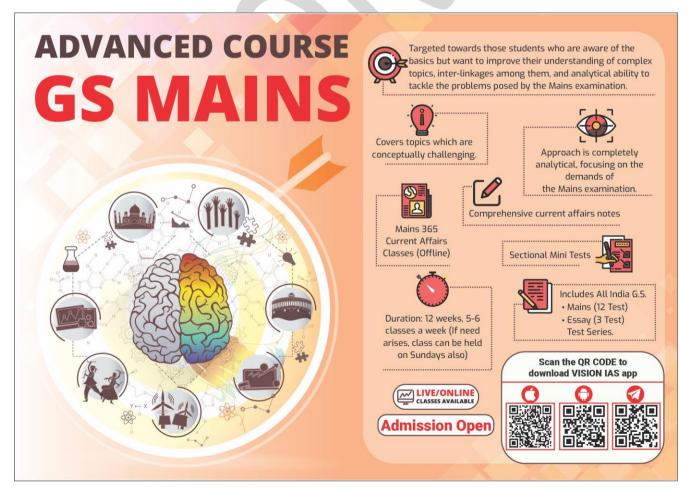
10.23. COALITION FOR DISASTER RESILIENT INFRASTRUCTURE

 The Union Cabinet recently approved the establishment of an International Coalition for Disaster Resilient Infrastructure (CDRI) along with its supporting Secretariat Office in New Delhi.

- It is proposed to be launched at the upcoming UN Climate Action Summit in New York, USA.
- Government pledged Rs. 480 crore corpus to CDRI which will:
 - fund technical assistance and research projects on an on-going basis,
 - o setting up the Secretariat office,
 - covering recurring expenditures.
- The Secretariat of CDRI will be established in New Delhi as a Society under The Societies Registration Act, 1860. Its memorandum and by-laws will be prepared and finalized by the National Disaster Management Authority (NDMA).
- The Charter document of the CDRI will be finalized by the NDMA in consultation with the Ministry of External Affairs.

10.24. HELIUM HYDRIDE

- Scientists have spotted the helium hydride molecule (HeH+) for the first time in space.
- The helium hydride ion or hydridohelium (1+) ion is a cation (positively charged ion) with chemical formula HeH+. It consists of a helium atom bonded to a hydrogen atom, with one electron removed, it can also be viewed as protonated helium.
- It is the lightest heteronuclear ion, and is believed to be one of the first compounds formed in the Universe after the Big Bang.



11. GOVERNMENT SCHEMES IN NEWS

11.1. PRADHAN MANTRI LAGHU VYAPARI MAAN-DHAN YOJANA

Why in news?

Recently, **Ministry of Labour and Employment** introduced the new scheme named "Pradhan Mantri Laghu Vyapari Maan-Dhan Yojana" (PMLVM) which offers pension coverage to the trading community.

Eligible Beneficiaries Key Features To provide Traders aged between 18 and It is an extension of the PM Shram Yogi Maan-dhan Yojana which pension coverage 40 who have an annual grants a monthly pension of Rs.3000 per month to shopkeepers, retail turnover of less than ₹1.5 to the trading traders and self-employed individuals after attaining the age of 60 community. **crore** are eligible. It would target enrolling 25 lakh subscribers in 2019-2020 and 2 crore It shall apply to the laghu vyaparis, who are selfby 2023-2024. It will benefit the operations of such small traders which are generally employed and working as shop characterized by family owned establishments, small scale of owners, retail traders, rice mill owners, oil mill owners, operations, labour intensive, inadequate financial aid, seasonal in workshop owners, commission nature and extensive unpaid family labour. agents, brokers of real estate, The Life Insurance Corporation of India, which acts as the pension owners of small hotels, fund manager, is responsible for the disbursement of pension amount. restaurants and other laghu The subscribers will have to contribute a monthly amount till vyaparis. attaining the age of 60 years, which will vary depending on the age at Any person covered under any which they enter the scheme, that will be matched by the other social security schemes government. such as Employee State In case of permanent disability of beneficiary before superannuation Insurance Scheme, Employees age, the spouse can continue in scheme by remitting the balance Fund Organization Scheme, amount until the loan tenure is reached. National Pension Scheme (NPS) If there is no spouse, then the total contribution along with etc. or he is an income-tax interest will be paid to the beneficiary. assessee is not qualified to In case of death occurs after the retirement date, the spouse will register for the scheme. receive 50% of the pension as the family pension. After the loss of both the pensioner and the spouse, then the fund will be credited back to the nodal agency. Apart from an online portal that would be launched, people would be

11.2. NISHTHA- NATIONAL INITIATIVE FOR SCHOOL HEADS AND TEACHERS HOLISTIC ADVANCEMENT

already in place for other schemes.

able to apply for the scheme through the common service centres

Union HRD Minister launched the National Mission to improve Learning Outcomes at the Elementary level- NISHTHA, National Initiative for School Heads and Teachers Holistic Advancement.

Objective	Beneficiaries	Key Features
Objective To train over 42 lakh teachers across the country		 Standardized module: developed at national level for all States and UTs. Activity-based modules: including educational games and quizzes, Social-emotional learning, motivational interactions, team building, preparation for school-based assessment, in-built continuous feedback mechanism, online monitoring and support system, training need and impact analysis.
	Councils of Educational Research and Training (SCERTs), District Institutes of Education and Training (DIETs) as well as Block Resource Coordinators and Cluster Resource Coordinators in all States and UTs.	 Post training module: this integrated training programme is embedded with post training interventions including provision of mentoring. Use of technology: A Mobile App and Learning Management System (LMS) based on MOODLE (Modular Object-Oriented Dynamic Learning Environment) have been developed by NCERT. LMS will be used for registration of Resource Persons and Teachers, dissemination of resources, training gap and impact analysis, monitoring, mentoring and measuring the progress online.

11.3. SAMARTH SCHEME

Why in News?

Ministry of Textiles signed a Memorandum of Understanding with 16 State governments on to offer skill training programmes under the **Samarth scheme (Scheme for capacity building in the textiles sector).**

Objectiv

Key Features

- To provide demand driven, placement oriented National Skills Qualifications Framework (NSQF) compliant skilling programmes to incentivize and supplement the efforts of the industry in creating jobs in the organized textile and related sectors, covering the entire value chain of textile, excluding Spinning and Weaving.
- To promote skilling and skill upgradation in the traditional sectors of handlooms, handicrafts, sericulture and jute.
- To enable provision of sustainable livelihood either by wage or self employment to all sections of the society across the country.

- The Scheme would target to train 10.00 lakh persons (9 lakhs in organised & 1 lakh in traditional sector)
- The scheme will broadly adopt the following strategy:
 - Aadhaar enabled biometric attendance system with minimum 80% attendance for assessment
 - Training by certified trainers having Training of Trainers (ToT) certification by Resource Support Agency (RSA)
 - Third party assessment and certification by assessment agencies empaneled by RSA
 - Placement linked skilling programme with mandatory wage employment in organized sector (70%) and in traditional sector (50%) and post placement tracking for one year
 - o Preference given to marginalized social groups and 115 aspirational districts
 - o Public Grievance redressal system.
 - For self-empolyment, concessional credit under the Pradhan Mantri MUDRA Yojana will be provided for beneficiaries.
- Implementing Agencies include Textile Industry, Institutions/Organization of the Ministry of Textile/State Governments having training infrastructure and placement tie-ups with textile industry, Reputed training institutions/ NGOs etc.

11.4. NATIONAL URBAN LIVELIHOODS MISSION (DAY-NULM)

Why in News?

Deendayan Antyodaya Yojana-National Urban Livelihoods Mission (DAY-NULM), a flagship mission under the Ministry of Housing and Urban Affairs has been **conferred the prestigious SKOCH Governance Gold Award** for its Portal for Affordable Credit and Interest Subvention Access (PAiSA).

Objective	Intended beneficiary	Salient features
To uplift the urban poor folks by enhancing sustainable livelihood opportunities through skill development.	Urban poor Street Vendors Slum dwellers Homeless Rag pickers Unemployed Differently abled	 NULM was launched by the Ministry of Housing and Urban Poverty Alleviation (MHUPA) in 2013 by replacing the existing Swarna Jayanti Shahari Rozgar Yojana (SJSRY). It provides for: Employment through Skill Training and Placement through City Livelihood Centres. Social Mobilization and Institution Development through formation of Self-Help Groups (SHG) for training members and hand holding, an initial support of 10, 000 is given for each group. Subsidy to urban poor - An interest subsidy of 5% - 7% for setting up individual micro-enterprises with a loan of up to 2 lakhs and for group enterprises with a loan limit of up to Rs.10 lakhs. Cost of construction of shelters for urban homeless is fully funded under the Scheme. Other means - Development of vendor markets and also the promotion of skills for the vendors through setting up infrastructure and special projects for the rag picker and differently abled etc. Ministry of Housing launched a web portal named PAiSA- Portal for Affordable Credit and Interest Subvention Access. It acts as a centralized electronic platform for processing interest subvention on bank loans to beneficiaries under Deendayal Antyodaya Yojana – National Urban Livelihoods Mission (DAY-NULM).

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