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### AUGUST 2020

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## AUGUST 2020

### G.S PAPER II

#### 1. POLITY

##### 1.1 EWS Quota Law

###### Why in news?

The Supreme Court has referred to a five-judge Constitution Bench a batch of petitions challenging the Economically Backward Section (EWS) quota law.

###### What is the law?

- The 103<sup>rd</sup> Constitution Amendment of 2019 provides for 10% reservation in government jobs and educational institutions for EWS.
- This reservation is provided by amending Articles 15 and 16 of the Constitution that deal with the fundamental right to equality.
- [Article 15 prohibits discrimination on grounds of religion, race, caste, sex or place of birth.
- Article 16 guarantees equal opportunity in matters of public employment.]
- The amendment adds an additional clause to both the provisions.
- This clause gives Parliament the power to make special laws for EWS like it does for Scheduled Castes, Scheduled Tribes and OBCs.
- The states are to notify who constitute EWS to be eligible for reservation.

###### What does the reference mean?

- A reference to a larger Bench means that the legal challenge is an important one.
- **Article 145(3)** - The minimum number of Judges who are to sit for deciding any case involving a question of law as to the interpretation of this Constitution shall be five.
- **The SC rules of 2013** - A bench of two judges will generally hear writ petitions that allege a violation of fundamental rights, unless it raises substantial questions of law.
- In that case, a five-judge bench would hear the case.
- Laws made by Parliament are presumed to be constitutional until proven otherwise in court.
- The SC had refused to stay the 103<sup>rd</sup> Amendment.
- A reference will make no difference to the operation of the EWS quota.

###### What are the grounds of challenge?

- The law was challenged on the ground that it **violates the Basic Structure** of the Constitution, which says that.
- The special protections guaranteed to socially disadvantaged groups are part of the Basic Structure.
- The argument is that the amendment departs from this Basic Structure by promising special protections on the sole basis of economic status.
- Although there is no exhaustive list of what forms the Basic Structure, any law that violates it is understood to be unconstitutional.
- The petitioners have also challenged the amendment because it **violates the SC's 1992 ruling** in Indra Sawhney case.
- This ruling upheld the Mandal Report and capped reservations at 50%.

- In the ruling, the court held that economic backwardness cannot be the sole criterion for identifying backward class.
- Another challenge has been made on behalf of private, unaided **educational institutions**.
- They have argued that their fundamental right to practise a trade/profession is violated when the state compels them to implement its reservation policy.

#### What are the government's arguments?

- The Ministry of Social Justice and Empowerment filed counter-affidavits to defend the amendment.
- When a law is challenged, the burden of proving it unconstitutional lies on the petitioners.
- The government argued that under **Article 46** of the Constitution, it has a duty to protect the interests of EWSs.
- [Article 46 - It is a part of Directive Principles of State Policy.
- It states that the State shall promote with special care the educational and economic interests of the weaker sections of the people.
- It also says that special care should be given, in particular, to the Scheduled Castes and the Scheduled Tribes.]
- **Countering Basic Structure argument** - The government argued that to sustain a challenge against a constitutional amendment, it must be shown that the very identity of the Constitution has been altered.
- **Countering Indra Sawhney argument** - For this, the government relied on a 2008 ruling in Ashok Kumar Thakur v Union of India case.
- In this 2008 ruling, the SC upheld the 27% quota for OBCs.
- The argument is that the court accepted that the definition of OBCs was not made on the sole criterion of caste but a mix of caste and economic factors.
- It made this argument to prove that there need not be a sole criterion for according reservation.
- For the **unaided institutions**, it argued that the Constitution allows the Parliament to place reasonable restrictions on the right to carry on trade.

#### What are the terms of reference framed by the court?

- The SC agreed that the case involved at least three substantial questions of law, whether:
  1. The economic criteria alone cannot be the basis to determine backwardness;
  2. The EWS quota exceeds the ceiling cap of 50% set by the court;
  3. The rights of unaided private educational institutions.
- Although Chief Justice of India S A Bobde heads the Bench that made the reference, the case could wait to be heard by a larger Bench.
- The timing depends on the court's resources, as it would have to spare five judges and allocate time to the larger Bench hearing.

### 1.2 Sub-categorisation of SCs and STs

#### Why in news?

The Supreme Court reopened the debate on sub-categorisation of Scheduled Castes and Scheduled Tribes for reservations.

#### What is the story behind?

- Punjab's law applies a creamy layer for SCs, STs by giving preference to Balmikis and Mazhabi Sikhs.
- This is the case that reopened the debate.
- The Supreme Court ruled in favour of giving preferential treatment to certain SCs over others to ensure equal representation of all SCs.
- The case has been referred to a larger Bench to decide.



- This is because, in 2005, the Court ruled that state governments had no power to create sub-categories of SCs for reservation.
- The larger Bench will reconsider both judgments.

#### What is sub-categorisation of SCs?

- States have argued that among the SCs, there are some that remain under-represented despite reservation in comparison to other SCs.
- This inequality within the SCs is underlined in many reports.
- This has been addressed by framing special quotas for the under-represented.
- In Andhra Pradesh, Punjab, Tamil Nadu and Bihar, special quotas were introduced for the most vulnerable Dalits.
- In 2000, the Andhra Pradesh legislature passed a law reorganising 57 SCs into sub-groups.
- It split the 15% SC quota in educational institutions and government jobs in proportion to their population.
- However, this law was declared unconstitutional in the 2005 Supreme Court ruling.
- This ruling held that the states did not have the power to tinker with the Presidential list that identifies SCs and STs.

#### What is the Presidential list?

- As per Article 341 of the Constitution, those castes notified by the President are called SCs and STs.
- This is called the Presidential list of the SCs and STs.
- A caste notified as SC in one state may not be a SC in another state.
- No community has been specified as SC in Arunachal Pradesh and Nagaland, and Andaman & Nicobar Islands and Lakshadweep.

#### What is the Supreme Court ruling regarding the list?

- In the 2005 E V Chinnaiah case, the Court ruled that only the President has the power to notify the inclusion or exclusion of a caste as a SC.
- It also said that the states cannot tinker with the list.
- Andhra Pradesh had submitted that the law was enacted as states had the power to legislate on the subject of education.
- It also added that the reservation in admission fell within its legislative domain.
- However, the court rejected this argument.
- The Constitution treats all SCs as a single homogeneous group.

#### What are the grounds for sub-categorisation?

- The basis of special protections for SCs comes from the fact that all these castes suffered **social inequity**.
- Untouchability was practised against all these castes irrespective of economic, education and other such factors.
- However, the Court has engaged with the argument on whether the benefits of reservation have trickled down to the weakest of the weak.
- **2018 ruling** - The concept of "creamy layer" was applied to promote the SCs for the first time.
- [This concept puts an income ceiling on those eligible for reservation.]
- The Supreme Court upheld this application to SCs in 2018.
- The central government has sought a review of the 2018 verdict and the case is currently pending.
- Punjab's law applies a creamy layer for SCs, STs in reverse - by giving preference to Balmikis and Mazhabi Sikhs.

- **2005 ruling** - The court had held that special protection of SCs is based on the premise that all SCs must collectively enjoy the benefits of reservation regardless of inter-se inequality.
- This is because the protection is not based on educational, economic or other such factors but solely on those who suffered untouchability.
- The court also had held that merely giving preference does not amount to inclusion or exclusion of any caste in the list.
- **State's argument** - The states have argued that the classification is done for a certain reason and does not violate the right to equality.
- The reason they have given is that the categorisation would achieve equitable representation of all SCs in government service.

#### What are the arguments against sub-categorisation?

- **Untouchability** - The argument is that the test of social and educational backwardness cannot be applied to SCs and STs.
- The special treatment is given to the SCs due to untouchability with which they suffer.
- **Vote-bank** - The petitioner's argument against allowing states to change the proportion of reservation is based on the fact that such decision would be taken to appease vote-banks.
- A President's list was envisaged to protect from such arbitrary change.
- **Jarnail Singh case** - The court held that the objective of reservation is to ensure that all backward classes march hand in hand.
- It added that this objective will not be ensured if only a select few get all the coveted services of the government.
- In the current case, the court relied on this case's ruling to buttress the point that social inequities exist even among SCs.
- However, since that ruling is pending for review, the petitioners argued against relying on it.
- The court ruled that the constitutional goal of social transformation cannot be achieved without taking into account changing social realities.

### 1.3 Definition of Assamese people

#### Why in news?

A report by a government-appointed committee has proposed a definition for "Assamese people".

#### What is the debate?

- The Assam Accord was signed at the end of a six-year Assam agitation (1979-85) against illegal migration from Bangladesh.
- In the context of the Accord, the question of who is Assamese stems from the language of Clause 6.
- Clause 6 says that certain safeguards shall be provided to protect, preserve and promote the cultural, social, linguistic identity and heritage of the Assamese people.
- This gives rise to a question of who these "Assamese people" are.

#### Isn't any resident of Assam, Assamese?

- The definition of "Assamese" cannot be so narrow as to mean only those who speak Assamese as their first language.
- Assam has many indigenous tribal and ethnic communities with their own ancestral languages.
- For Clause 6, it was necessary to expand the definition of "Assamese" beyond the Assamese-speaking population.
- Those not eligible for the safeguards under Clause 6 would clearly be from among the migrant populations.



- But there is a debate on whether the entire migrant populations would be excluded, or would some of them be eligible for Clause 6 benefits.

### Who is a migrant?

- In popular conversation, the idea of “indigenous” is taken to mean communities who trace their histories in Assam before 1826.
- This was the year when the erstwhile kingdom of Assam was annexed to British India.
- Large-scale migration from East Bengal took place during British rule, followed by further waves after Independence.
- The Assam agitation was triggered by fears that the Bengali Muslim and Bengali Hindu migrants may overrun the indigenous population, and dominate them.
- During the agitation, the demand was for the detection and deportation of those who had migrated after 1951.

### Was this demand accepted?

- Not 1951. The Assam Accord was settled at a cut-off of March 24, 1971.
- Anyone who arrived in Assam before that cut-off would be considered a citizen of India.
- This date was also the basis of the National Register of Citizens (NRC), published in 2019.
- As the Accord legalised additional migrants (1951-71), Clause 6 was added as a safeguard for the indigenous people.

### How has Clause 6 been taken up since?

- Because of the complexities involved, previous efforts to work out a framework made little headway.
- The matter got urgency last year amid protests by the Assamese against the Citizenship Amendment Bill (now an Act).
- This Act makes it easier for certain categories of migrants to get Indian citizenship — the key here being Hindus from Bangladesh.
- The Home Ministry set up a new committee, which submitted its report in February 2020, and its contents were made public.

### What are the recommendations?

- The proposed definition of the Committee is limited to the purpose of implementing the Clause 6 of the 1985 Assam Accord.
- This definition includes indigenous tribals, other indigenous communities, all other citizens of India residing in Assam on or before January 1, 1951 and indigenous Assamese, and their descendants.
- As for safeguards, the committee has recommended reservations in legislature and jobs for “Assamese people”.
- It also recommended that land rights to be confined to them.

### What are implications of the definition?

- Migrants who entered Assam after 1951 but before March 24, 1971 are not Assamese but are Indian citizens who can vote.
- Not just indigenous groups, but East Bengal migrants who entered Assam before 1951, too, would be considered Assamese.

### What issues does this raise?

- Some find it too **inclusive**.
- The committee had received some suggestions that had proposed a base year of 1826 for anyone being considered Assamese.
- Those who speak for indigenous Assamese Muslims told that there should not be a base year for identifying the indigenous people.
- Some say that only communities living in Assam during Ahom rule (pre-1826) be included in the definition.

- Others find it **exclusionary**.
- Those who speak for Bengali Muslims had been demanding that the 1971 cut-off be used for deciding Clause 6 eligibility too.
- As 1951 NRC is unavailable in many parts of Assam, there is a question on how could one prove that a person has been in Assam prior to 1951.

### **What is the judicial constraint?**

- Several issues come up for both the state and central government.
- The key issue is whether it will stand the test of judicial scrutiny because it is bound to be challenged in the courts.
- There is a doubt whether it will stand the test of constitutional validity.

## **1.4 Domicile Quota**

### **What is the issue?**

- Madhya Pradesh has reserved government jobs for the locals.
- By doing so, it has joined the bandwagon of States playing 'sons of the soil' politics.

### **What did the other States do?**

- Haryana, Andhra Pradesh and Telangana have resolved to reserve jobs in both the government and private sectors.
- Telangana has decided to reserve 80% of semi-skilled jobs and 60% of skilled jobs for locals.
- Andhra Pradesh and Haryana have decided to reserve 75% of jobs.
- Karnataka is in the process of preparing a law in this regard.

### **What would be the legal challenges?**

- The laws passed by these States could face a legal challenge for going against Article 19 (d) and (e) of the Constitution.
- Article 19 (d) spells out that all citizens shall have the right to move freely throughout the territory of India.
- Article 19 (e) spells out that all citizens can reside or settle in any part of the territory of India.

### **Where did this kind of politics originate?**

- This strain of parochial politics has its origins that can be traced back to the politics of the Shiv Sena in the 1960s.
- It initially targeted 'South Indians' for monopolising white-collar jobs and later the blue-collar workforce from northern States.
- Ironically, the Shiv Sena has of late moved away from 'Marathi mannos' mobilisation, while other States are playing the domicile card.
- Gujarat, Tamil Nadu and Maharashtra have mercifully not followed up on quota promises for locals.
- Even so, such rhetoric can distort the labour market, particularly when local fringe groups create law and order complications.

### **What is so odd?**

- Oddly enough, both the labour-supplying States as well as the receiving ones have played the domicile card.
- In the first case, the effort is to win over psychologically scarred migrants who have reverse migrated to 'home' in the wake of Covid.
- If the intent is to prevent forced migration, it should be addressed through sustained economic development initiatives.

### **What could be the impact of the domicile quotas?**

- These quotas can raise costs and inefficiencies in labour-receiving States.

- It will also exert short-term pressure on labour-supplying States to create productive capacities.

### **What is the reality?**

- According to the Economic Survey (2016-17), migrants account for over 20-30% of the workforce, or more than 100 million.
- Workers go to where jobs are available and labour is needed because locals are either unavailable or unwilling to do these jobs.
- Therefore, the concept of “outsiders snatching jobs from locals” is just an easy political sell - does not reflect reality.
- Shackling the individual rights of workers amounts to poor economics.
- It will also create conditions for social and economic instability.

## **1.5 Common Electoral Roll**

### **Why in news?**

The Prime Minister's Office (PMO) has pitched for a common electoral roll.

### **Where was this pitch made?**

- This pitch was made by the PMO in its meeting with representatives of the Election Commission and the Law Ministry.
- The PMO discussed the possibility of having a single voters' list to the panchayat, municipality, state assembly and the Lok Sabha elections.

### **How many types of electoral rolls does India have?**

- In many states, the voters' list for the panchayat and municipality elections is different from the one used for Parliament and Assembly elections.
- The distinction stems from the fact that the supervision and conduct of elections are entrusted with two constitutional authorities,
  1. The Election Commission (EC) of India and
  2. The State Election Commissions (SECs).
- **EC** - The EC is responsible for conducting polls to the offices of the President and Vice-President of India, and to Parliament, the state assemblies and the legislative councils.
- **SEC** - The SECs supervise municipal and panchayat elections.
- They are free to prepare their own electoral rolls for local body elections.
- This exercise does not have to be coordinated with the EC.

### **Do all states have a separate list for their local body elections?**

- No, each SEC is governed by a separate state Act.
- Some state laws allow the SEC to borrow and use the EC's voter's rolls in toto for the local body elections.
- In others, the SEC uses the EC's rolls as the basis for the preparation and revision of rolls for municipality and panchayat elections.
- All states, except Uttar Pradesh, Uttarakhand, Odisha, Assam, Madhya Pradesh, Kerala, Odisha, Assam, Arunachal Pradesh, and Nagaland, adopt EC's rolls for local body polls.
- The Union Territory of Jammu and Kashmir didn't adopt EC's rolls for local body polls.

### **Why is the Union government working on a common electoral roll?**

- The common electoral roll is among the promises made by the present government in its manifesto for the Lok Sabha elections in 2019.
- It ties in with the government's commitment to hold elections simultaneously to the Lok Sabha, state assemblies and local bodies.

- The government has pitched a common electoral roll and simultaneous elections as a way to **save effort and expenditure**.
- It has argued that preparing a separate voters list causes duplication of essentially the same task between two different agencies.
- This, thereby, duplicates the effort and the expenditure.

#### **Is the pitch for a common electoral list new?**

- No. The Law Commission recommended it in its 255th report in 2015.
- The EC too adopted a similar stance in 1999 and 2004.

#### **How does the government intend to implement it?**

- In the meeting called by the PMO, two options were discussed.
- **Amendment** - The first one is a constitutional amendment to Articles 243K and 243ZA.
- These articles give the power of superintendence, direction and control of preparation of electoral rolls and the conduct of local body elections to the SECs.
- The amendment would make it mandatory to have a single electoral roll for all elections in the country.
- **Persuade** - The state governments could be persuaded to tweak their respective laws and adopt the EC's voters list for municipal and panchayat polls.

## **2. GOVERNANCE**

### **2.1 Three-language Formula**

#### **Why in news?**

Tamil Nadu has rejected the three-language formula advocated in the National Education Policy (NEP 2020).

#### **What does this rejection reiterate?**

- By rejecting, Tamil Nadu Chief Minister has only reiterated the State's unwavering position on an emotive and political issue.
- Tamil Nadu has a two-language policy that remains non-negotiable for almost the entire political class.
- This policy was implemented decades ago after a historic agitation against the imposition of Hindi.

#### **Did the policy talk about any imposition?**

- The policy said that no language will be imposed on any State.
- But, it has expectedly cut no ice with parties in Tamil Nadu, which have risen in near unison to oppose the proposal.
- Tamil Nadu Chief Minister appealed to the Prime Minister to allow States to follow their own language policy.
- In a State that resisted multiple attempts to impose Hindi since 1937, political parties are wary of any mandate to impart an additional language in schools.
- They fear this would eventually pave the way for Hindi to enter the State through the back door.
- Since 1985, the State has even refused to allow Jawahar Navodaya Vidyalayas to be set up as they teach Hindi.

#### **What is the effectiveness of the two-language policy?**

- The two-language policy of Tamil and English was piloted by former Chief Minister C.N. Annadurai in 1968.
- It has thus far worked well in the State.
- In a liberalised world, more windows to the world are being opened up for those proficient in English, a global link language.
- The State's significant human resources contribution to the IT sector is attributed to its recruits' English fluency as much as to their technical knowledge.

- There is an argument that Tamil Nadu is depriving students of an opportunity to learn Hindi, touted as a national link language.

### **What is the reality?**

- The State's voluntary learning has never been restricted.
- The growth over the past decade in the number of CBSE schools, where the language is taught, would bear testimony to this.
- The patronage for the 102-year-old Dakshina Bharat Hindi Prachar Sabha, based in Chennai, also proves this.
- In the Sabha's centenary year, Tamil Nadu accounted for 73% of active Hindi pracharaks (teachers) in South India.
- Out of necessity, many in the State have picked up conversational Hindi to engage with the migrant population.
- Only compulsion is met with resistance.
- India's federal nature and diversity demand that no regional language is given supremacy over another.

## **2.2 National Recruitment Agency**

### **Why in news?**

The Union Cabinet has decided to create National Recruitment Agency (NRA).

### **What is the NRA?**

- The NRA would be an independent, professional, specialist organisation.
- It would conduct a screening examination for non-gazetted jobs.
- This will eliminate the need for candidates to take separate examinations of the RRB, SSC and IBPS.
- [RRB - Railway Recruitment Board, SSC - Staff Selection Commission, IBPS - Institute of Banking Personnel Selection.]
- There would also be an emphasis on creating advanced online testing infrastructure in 117 aspirational districts.
- Overall, the posts coming under the ambit of the proposed NRA would cover about 1.25 lakh jobs a year, which attract about 2.5 crore aspirants.

### **What are the benefits of NRA?**

- The single examination may be offered at the district level in the regional language.
- The gains from a single examination, as opposed to a multiplicity of tests in far fewer locations are self-evident.
- Candidates would no longer have to travel to urban centres at considerable expense and hardship to take an employment test.
- Opportunities to improve performance, subject to age limits, and 3-year validity for scores are positive features.

### **What should the government concentrate on?**

- The long-term relevance of such reforms will depend on the governments' commitment to raise the level of public employment and expand services to the public.
- Both of this is low in India. The governments should work on this.

### **What are the concerns?**

- As a share of the organised workforce, the Central government employment appears to be declining.
- New posts are sanctioned periodically, but a large number of vacancies remain unfilled.
- With growing emphasis on transferring core railway services to the private sector, there may be fewer government jobs on offer in the future.

- Moreover, jobs under the Centre, predominantly in the railways and defence sectors, constitute around 14% of public employment.
- The rest of the jobs fall within the purview of States.

## 2.3 National Health ID

### Why in news?

Prime Minister announced a national health ID for every Indian.

### What is the national health ID system?

- The national health ID will be a **repository** of all health-related information of a person.
- According to the National Health Authority (NHA), a person who wants their health records available digitally must create a Health ID.
- Each Health ID will be linked to a health data consent manager such as National Digital Health Mission that will be used to seek the patient's consent.
- It will allow for seamless flow of health information from the Personal Health Records module.

### How will the Health ID be created?

- It will be created by using a person's basic details and mobile number or Aadhaar number.
- This will make it unique to the person, who will have the option to link all of their health records to this ID.

### What was the original proposal for the health ID?

- The National Health Policy 2017 aimed at creating a digital integrated health information system that would serve the needs of all stakeholders.
- This system could improve efficiency, transparency and citizens' experience with linkage across public and private healthcare.

### What did the Niti Aayog do?

- Based on this proposal, in 2018, Niti Aayog floated a consultation of a digital backbone for India's health system - National Health Stack.
- In this consultation, a Digital Health ID was proposed to reduce the risk of preventable medical errors and increase the quality of care.
- The system will also enable the users to obtain a longitudinal view of their healthcare records.

### What did the Central government do?

- This Niti Aayog proposal was then further taken up by the Central government.
- The Ministry of Health and Family Welfare, the NHA, and the MietY prepared a strategy overview document.
- The document is about making India a digital health nation by enabling digital healthcare for all.

### Which systems does the national health ID interact with?

- Various healthcare providers such as hospitals, labs, online pharmacies, insurance companies, etc., will participate in the health ID system.
- While option of digital Health ID will be there, in case a person does not want Health ID, then also treatment should be allowed.

### Have there been global instances of such a health record system?

- In 2005, the UK's National Health Service (NHS) started deployment of an electronic health record system.
- The goal was to have all patients with a centralised electronic health record by 2010.
- Many hospitals acquired electronic patient records systems as part of this process.
- But, there was no national healthcare information exchange.
- The project had been plagued by changing specifications, technical challenges and clashes with suppliers.



- This left it years behind schedule and way over cost.
- The program was dismantled after a cost to the UK taxpayer was more than £12 billion.

## **2.4 Regulation of Indian Pharmacy Market**

### **What is the issue?**

- Earlier, large investors shied away from investing in the online pharmacy sector due to lack of proper regulations.
- But now, there is a sudden increase in activities in the sector.

### **What are the recent activities?**

- India's online pharmacy market recently saw two significant merger and acquisition deals.
- Also, the e-commerce giant Amazon has launched its online drug delivery services.

### **Is the activity in the online pharma space a result of Covid-19?**

- Covid-19 and the subsequent behavioural shift towards e-commerce may have catalysed growth for online pharmacies.
- But, the sector was already poised to grow 7-fold by 2023 to \$2.7 billion.
- This was mainly due to the challenges faced by physical pharmacies that gave their online counterparts a problem to solve.
- Experts believe that e-pharmacies will be able to solve the problems that traditional pharmacies couldn't.
- But for this, they need to have a large-scale presence that calls for either huge investments or consolidation.

### **How the Indian pharmacy market is currently shaped?**

- India has a fragmented market with over 8 lakh pharmacies.
- This gives online pharmacies an opportunity to capture their space without opposing large traditional retailers.
- Currently, companies in the Indian e-pharmacy space mainly operate three business models:
  1. Marketplace,
  2. Inventory-led hybrid (offline/online) and
  3. Franchise-led hybrid (offline/online).
- These models are dependent on the way the supply chain is structured.

### **What are the rules governing the pharmacy sector?**

- The government had floated draft regulations for e-pharmacies but these guidelines never saw light of the day.
- The lack of proper rules governing the online pharmacy space has kept large investments at bay.
- But, it has allowed the existing players in the market to grow and overcome the challenges faced by traditional retailers.
- For pharmacies overall, India's drug regulations require retailers to get a licence to dispense medicines from the state in which they are being sold.

### **What are the rules governing the e-pharmacy sector?**

- As the e-pharmacies are not regulated currently, their operations are mostly met with opposition from brick and mortar chemists.
- In the absence of clear regulations, online pharmacies currently operate as marketplaces.
- They cater to patients as a platform for ordering medicines from sellers that adhere to the Drugs and Cosmetics Act and Rules of India.
- Other regulations, like the Information Technology Act and the Narcotic Drugs and Psychotropic Substances Act, also apply.

- Works on regulations specifically for e-pharmacies have been in progress for several years now.

#### **What do the draft e-pharmacy regulations propose?**

- **Definitions** - Draft rules sought to define the online sale of medicines.
- It also defined what an e-prescription is and what type of licences online firms would need to get from regulators to operate.
- It also proposed to define e-pharmacies in a way that would allow them to distribute, sell and stock medicines.
- The proposed regulations prevent them from selling habit-forming drugs like cough syrups specified in Schedule X of the Indian drug regulations.
- **Licence** - It also proposed to allow e-pharmacies to get a central licence to operate from the country's apex drug regulator.
- This licence could be used to allow them to operate across the country.

### **3. SOCIAL JUSTICE**

#### **3.1 Hindu Woman's Inheritance Right**

##### **Why in news?**

The Supreme Court expanded on a Hindu woman's right to be a joint legal heir and inherit ancestral property on terms equal to male heirs.

##### **What is the ruling?**

- A three-judge Bench has ruled that a Hindu woman's right to be a joint heir to the ancestral property is by birth.
- It says that the rights do not depend on whether her father was alive or not when the law was enacted in 2005.
- The Hindu Succession (Amendment) Act, 2005 gave Hindu women the right to be coparceners or joint legal heirs like a male heir does.
- The ruling said that since the coparcenary is by birth, it is not necessary that the father coparcener should be living as on 9.9.2005.

##### **What is the Hindu Succession Act, 1956?**

- The Mitakshara school of Hindu law was codified as the Hindu Succession Act, 1956.
- It governed succession and inheritance of property but only recognised males as legal heirs.
- The law applied to everyone who is not a Muslim, Christian, Parsi or Jew by religion.
- Buddhists, Sikhs, Jains and followers of Arya Samaj, Brahmo Samaj are also considered Hindus for the purposes of this law.
- In a Hindu Undivided Family (HUF), several legal heirs through generations can exist jointly.
- Traditionally, HUF includes only the male descendants of a common ancestor along with their mothers, wives and unmarried daughters.
- The legal heirs hold the family property jointly.

##### **What is the 2005 law?**

- Women were recognised as coparceners or joint legal heirs for partition arising from 2005.
- Section 6 of the Act was amended that year to make a daughter of a coparcener also a coparcener by birth in her own right.
- The law also gave the daughter the same rights and liabilities in the coparcenary property as she would have had if she had been a son.
- It applies to ancestral property and to intestate succession in personal property - where succession happens as per law and not through a will.

- The 174th Law Commission Report had also recommended this reform in Hindu succession law.
- Even before the 2005 amendment, Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu had made this change in the law.

#### How did the case come about?

- While the 2005 law granted equal rights to women, questions were raised in multiple cases on whether the law applied retrospectively.
- There were questions regarding whether the rights of women depended on the living status of the father through whom they would inherit.
- Different benches of the SC had taken conflicting views on the issue.
- In *Prakash v Phulwati* (2015), the SC held that the benefit of the 2005 amendment could be granted only to living daughters of living coparceners as on September 9, 2005.
- [September 9, 2005 - The date when the amendment came into force.]
- In 2018, the SC held that the share of a father who died in 2001 will also pass to his daughters as coparceners during the partition of the property as per the 2005 law.
- These conflicting views by Benches of equal strength led to a reference to a three-judge Bench in the current case.
- The ruling now overrules the verdicts from 2015 and 2018.

#### How did the court decide the case?

- The court looked into the rights under the Mitakshara coparcenary.
- Section 6 creates an unobstructed heritage or a right created by birth for the daughter of the coparcener.
- So, the right cannot be limited by whether the coparcener is alive or dead when the right is operationalised.
- The court said that the 2005 amendment gave recognition of a right that was in fact accrued by the daughter at birth.
- The conferral of a right is by birth, and the rights are given in the same manner with incidents of coparcenary as that of a son.
- She is treated as a coparcener in the same manner with the same rights as if she had been a son at the time of birth.
- The ruling said that though the rights can be claimed, w.e.f. 9.9.2005, the provisions are of **retroactive** application.
- They confer benefits based on the **antecedent event**.
- The Mitakshara coparcenary shall be deemed to include a reference to a daughter as a coparcener.
- The SC also directed High Courts to dispose of cases involving this issue within six months since they would have been pending for years.

### 3.2 UN Guidelines for PwD

#### Why in news?

The United Nations has released its guidelines on access to social justice for people with disabilities (PwD).

#### What are the guidelines?

- All persons with disabilities have legal capacity and, therefore, no one shall be denied access to justice on the basis of disability.
- Facilities and services must be universally accessible to ensure equal access to justice without discrimination of persons with disabilities.
- PwD, including children with disabilities, have the right to appropriate procedural accommodations.
- PwD have the right to access legal notices and information in a timely and accessible manner on an equal basis with others.

- PwD are entitled to all safeguards recognized in international law on an equal basis with others, and States must provide the necessary accommodations to guarantee due process.
- PwD have the right to free or affordable legal assistance.
- PwD have the right to participate in the administration of justice on an equal basis with others.
- PwD have the rights to report complaints and initiate legal proceedings concerning human rights violations and crimes, have their complaints investigated and be afforded effective remedies.
- Effective and robust monitoring mechanisms play a critical role in supporting access to justice for PwD.
- All those working in the justice system must be provided with awareness-raising and training programmes addressing the rights of PwD.
- These 10 principles would make it easier for the PwD to access justice systems around the world.

#### **How does the UN define a person with a disability?**

- The UN Convention on the Rights of Persons with Disabilities, adopted in 2007, has defined PwD.
- Persons with Disabilities are those who have long-term physical, mental, intellectual or sensory impairments.
- These impairments along with various barriers may hinder the person's full and effective participation in society on an equal basis with others.

#### **What does discrimination on the basis of disability mean?**

- The UN states that the 'Discrimination on the basis of disability' means any distinction, exclusion or restriction on the basis of disability.
- These discriminations have the effect of impairing or nullifying the recognition, enjoyment or exercise, on an equal basis with others, of all human rights and fundamental freedoms in any field.
- It includes all forms of discrimination, including denial of reasonable accommodation.
- Reasonable accommodation means the modification and adjustment in a particular case so that PwD can exercise human rights and fundamental freedoms on an equal basis.

#### **How many people are disabled in India?**

- As per the UN, in India 2.4% of males are disabled and 2% of females from all age groups are disabled.
- Disabilities include psychological impairment, intellectual impairment, speaking, multiple impairments, hearing, seeing among others.
- In comparison, the disability prevalence in the US is 12.9% among females and 12.7% among males.

## **4. INDIA & ITS NEIGHBORHOOD**

### **4.1 Resetting Indian Diplomacy**

#### **What is the issue?**

- Since June 2020, when China grabbed parcels of India's Ladakh territory, India's focus has shifted from Pakistan to China.
- Indian diplomacy needs a global reset.

#### **What is the current situation?**

- It's now clear that the Chinese are not planning to budge.
- Both the armies will have to dig in for the long-haul, eye-balling each other through the freezing Ladakh winter.
- Simultaneously, it's become obvious India isn't able to hurt China in any meaningful economic way with sanctions like banning apps.



- The Chinese are so deeply entrenched in our economy that it is virtually impossible to remove them root and branch.

#### **What is India trying to do?**

- Indian policymakers are veering round to the view the only way to strike at China is via the sea route.
- That's why they are looking at building up bases in the Andaman & Nicobar Islands.
- These islands are close to the Malacca Straits through which most Chinese oil passes.
- The Chinese have already built a string of bases in the Indian Ocean in places like Djibouti and Gwadar, Pakistan.
- But India's trump card is India's Malacca Straits proximity.

#### **How should India make its moves?**

- Keeping the Chinese in mind, India needs to make other further calculated diplomatic moves, both with neighbours and global powers.
- Of late, the Indian administration has visibly tilted towards the US.
- It has invested heavily in Donald Trump.
- There are many foreign policy examples to show putting all your money on one horse can land you with a big hole in your diplomatic pocket.

#### **What is the shift in geopolitics?**

- In the middle distance and the Indian neighbourhood, transformational changes are happening, requiring nimble action.
- **Middle East** - The Saudis and the UAE are keen to build ties with India, one of the world's largest oil buyers in a Covid-hit market.
- Perhaps this is why Saudi ties with Pakistan have frayed.
- As a result, Pakistan's leaning even more heavily on China.
- China is also moving closer to Iran, a country with which India has historically enjoyed warm ties.
- **Bangladesh** - India is keen to rebuild relations with Bangladesh.
- In July 2020, the first transshipment of goods destined for India's north-east from Haldia to Chittagong took place.
- India has strengthened inland waterways agreements with Bangladesh.
- It has also gifted some locomotives and is building a power plant there.

#### **What should India do further?**

- India needs to mend ties with Nepal as well which has come under strong Chinese influence.
- India is in a critical battle for power in its neighbourhood with an extremely powerful rival.
- So, it should be careful with each step.

### **4.2 Pakistan's New Map**

#### **Why in news?**

Pakistan's new map asserts its claims on Jammu and Kashmir, Siachen and Sir Creek, and lays a new claim to Junagadh.

#### **What are Pakistan's claims?**

- **Jammu and Kashmir** – Pakistan map has claimed to all of Jammu and Kashmir, but not Ladakh.
- This claim goes against its own commitment to adjudicate the future of all six parts of the erstwhile royal state of Jammu-Kashmir with India.

- [Parts of the erstwhile royal state of Jammu-Kashmir - Jammu, Kashmir, Ladakh, Gilgit-Baltistan, PoK and Aksai Chin]
- The new map draws a line demarcating Gilgit-Baltistan separately from the Pakistan occupied Kashmir.
- It renamed Jammu and Kashmir as Indian Illegally Occupied Jammu and Kashmir.
- **Siachen and Sir Creek** - Both the places were under several discussions between India and Pakistan.
- Pakistan's unilateral claim over them is not helpful or conducive to future resolution.
- **Junagadh** - The map has made a new claim over Junagadh, which opens up a completely new dispute.
- Junagadh, a former princely state, was in contention at the time of Partition.
- The issue was successfully resolved after a referendum was conducted there in February 1948.
- In this referendum, an overwhelming 95% of the state's residents voted to stay with India.
- Junagadh's accession to India was accepted by Pakistan.
- **Ladakh** - The new map leaves the claim line with Ladakh unclear.

#### How did India respond?

- Pakistan's map appears to have reset several agreements with India that have been concretised over the past 70 years.
- The Ministry of External Affairs has termed Pakistan's announcement of a new map as an exercise in political absurdity.
- It accused Pakistan of attempting a form of territorial aggrandisement supported by cross-border terrorism.

#### What is next?

- India should be prepared for Pakistan taking all the issues it has raised with its new map to the international stage.
- Pakistan's actions come in conjunction with map-related issues India faces today on two other fronts with,
  1. China at the Line of Actual Control on Ladakh, and
  2. Nepal at Kalapani and Limpiyadhura (which Nepal's government has also issued a new map about).
- All these three countries objected to the map that India had issued in November 2019, albeit for different reasons.
- India must be well-prepared to deal with the three-pronged cartographic challenge it will face in the coming months.

### 4.3 Pakistan's SRO listing

#### Why in news?

Pakistan Foreign Affairs Ministry (MFA) issued a Statutory Regulatory Order (SRO) listing recently.

#### What is SRO listing?

- This SRO lists 88 fugitive terrorists, which Dawood Ibrahim and the LeT's Zaki Ur Rahman Lakhvi..
- The SRO directed its officials to implement the United Nations Security Council (UNSC) committee resolutions against them.
- It directed the officials to ensure that everyone on the list does not have access to funding, arms or travel.

#### What does Pakistan deny?

- Pakistan's MFA denied that the SRO listing was new.
- The listing had UNSC and Interpol information on at least five Pakistani passports and three Karachi addresses that belonged to Dawood.
- [Dawood - The former underworld don and the accused mastermind of Mumbai's 1993 blasts.]
- However, the MFA says that the SRO did not imply an admission that he lives there.





- Instead, it argues that the move was a routine one, as a part of Pakistan's international commitments.
- Pakistan is required to align its domestic terror listings with those issued by the UNSC's ISIL and Al-Qaeda Sanctions Committee.

#### Does Pakistan's domestic listing align with the international ones?

- The domestic listing is maintained under the country's Anti-Terrorism Act by the National Counter Terrorism Authority (NACTA).
- Thus far, the domestic list had not included either Dawood or Lakhvi.
- [Lakhvi was tried for the 26/11 attacks but was granted bail in 2014.]
- In contrast, LeT chief Hafiz Saeed and JeM chief Masood Azhar, who were designated by the UNSC in 2019, were added to the domestic list.

#### What are the confusions?

- The MFA claims that the listing that included Dawood and Lakhvi had been issued earlier.
- This is a claim that is countered by India, which says this is a first.
- The confusion over the SRO and Pakistan's disclaimer says that its government lacks a seriousness of purpose when it comes to its actions against all terrorists.

#### What are some questions?

- If the SRO had named these terrorists in past orders, there is a question why they were not added to its domestic listing.
- If it has included Dawood in its own SRO, then for the MFA to say it is paying lip service to the FATF directives, is a matter of concern.
- Finally, there is a question whether Pakistan has done anything to investigate, prosecute and apprehend these listed terrorists.

#### Is Pakistan obligated to answer these questions?

- In October 2020, Pakistan is expected to face some of these questions at the Financial Action Task Force (FATF) plenary session.
- This FATF session will decide if its actions,
  1. Merit a reprieve from the grey or "increased monitoring" list, or
  2. Downgrade it to the black or "high-risk jurisdiction" list.
- If downgraded, Pakistan will have to face sanctions.
- So, Pakistan needs to show proof of its actions on the ground, rather than going back and forth on the paperwork.

#### Financial Action Task Force (FATF)

- Headquartered in Paris, the FATF was set up by the G7 countries in 1989.
- **Objective** - FATF acts as an international watchdog on issues of money laundering and financing of terrorism.
- It is empowered to curtail financing of UN-designated terrorist groups.
- It is to limit the concerned countries from sourcing financial flows internationally and thereby constraining them economically.
- **Members** - FATF has 39 members, which comprise 37 member jurisdictions and 2 regional organisations.
- India became a full member in 2010.

### 4.4 Pakistan's Terrorism Statement

#### Why in news?

India has strongly protested to the United Nations Security Council (UNSC) over Pakistan's statement to a special discussion on terrorism.

#### What is the statement?

- The statement was Pakistan's mission to the U.N.
- It was published as something delivered at an open debate on a report by the U.N. Secretary General.

### What are the problems?

- **Undelivered** - The statement was never actually delivered.
- The only countries invited to the discussion were permanent and non-permanent members of the UNSC and officials briefing them.
- Neither does the UNSC take cognisance of statements by non-participating countries.
- **Allegations against India** - The statement appeared to be an exercise by Pakistan in repeating its allegations against India.
- In the letter, Pakistan's Ambassador sought to portray Pakistan as a victim of cross-border terrorism.
- The letter claimed that Pakistan decimated al-Qaeda in the region.
- The statement listed "four types of terrorism" Pakistan confronts, each of which was attributed to India.

### What are the allegations?

- **TTP** - The first allegation included some of the attacks in Pakistan carried out by the Tehrik-e-Taliban Pakistan (TTP).
- According to Pakistan, TTP has been funded by an Indian terror syndicate based in Afghanistan.
- That claim has been rejected by the UNSC in part already.
- **Hired mercenaries** - Pakistan claimed that India has hired mercenaries to carry out attacks in Pakistan.
- **Hindutva terrorism** - It says that the policies of the Indian government amount to Hindutva terrorism.
- It gave specific references to the Citizenship Amendment Act (CAA) and the Ram temple construction.
- **State terrorism** - The oft-repeated one is about Indian government actions in Jammu and Kashmir which it refers to as state terrorism.

### Does India have to worry about these allegations?

- India has described these allegations as preposterous and laughable.
- India need not worry about its reputation, given its acclaimed role in fighting terror and cooperating on the international stage to deny terrorists funding and safe haven.
- Pakistan has consistently done the opposite.
- It has been continuously grey-listed at the Financial Action Task Force (FATF).
- There are several names of Pakistani terror groups and individuals present in the U.N. terror lists.

### What could India do?

- India should take the Pakistani attempt to build its case seriously.
- It should pre-empt its larger strategy of painting India in a poor light ahead of its tenure at the UNSC 2021-2022 and the upcoming scrutiny process at the FATF.

## 5. BILATERAL ISSUES

### 5.1 Italian Marines' Case

#### Why in news?

The Supreme Court (SC) of India would keep the Italian marines' case alive.

#### What is the SC decision?

- The SC would keep the case alive until Italy pays adequate compensation for the killing of two fishermen by its marines in 2012.
- It has indicated that it would not allow the closure of the trial until such compensation is paid.
- It has ordered that the families of the victims be heard on this matter.



- It may seem pragmatic to keep any pending litigation alive until all dues relating to it are paid and all legal issues are settled.
- However, the SC's stand in the marines' case is somewhat puzzling.

#### What did the PCA rule?

- The Permanent Court of Arbitration (PCA) at The Hague is an arbitral tribunal.
- It adjudicates disputes under the United Nations Convention on the Law of the Sea (UNCLOS).
- In the Mariners' case, the PCA has granted immunity to the marines.
- It also favoured Italy as the appropriate jurisdiction where they could be tried for the crime.
- The PCA wants India to compensate for loss of life, physical harm, damage to property and moral harm suffered by the crew members of St. Antony, the fishing vessel involved.
- It mandated negotiations on the quantum.

#### Why pending the case doesn't seem like a good idea?

- The Indian government has already declared that it would **abide by the PCA's ruling**.
- So, it does not seem proper to delay the process of bringing closure to the matter.
- The Court's resolve to obtain adequate compensation for the families of the victims is welcome.
- But, it would be difficult to have a **judicial determination** of what quantum would satisfy these requirements.
- The Centre may have approached the top court for formal permission to close the pending trial proceedings as a matter of abundant caution.
- But, it could have **approached the trial court itself** through the public prosecutor for withdrawal from prosecution under Section 321 of the CrPC.
- Too many legal tangles have already caused enough diplomatic rupture in the progression of the Enrica Lexie-St. Antony case since 2012.

#### What could be done?

- The pendency of the matter in court should not become a bargaining point that delays the reaching of a fair settlement.
- Continuing hearings may be seen as India being reluctant to cease all criminal proceedings against the marines as per the ruling.
- India's focus should now be on negotiating for compensation and ensuring a purposive criminal trial in Italy.

## 5.2 Indo-Japan Relationship

#### Why in news?

Japan's Prime Minister announced that he would step down as a chronic illness has resurfaced.

#### Who is Japan's PM?

- Shinzo Abe is Japan's Prime Minister.
- Abe, whose tenure began in 2012, was due to be in office till September 2021.
- He had first become the PM in 2006, but resigned in 2007 due to illness.

#### How committed was Abe for a relationship with India?

- In his first stint in 2006-07, Abe visited India and addressed Parliament.
- During his second stint, he visited India thrice.
- He was the first Japanese PM to be Chief Guest at the Republic Day parade in 2014.

#### How did the Indo-Japan ties transform?

- The foundation for "Global Partnership between Japan and India" was laid in 2001.

- Annual bilateral summits were agreed in 2005.
- However, it was Abe who accelerated the pace of ties since 2012.
- **In first term** - Abe, who visited India in 2007, laid the foundation for his concept of Indo-Pacific.
- This concept has now become mainstream and one of the main pillars of Indo-Japan ties.
- **In second term** - Abe helped build the relationship further.
- In 2014, Narendra Modi as PM chose Japan for his first bilateral visit outside the neighbourhood.
- Modi and Abe agreed to upgrade the bilateral relationship to “Special Strategic and Global Partnership”.
- The relationship encompassed issues like civilian nuclear energy, maritime security, quality infrastructure, Act East policy and Indo-Pacific strategy.

### How was the Indo-Japan nuclear deal signed?

- When Modi went to Japan in 2014, the Indo-Japan nuclear deal was still uncertain.
- This is so because Tokyo was sensitive about a deal with a non-Nuclear-Proliferation-Treaty member country.
- Abe’s government convinced the anti-nuclear hawks in Japan to sign the agreement in 2016.
- The pact was a key to India’s deals with US and French nuclear firms, which were either owned by or had stakes in Japanese firms.

### What are the defence agreements?

- Under Abe, the two sides decided to have Foreign and Defence Ministers’ Meeting (2+2).
- They are negotiating the Acquisition and Cross-Servicing Agreement (ACSA), a military logistics support pact.
- In November 2019, the first Foreign and Defence Ministers’ Meeting was held in New Delhi.
- In 2015, a pact for transfer of defence equipment and technology was also signed.

### What is the Indo-Pacific strategy?

- During Abe’s tenure, India and Japan came closer in the Indo-Pacific architecture.
- Abe had spelt out his vision of the Confluence of the Two Seas in his 2007 speech when the Quad was formed.
- But, Quad collapsed soon.
- In 2017, Chinese aggression grew in the Pacific, Indian Ocean, and India’s borders in Doklam.
- As a result, Abe mooted the idea of reviving the Quad.
- Quad was revived as Indian, Japanese, Australia and US officials met in Manila on the sidelines of the East Asia summit.

### What is Japan’s stand on India-China stand-offs?

- Since 2013, Indian and Chinese soldiers have had four border-stand-offs, including the ongoing one since May 2020.
- Abe’s Japan has stood with India through each of them.
- Japan has made statements against China for changing the status quo.

### What are the infrastructural investments?

- During Abe’s visit in 2015, India decided to introduce the **Shinkansen system** (bullet train), due to begin in 2022.
- Under Abe’s leadership, India and Japan formed the **Act East Forum**.
- The Forum is engaged in projects in the Northeast.

#### QUAD

- Quad is a multilateral grouping among Japan, Australia, India and the United States.
- Quad was convened, in 2017, at the level of senior officials on the margins of the East Asia Summit in Bangkok.
- There are common references to the creation of a free, open and inclusive regional architecture, rules-of-the-road, freedom of navigation and over-flight, and, ASEAN centrality.

- The two countries also planned **joint projects** in Maldives and Sri Lanka among others to counter Beijing's influence.

#### What is next?

- Much to India's comfort, Abe did not get distracted by India's domestic developments.
- He focused on strategic, economic and political deliverables.
- India will now wait for Abe's successor, who will have big shoes to fill.

## 6. INTERNATIONAL ORGANISATIONS

### 6.1 International Labour Standards

#### Why in news?

In the International Labour Organization's (ILO's) 101-year history for the first time, a labour standard has been universally ratified.

#### What does this mean?

- This historic moment was made when the Kingdom of Tonga decided to outlaw the worst forms of child labour (Convention 182).
- **Convention 182** was adopted in international labour conference, 1999.
- It prohibits the sexual exploitation of children, trafficking, deployment in armed conflict and other conditions that compromise their overall well-being.
- It complements the ILO's efforts under the Minimum Age **Convention 138** of the year 1973.
- Convention 138 prevents the employment of children below a lower age threshold.

#### When did India ratify?

- In 2017, India ratified the Convention 182 and Convention 138.
- This move has signalled its legal commitment to the elimination of child labour.

#### What is the influence of these ILO conventions?

- Under the influence of both these ILO standards, millions of young children have been rescued from hazardous conditions of work.
- In turn, these have resulted in significant increases in enrolments in primary education.
- However, the landmark ratification does not detract from the enormity of the challenge that remains.

#### What are the challenges?

- An estimated 152 million are trapped in child labour and 72 million of them are engaged in hazardous work.
- The current efforts would have to be stepped up significantly to achieve the goal of total abolition of the scourge of child labour by 2025.

#### International Labour Organization

- The ILO was created in 1919 by the Versailles Peace Treaty.
- After the demise of the League of Nations, it became the first specialized agency associated with the UN.
- Its secretariat is in Geneva, Switzerland.
- It has 187 of the 193 UN member states plus the Cook Islands.
- It is responsible for drawing up and overseeing international labour standards.
- It has a tripartite governing structure – representing governments, employers, and workers.
- It publishes Global Wage report.

#### Eight Core Conventions of the ILO

1. Forced Labour Convention (No. 29)
2. Abolition of Forced Labour Convention (No.105)
3. Equal Remuneration Convention (No.100)
4. Discrimination (Employment Occupation) Convention (No.111)
5. Minimum Age Convention (No.138)
6. Worst forms of Child Labour Convention (No.182)
7. Freedom of Association and Protection of Right to Organised Convention (No.87)
8. Right to Organise and Collective Bargaining Convention (No.98)

- But the COVID-19 pandemic is threatening a reversal of recent gains.
- There are widespread job losses, deterioration in conditions of work, decline in household incomes and temporary school closures.

#### **What are these Conventions part of?**

- The two instruments on child labour are among the eight core ILO Conventions.
- These eight conventions are regarded as embodying the spirit of the 1998 declaration on fundamental principles and rights at work.
- Instruments relating to the freedom of association and the elimination of discrimination in employment and occupation are among the others.
- They provide the framework to counteract the predominance of informality in the conditions of work.
- They should be a priority for governments.

#### **What could be done?**

- The world prepares to designate 2021 as the year to abolish child labour.
- So, the governments must seize the moment to instil hope in the future generations.

### **6.2 WHO's Relevance**

#### **What is the issue?**

- COVID-19 has infected more than 19 million people, and devastated economies.
- This has brought the relevance of the World Health Organization (WHO) under question.

#### **What the WHO should have done?**

- An early warning and timely policy measures by the WHO would have forewarned countries.
- The countries would have set their preparatory efforts in motion for mounting a decisive response strategy.
- The WHO was expected to play the dual role of a think tank and oversee global responses to public health emergencies.

#### **What did it actually do?**

- The earliest COVID-19 positive case in China was reported in November, 2019.
- But China informed the WHO about the disease only in January, 2020.
- Then, confirmed cases were reported from Japan, South Korea, Taiwan and the U.S. in January.
- But the WHO continued to downplay the severity of the virus.
- The WHO declared the COVID-19 pandemic as a public health emergency of international concern only on January 30.
- It ignored Taiwan's hints of human-to-human transmission and requests on sharing relevant information.
- Further, it went on to praise China's response to the pandemic.
- WHO was severely criticised for its poor handling of the Ebola outbreak in 2014 as well.

#### **What is its relevance?**

- The relevance of the health agency has been fading.
- The WHO has been reduced to a coordinating body, beholden to the interests of rich member states.
- Its functional efficiency has been disadvantaged.
- This is due to the organisational lethargy, absence of decisive leadership, bureaucratic indolence and underfunded programmes.
- It has an inability to evolve to meet the needs of the 21st century.
- Director General Tedros Adhanom has been criticised for his leadership abilities during this pandemic.



### What is the concern with the funding?

- The WHO is funded through assessed contributions made by the member states.
- These contributions can be spent as per the WHO's priorities approved at the World Health Assembly.
- The WHO is also funded through voluntary contributions from member states and private donors.
- These contributions are allocated in consultation with the donors.
- While voluntary contributions accounted for nearly 80% of the budget in 2018-19, assessed contributions merely constituted 17%.
- The challenges owing to constrained finances encumber autonomy in decision-making by favouring a donor-driven agenda.

## 7. INTERNATIONAL ISSUES

### 7.1 Intra-Afghan Peace Talks

#### Why in news?

The Taliban has decided to cease fire for three days during Id-ul-Adha.

#### What does this decision mean?

- This has come as a relief for Afghans who have seen unabated violence despite a peace agreement between the insurgents and the U.S.
- This is the third official respite since the war started in 2001.

#### What were the previous respites?

- In June 2018 and May 2020, the Taliban had briefly ended hostilities to mark the end of the holy month of Ramzan.
- On both occasions, it refused to extend the ceasefire.
- It returned to war as soon as the celebrations were over.

#### What is the difference this time?

- This time hopes are high that the ceasefire could be extended.
- This is because the Afghan government and the insurgents are preparing to launch the intra-Afghan talks.
- These talks were promised in the U.S.-Taliban deal, which was signed in February 2020.
- According to the deal, talks were to begin in March 2020.

#### Why the talks did not begin as per the deal?

- Both sides failed to reach an agreement on prisoner exchange, which the U.S. had agreed with the Taliban.
- The insurgents complained that the government was not complying with the terms of the agreement.
- The officials of the Ashraf Ghani administration said the Taliban's demands were unacceptable.

#### Why talks will begin now?

- Finally, President Ghani decided to release 5,000 Taliban prisoners.
- This is followed by the Taliban's ceasefire announcement.
- Both sides have now agreed to kick-start talks after Id.
- They could do it in a peaceful environment if the ceasefire is extended.
- There are underlying issues that continue to plague the peace process.

#### What are the underlying issues?

- When the U.S. entered into talks with the insurgent group, it did not insist on a ceasefire.

- So the Taliban continues to engage in **war and talks** simultaneously.
- The Americans were badly looking for a way out of the conflict.
- So, they kept the Afghan **government out of the peace process**.
- According to the U.S.-Taliban agreement, the U.S. agreed to pull out its troops in return for security assurances from the Taliban.
- The onus was on a weakened Afghan government to start talks even as the Taliban continued attacks.

#### What happened after the deal?

- According to the government, 3,560 government troops and 775 civilians have been killed in conflict since the deal was signed.
- Also, infighting made matters worse for the government.
- Last year's presidential election saw a record low turnout.
- The results were contested by the main Opposition candidate, Abdullah Abdullah, who formed a parallel administration.
- He backed off, but only after being appointed the head of the High Council for National Reconciliation that will lead talks with the Taliban.

#### What would be some challenges?

- These above factors allowed a resurgent **Taliban to maintain the upper hand** - in war and in talks.
- Taliban sees itself as the legitimate ruler of Afghanistan.
- In addition, it has **not recognised the Constitution** of the country.
- This will be the government's key challenge when its representatives and that of the Taliban would be holding talks.

## 7.2 Lebanon blast

### Why in news?

A devastating blast had occurred in central Beirut, Lebanon.

#### What are possible causes of the blast?

- The initial explosion ignited a fire, while the second one was more devastating enveloping the capital's skyline.
- The blast was caused by the detonation of more than 2,700 tonnes of ammonium nitrate that had been stored at the Beirut port for six years.
- Primary observations point serious lack of maintaining safety norms at the explosive storage.
- Large quantities of stored ammonium nitrate are regarded as a major fire hazard, with multiple reported cases across the world.

#### What is wrong with the timing of the accident?

- In the recent past, Lebanon has been crippled by serious economic woes at the centre of which has been a currency crisis.
- This has caused large-scale closure of businesses and soaring prices of basic commodities resulting in social unrest.
- The blast has occurred at the time when a UN tribunal is set to give its verdict in the 2005 assassination of former Lebanese Prime Minister.
- The country has been bracing for the aftermath of the verdict of the case, which has at its core the age-old Shia-Sunni rift.
- Beirut's health-care system, struggling to fight the COVID-19 pandemic, is already stretched.
- Coping with the aftermath of the blast itself would be an uphill task for the country's beleaguered government.
- Prices of essential goods are high, foreign currency is scarce and the GDP is expected to contract 12% this year.

- On the southern border, tensions between Israel and Hezbollah are on the rise, with Israeli Prime Minister warning of military action.

#### **What are the new concerns?**

- Residents of Beirut are struggling with long power outages, which are delaying even the rescue efforts after the blast.
- The blast would deepen the country's economic woes as one of its main ports has been destroyed.

### **7.3 Belarus Elections**

#### **Why in news?**

The results of the Presidential Election of Belarus are being contested.

#### **What is the problem with the results?**

- The Election Commission of Belarus announced that the long-term President Alexander Lukashenko was the winner of the recent election.
- His main rival, Svetlana Tikhanovskaya, rejected the results and called for a recount.
- This was the hardest fought election in Belarus, a former Soviet republic, since the USSR's disintegration.

#### **What is the response?**

- Protests broke out in the capital, Minsk.
- This was met with a violent security crackdown.
- Then, as the country was slipping into chaos and anarchy, Ms. Tikhanovskaya fled to neighbouring Lithuania.
- But her campaign committee has said that it would continue to support the protests against the election fraud.

#### **Why are there protests?**

- There has been widespread anger against the government over a stagnant economy.
- Mr. Lukashenko had cracked down on the Opposition even before the election.
- Sergei Tikhanovsky, husband of Svetlana Tikhanovskaya, was to contest the elections against Mr. Lukashenko.
- But he was barred from contesting for allegedly inciting unrest.
- Only after this, Ms. Tikhanovskaya entered the race.
- Throughout the campaign, the Opposition accused the government of intimidation, cracking down on journalists and activists, and prohibiting independent observers.
- All these raised doubts about the fairness of the election, which led to protests.

#### **What would be the impact of the protests?**

- This is a time of growing economic troubles.
- If the protests questioning the legitimacy of Mr. Lukashenko's presidency continue, it could substantially weaken him.
- The crisis has already derailed his plans for a strategic realignment in Eastern Europe.
- In recent years, Belarus, a geopolitical ally of Russia, has shown a willingness to work closer with the West.
- He wants to raise his country's strategic profile at a time when there is a contest for influence in Eastern Europe between Russia and USA.
- But many western countries have condemned the handling of the election and the protests, and called for a peaceful settlement.

#### **What did Russia do?**

- Russia immediately sensed an opportunity to cement ties with Belarus.
- This is because Belarus is an important transit route of Russian gas to Europe as well as a buffer between Russia and European powers.

- Mr. Lukashenko has nowhere to turn to other than Russia.

#### **What could be done?**

- Mr. Lukashenko could ensure the formation of a legitimate government that could address the country's vital problems.
- He has to reach out to the Opposition and offer talks to find a peaceful settlement to the crisis.

### **7.4 Israel-UAE-US deal**

#### **Why in news?**

Israel and the United Arab Emirates, helped by the US, have arrived at an important peace agreement.

#### **What is the big deal?**

- The deal was announced by the US White House.
- The deal says that the UAE will establish diplomatic relations with Israel if its President commits to give up the plan to annex the West Bank.
- [West Bank is the main territory of a state that the Palestinians want.]
- The UAE becomes the third Arab nation to recognise Israel after Egypt (1979) and Jordan (1994).
- It has the potential to change the geopolitics of West Asia and beyond.

#### **What about the Palestinians?**

- The Palestinian leadership rejects and denounces the UAE, Israeli and the US trilateral announcement.
- The Palestinian Authority, which seeks a two-state solution, lashed out against the deal as a betrayal by the UAE.
- For the Palestinians, the Israeli commitment that it will not pursue its plan to annex the West Bank is an empty concession.
- This is because the deal does not address the Palestinian demand for statehood.
- President Binyamin Netanyahu floated the annexation plan recently.
- It says Israel will claim sovereignty of all land in the West Bank on which Jewish settlements have come up.
- This plan would literally cut up the dream of a Palestinian state.
- It was not certain if Netanyahu would have gone ahead with it even without the UAE deal.
- Now, by agreeing not to, he has enabled the UAE to talk it up to its Arab allies as a major concession extracted from Israel.
- Netanyahu himself can project it elsewhere abroad as a big give on his part, without compromising on the core issues of the conflict.

#### **How have the Arab states reacted?**

- **Saudi Arabia** has said nothing so far.
- But, the ruling family's Prince Turki al-Faisal had rejected the proposals for Israel-Palestine peace unveiled by the US in January 2020.
- But Crown Prince Mohammed bin Salman (MbS) has been hailed as an ally by the Trump administration.
- He has formed a friendship with Trump's son-in-law, tasked with finding a solution to the Israeli-Arab conflict.
- There is bound to be speculation that the UAE could not have taken its decision on Israel without the support of Saudis.
- Over the years, the Saudis have seen both the US and Israel as insurance against Shia Iran.
- The smaller Gulf States of **Oman and Bahrain** have quickly fallen in line behind UAE.
- It could be a matter of time before the others, including Saudi, do as well.

### How does the region's geopolitics change?

- If the **Arab states** do fall in line, it would bring all Sunni nations in the region in an anti-Iran alliance with Israel.
- **Iran** and its proxies and allies have been weakened and broken by war, the ISIS and al-Qaeda.
- [Iran's allies - Syria, Lebanon and Iraq, the Hezbollah in Lebanon, and the Houthis in Yemen]
- Hezbollah, which Israel has treated as enemy, faces a domestic backlash after an explosion in Beirut.
- **Russia**, a staunch ally of Syria, has not yet reacted.
- The deal will send ripples through other parts of the world.
- In South Asia, it will put **Pakistan** in a bind.
- Pakistan is already facing criticism at home for not being able to take on India over its 2019 decisions in Kashmir.
- Pakistan is unlikely to be seen as joining an Arab alliance that has abandoned another cause dear to Pakistan, that of Palestine.
- But then, UAE is a good friend.
- Pakistan has already annoyed Saudi Arabia by not agreeing to hold a special session on Kashmir at the OIC.
- Even if Pakistan does not join the Arab stampede towards Israel, it cannot rail against them for it.

### 7.5 EU-Turkey Relations

#### What is the issue?

- Tensions in the eastern Mediterranean has soared due to the issues between Turkey and Greece.
- Turkey sent an exploration vessel, accompanied by a Navy fleet, to the disputed waters.

#### What is the trigger?

- Turkey and Greece have historically shared troublesome relations.
- But, the trigger for the recent hostility between them has been the discovery of gas in the Mediterranean waters.
- The European Union (EU) has planned to transport the gas to its mainland, which would help reduce its dependency on Russia.
- This has raised the region's geopolitical profile.
- Turkey and Greece have overlapping maritime claims.

#### How was Turkey treated?

- The EU members and its allies in West Asia and Africa planned to build a gas pipeline from the Mediterranean to Europe's mainland.
- But they kept Turkey out of it, which infuriated Ankara.
- In the early 2020, the EastMed Gas Forum was formed by Cyprus, Egypt, Greece, Israel, Italy, Jordan and Palestine.
- Turkey was again excluded from this Forum.

#### What did Turkey do?

- Turkey challenged the pipeline project and reached an agreement with Libya's Tripoli-based government.
- According to this agreement, an exclusive economic zone (EEZ) will be formed from Turkey's southern shores to Libya's northern coast across the Mediterranean.

#### How did Greece respond?

- Greece claimed that the Turkish zone violated its maritime sovereignty.
- Later, Greece announced its EEZ with Egypt, which clashes with Turkey's zone.

- Immediately thereafter, Turkey sent its survey ship over.

#### **What is the potential of this issue?**

- This complicated issue has the potential to involve Europe, West Asia and North Africa.
- It is difficult to demarcate the maritime boundaries in the eastern Mediterranean, which is dotted with Turkish and Greek islands.
- Cyprus is physically divided with the southern part ruled by a recognised government and the northern part controlled by Turkey.
- Turkey's survey ship plans exploration activities around Greece's Crete Island.
- But Crete Island lies just outside the Turkish-Libya economic zone.
- Greece and Cyprus call this a violation of their sovereignty.

#### **What is the alliance?**

- France, the EU's most powerful military force, has thrown its weight behind Greece and Cyprus.
- Now, an alliance is emerging among Greece, Cyprus, Italy and France, which is backed by Egypt, Israel and the UAE.
- Turkey stands almost isolated, but remains a key power in the Mediterranean.

#### **What should the EU do?**

- If the EU wants to transport gas from the coast of Israel to Europe via Cyprus and Italy, an open conflict with Turkey cannot help.
- In everybody's interest, tensions should be dialled down.
- A diplomatic and mutually acceptable solution to the gas contest should be found.
- Excluding Turkey, which has a long Mediterranean coast, is unwise.
- Allowing a resurgent Turkey to bully smaller powers in the region would be strategically disastrous.
- The EU has to strike a balance between these two options.

### **7.6 Israel-Hezbollah Tensions**

#### **Why in news?**

Israel attacks Hezbollah targets in southern Lebanon.

#### **What is the story behind?**

- Hezbollah is a Shia militia-cum-political party in Lebanon.
- Hezbollah and Israel have fought two wars before.
- They have been observing a tenuous ceasefire for 14 years.
- The recent attacks mark a significant escalation in the crisis that has been building up along the border in recent years.
- Recent tensions began after Israel targeted Iranian weapons and supplies within Syria.

#### **Why Israel specifically targets supplies in Syria?**

- In Syria, the Shia militias fought alongside regime fighters against rebels and Sunni jihadists.
- So, Israel fears that Iranian supplies to Hezbollah via Syria would leave them stronger.
- This would enhance Israel's security challenges in the northern border.

#### **What was Israel's target in the recent attacks?**

- In the recent attacks, Israel targeted an observation post.
- The Israeli Defense Forces claimed that this post was attacked as they were used by Hezbollah for intelligence collection.





- The raid shows the growing appetite of the newly formed unity government of Netanyahu.
- This government is under fire at home over its COVID-19 crisis handling, for war as a means to address the simmering border problems.

#### **For Israel, how tough target Hezbollah is?**

- In 2000, after 18 years of occupation of southern Lebanon, Israel was forced to withdraw mainly due to the fighting of Hezbollah.
- In 2006, Israel invaded Lebanon, aimed at destroying Hezbollah's military capabilities.
- But after a month of Israeli aerial and land attacks, Hezbollah fired hundreds of short-range rockets into northern Israel.
- Ever since, both sides have been wary of another open conflict.
- Israel, which bombed Gaza several times since its 2005 withdrawal from the strip, had been careful when it came to Hezbollah.
- The militants turned their focus to capacity building after the 2006 war, and, since 2011, to the civil war in Syria.

#### **What is the axis formed?**

- Syria has been a vital link between Hezbollah and Iran ever since the group was founded in the early 1980s.
- Iran has substantially increased its footprint in Syria, bolstering the Iran-Syria-Hezbollah axis.
- Israel sees this axis as a growing security challenge.
- Hence, it started the bombing operations in Syria, risking another conflict with Hezbollah.

## **G.S PAPER III**

### **8. ECONOMY**

#### **8.1 SIP Mutual Funds 2020**

##### **What is the issue?**

- The Covid-19 pandemic have raised anxiety among individuals who want to keep liquidity at hand to meet any future contingency.
- For many, the big dilemma is whether to continue with their monthly mutual fund investments.

##### **Should one invest in the markets?**

- The fall in markets has opened a window of opportunity for investors to invest directly in shares.
- However, one must be very careful about which stock to pick.
- This makes mutual funds the preferred mode when it comes to taking equity exposure.
- Should one invest in equities at all in these times?
- Those who have certainty of income can continue with their existing investments and also look to increase them.
- For others, the situation is tricky.
- With uncertainty all around, the risks associated with equities have only gone up.
- Equity investments are meant for at least 3 to 5 years.
- This means that investors should park only that component of their income into equities, which they may not require for the next five years.

- An investor who is unsure about the sustainability of his job and salary should look towards building liquidity for current times.
- Equity assets do not fit the bill.

#### **Should one continue with their SIPs?**

- There is a fall in equity markets on account of any adverse global or domestic event, amidst the ongoing pandemic.
- This fall may just make it unfeasible for an investor to withdraw from her equity portfolio.
- Since these are times to build liquid reserves, investors can move their systematic investment plans (SIPs) from the equity to the debt category.
- As the idea is to build contingency provisions, the best suited would be ultra short-term funds and low duration funds.
- Within that, investors should go for schemes that have the highest exposure to AAA rated papers, and have a lower expense ratio.
- Other than stopping their incremental SIP inflows, investors can:
- Go for a three-month pause option with their mutual funds, where the money won't be debited from their account for 3 months or,
- Go for the option of reducing the ticket size of the SIP.

#### **What should the less impacted ones do?**

- Individuals who are not too constrained on the income front may continue with their existing equity SIPs.
- They may even direct their additional savings into equities.
- An investment in current times may mean a higher accumulation of units on account of the drop in net asset value of MF units.
- But, the priority should be to build at least six months' contingency funds that are sufficient to meet EMI expenses, school fees, etc.,

#### **What should one do with their existing equity investments?**

- One must avoid liquidating the equity investments to meet expenses or other liabilities.
- One can withdraw from investment portfolios like deposits, gold, etc., rather than pulling out of equity schemes.
- Even though they have bounced back significantly, markets are still trading around 12% lower than the highs they had hit in January 2020.
- Many investors who would have started their SIPs 2-3 years ago may still find their capital in the negative.
- Equity SIPs will work if investments are disciplined and redemptions are planned.
- So one should book their profits when the markets are at a high, or when their financial goal has been achieved.
- Investors can have a diversified portfolio across asset classes like equities, fixed deposits, gold, debt mutual funds, etc.

## **8.2 US GDP Slide**

### **Why in news?**

The United States has recorded the sharpest GDP decline in its history.

### **How much did GDP slide?**

- The GDP of the US, the world's largest economy, has contracted by 33% in the second quarter, or a near 10% quarter-over-quarter decline.
- This is in sharp contrast to the GDP data released by China, the world's second-largest economy.

- China's GDP growth swung back sharply into the black in the April-June quarter.

### What explains the US GDP slide?

- Economists decoding the slide in the US GDP numbers point to a precipitous **fall in consumption**.
- [Consumption is the biggest component of American GDP that accounts for almost 70% of the economy.]
- Spending on goods and services has fallen at a seasonally adjusted annualised rate of 35% in the second quarter.
- **Investments** in buildings, equipment and intellectual property also fell at an annual rate of 49% while **exports** plunged 64%.
- The worrying news for the US is that the scale of this fall in the first quarter would be dwarfed by that in the second.
- Much of this pessimism can be attributed to the **sharp surge in COVID-19 cases**.

### Why do the world's top two economies offer contrasting trends?

- **Similarities** - Both the US and China are consumption-driven - over two-thirds of US GDP and more than one-half that of China.
- In their relief packages, both countries focussed on boosting consumption by attempting to put money in the hands of consumers.
- **Divergent trends** - China's GDP growth showed a sharply divergent trend, swinging back sharply in the April-June quarter.
- This growth was driven by a bounce back in manufacturing output and a public spending boost.
- China recorded a V-shaped recovery (a sharp fall followed by an equally sharp recovery), which was something unexpected.
- This ensured that China effectively sidestepped a technical recession.
- [Technical Recession - Two consecutive quarters of negative growth]
- The US is clearly headed for a recession if the third-quarter projections are anything to go by.

### What is the key differentiator between these two economies?

- The big differentiator is with respect to the services sector and consumption trends.
- **Services sector** - Both economies rely on the service sector for a range of value-additions and output that contribute to their respective GDP.
- In the US, continuing mobility restrictions have significantly hampered the return of such jobs.
- Such restrictions in the US have been geographically more widespread and longer-term.
- This is so because of its initial delay in responding to the spread of the disease, and fickle state government policies.
- China's COVID-19 related support policies, including spending, loans and guarantees, amounted to just 2.5% of GDP.
- This is much higher than the 11% for the US.
- **Consumption trends** - China's 3.2% year-on-year GDP growth showed a clear recovery in consumption trends.
- This is something that is evidently missing in the US.

### What are the takeaways for India?

- **Relaxations** - In India, like in the US, the case count is surging, even as the government is progressively easing up restrictions.
- The Union Home Ministry has announced further relaxations in the lockdown guidelines, including opening up gyms.
- After this announcement, India recorded the biggest jump in the daily case count at over 55,000.



- **Consumption** - The share of consumption to GDP, at 57% in India, is closer to that of China.
- But the trend of normalisation of consumption is akin to what is being experienced in the US.
- There are uncertainties preventing people from upping their spends beyond essentials, notwithstanding the progressive unlockdowns.
- **Recovery packages** - India's recovery could have another problem.
- Much of the Rs 20 lakh crore Covid-19 economic package has been liquidity driven, with little burden on the Central exchequer.
- It has been focused on pushing banks to extend credit on the back of government guarantees to sectors like small businesses, NBFCs, etc.

#### How would recovery happen in India?

- Most economic activities are losing two months of output.
- There is a subsequent localised lockdowns being announced by states in the wake of the surge in caseload.
- Therefore, the recovery process looks like it would be an extended one.
- The recovery in economic activity also depends on the **quality of policy support**.
- A consumption boost in India's recovery is should not be ruled out.

### 8.3 Signs of Economic Recovery

#### Why in news?

The Commerce Ministry has released the latest data on output at the eight core industries.

#### What are some data?

- Overall production at the infrastructure industries extended their year-on-year decline to a fourth straight month in June 2020.
- Of the seven industries that extended their contractions, only coal shrank at a faster pace (-15.5%) than in May.
- Refinery products shrank 8.9% marking an improvement from the 21.3% contraction seen the previous month.
- [Refinery products - Largest weight on the index contributing 28%]
- The lifting of restrictions on inter and intra-State movement of persons and goods revived vehicular movement and fuel demand.
- With personal modes of mobility preferred given the fear of infection, petroproduct consumption grew.
- Electricity output fell at a slower 11% pace than the May month's 14.8% slump.
- This signals an uptick in demand from some manufacturing clusters including in western and northern India.
- Among the other sectors, steel production continued to tumble: output shrank by more than a third (-33.8%) from June 2019.
- The cement have put the worst behind as urban construction and projects under the rural job guarantee scheme spurred demand.
- Fertilizers saw the expansion ease to 4.2%, from 7.5% in May.

#### What does the IMD forecast say?

- With monsoon activity above normal so far this year, kharif sowing was almost 14% higher as on July 31 than at the same time in 2019.
- The IMD is forecasting above average rainfall in August and September.
- So, the outlook for the agriculture-reliant rural economy is far more promising than for most other sectors.

### What do these data reveal?

- These data shows that the pandemic-spurred economic contraction may have begun to bottom out.
- The sector-wise performance affirms that the gradual reopening since June have helped tease increase some demand in the economy.

### What is the conclusion?

- To be sure, the economy is still a fair distance from a sustained turnaround with other data flagging the risks to a recovery.
- The significant shortfalls in GST collection point to the difficulties the governments are facing in garnering crucially needed revenue.
- This has already swelled the fiscal deficit at the end of the first quarter to 83% of the full year's target.
- The new infections curve showing no signs of plateauing as yet.
- So, the policymakers have the task of stemming the COVID-19 tide without dampening economic momentum.

## 8.4 Lockdown and Fiscal Management

### What is the issue?

- One of the biggest casualties of the lockdown is the government.
- All governments need money to function and if revenue does not increase it is hard to meet committed expenditure.

### What is the reality?

- For the Central government, there is a solution in the form of higher borrowing, for which it must ideologically steer away from FRBM.
- But States find it hard to manage, and end up cutting discretionary expenditure.

### Why is there a decline in tax flow?

- Income tax collections are lower by around ₹ 35,000 crore. There are three reasons for this.
- There were job cuts by several corporates, which directly meant a lower salary bill and hence tax payments.
- The companies have lowered the salaries of their staff by different scales for the year.
- All companies disburse their variable pay to their employees in the first quarter.
- The fourth-quarter as well as FY20 results of companies showed decline in both the topline and bottomline.
- Hence, the payouts to employees were lower, which gets reflected in a one-time loss for the government.
- There is a continuation in the trend of falling sales and profits of companies for Q1 FY21.
- With profits declining, the tax outflow would come down, which is reflected in the lower collections so far.
- It may be hoped that there would be some pick-up in Q3 and Q4.
- This can help steady collections and avoid a sharp fall in this period.

### Why is there a shortfall in GST collections?

- The major casualty is the GST, where there has been a 50% decline.
- [The GST is a tax imposed on all goods and services.]
- For tax collections to increase, consumption should go up.
- The localised periodic lockdowns have ensured that households have only shopped the essentials, which have lower GST rates.
- For the first two months, e-commerce was not allowed to deliver non-essentials.
- The result was less spending and lower revenue for the government.

- With limited removal of restrictions until September, it is unlikely that there will be any pick-up and the government will witness sharp fall in GST collections.

#### **Why is there a trade deficit?**

- The trade deficit has been widening with imports declining faster than exports due to a sharply falling economy.
- This lowers demand as well as crude prices, customs collection too have declined by around ₹ 24,000 crore.
- This does not look like it will be compensated for in the future, as imports would continue to move in a downward trajectory.

#### **Is there any decline in excise collections?**

- The Central excise collections have more or less been maintained.
- This can be attributed to the government increasing the duty on petrol and diesel as well as sin products.
- If these items were subsumed under the GST, the government would have had no control over the collections.
- What would be the economic effects?
- State budgets - The first consequence of such sharp slippages in meeting targets is that the State budgets would get affected.
- During the first quarter, the transfers to States were ₹ 1.34 lakh crore as against ₹ 1.49 lakh crore last year.
- The shortfalls in the Centre's revenue would translate into the same for States.
- This in turn have to cut back on expenditure.
- Expenditure - The second implication is that the Centre has to take a tough call on the expenditure side.
- So far this quarter, the total expenditure has been higher by around 13% at ₹ 8.16 lakh crore.
- This is mainly due to the relief expenditure invoked, that was said to be outside what was budgeted . Two possibilities exist.
- There can be a cut in capex during the year even though the government has enhanced such allocations to keep spending up.
- There could be some sharp cuts in subsidies.
- As the government has announced it is giving free foodgrains to the poor for six months, it would remove the need to provide any food subsidy separately.
- This is why the food subsidy bill this time is much lower than that of last year.

#### **How would borrowing help?**

- Higher borrowing will be necessitated due to a higher fiscal deficit.
- The government slashed interest rates on small savings drastically in April, so there will be a lower allocation of funds.
- Hence higher market borrowing will be necessitated.
- The government has already increased the borrowing programme from ₹ 7.8 lakh crore to ₹ 12 lakh crore for the year.
- Such borrowing will definitely have a bearing on bond yields.
- This is why they are still quite intransigent in the downward direction, even though there is surplus liquidity.
- The RBI has brought in a new benchmark security that had a lower yield.
- The market remains uncertain.

### **8.5 New Loan-Restructuring Scheme**

#### **Why in news?**

The Reserve Bank of India gave the green signal to a loan-restructuring scheme for stressed borrowers.



### What is the scheme?

- This scheme is a special window that provides one-time loan restructuring to companies and individuals.
- It will provide relief specifically to those impacted by the pandemic.

### Who will benefit from the scheme?

- Only those companies and individuals whose loans accounts are in default for not more than 30 days as on March 1, 2020, are eligible.
- For corporate borrowers, banks can invoke a resolution plan till December 31, 2020 and implement it till June 30, 2021.
- Such loan accounts should continue to be standard until the date of invocation.
- The one-time restructuring window is available across sectors.
- The companies that were already in default for more than 30 days as on March 1 cannot avail this facility.
- This could affect revival plans of companies that were about to regain profitability but were hit when the lockdown was imposed.
- For personal loans, the resolution plan can be invoked until December 31, 2020 and will be implemented within 90 days thereafter.

### How will it be implemented?

- The RBI has set up a five-member expert committee headed by K V Kamath.
- This committee will make recommendations on the financial parameters required.
- It will recommend the sector-specific benchmark ranges for such parameters to be factored into each resolution plan for borrowers with an exposure of Rs 1,500 crore or above at the time of invocation.
- It will also undertake a process validation of resolution plans for accounts above a specified threshold.
- The RBI will notify this along with modifications in 30 days.
- This means the RBI will have the last word on who will be eligible and the parameters.
- As per the RBI, the most adversely affected sectors by the pandemic are tourism and hospitality, construction and real estate, and aviation.

### How will the scheme impact banks?

- The biggest impact will be that banks will be able to check the rise in non-performing assets (NPAs) to a great extent.
- However, it will not bring down the NPAs from the present levels.
- Banks will not face much of a problem in working out individual resolutions plans.
- But they will have to tackle borrowers who were in stress after the pandemic hit.
- Were earlier such schemes not misused by banks and corporates?
- Strategic Debt Restructuring (SDR) scheme - Banks were given an opportunity to convert the loan amount into 51% of equity.
- This equity was to be sold to the highest bidder, once the firm became viable.
- This was unable to help banks resolve their bad loan problem as only two sales have taken place through this measure due to viability issues.
- Sustainable Structuring of Stressed Assets scheme - Banks were unwilling to grant write-downs as there were no incentives to do so.
- Write-downs of large debtors could exhaust banks' capital cushions.
- Asset reconstruction scheme - The major problem was that asset reconstruction companies were finding it difficult to resolve assets they had bought from banks.
- Therefore, they wanted to purchase the loans only on low prices.

- Consequently, banks were reluctant to sell them loans on a large scale.
- IBC: The Insolvency and Bankruptcy Code kicked off.
- The RBI announced a stringent loan resolution process through its circular.

#### **Does the new scheme have safeguards against misuse?**

- Yes, the RBI has built in safeguards in the resolution framework to ensure it does not lead to ever greening of bad loans.
- Restructuring of large exposures will need independent credit evaluation done by rating agencies and a process validation by the expert committee.
- For personal loans there will be no requirement for third party validation by the expert committee, or by credit rating agencies, or need for ICA.
- The RBI has said that the term of loans under resolution cannot be extended by more than two years.
- In the case of multiple lenders to a single borrower, banks need to sign an Inter-Creditor Agreement (ICA).
- To mitigate the impact of expected loan losses, banks need to make a 10% provision against such accounts under resolution.
- For banks not willing to be part of the ICA, a penal provision of 20% has been specified.

#### **What are the major differences with previous recast schemes?**

- The earlier restructuring schemes did not have any entry barrier.
- The current scheme is available only for companies facing Covid-related stress, as identified by the cut-off date of March 1.
- Strict timelines for invocation of resolution plan and its implementation have been defined in the scheme.
- In the past, this was largely open-ended.
- Independent external evaluation, process validation and specific post-resolution monitoring are further safeguards.

### **8.6 Rise in India's Forex**

#### **Why in news?**

Covid-hit India's forex reserves jumped by a record \$11.9 billion in the week ending July 31 to hit a fresh high of \$534.5 billion.

#### **How has India's forex reserves risen?**

- The trend of rising foreign exchange reserves started after a sharp cut in corporate tax rates in September, 2019.
- The investor sentiments turned weak after the budget announcement in July to impose higher surcharge.
- Now, the investors are drawn to invest in the India as the government has decided to reverse its budget decision relating to higher surcharge impact on FPIs.
- During the period between September 27, 2019 and July 31, 2020, India has added 25% of the reserves it had till September 20.
- India has ranked fifth, behind China (\$ 3,298 billion), Japan (\$ 1,383 billion), Switzerland (\$ 896 billion) and Russia (\$ 591 billion).
- The rising forex reserves have come as a breather as it can cover India's import bill of more than one year.

#### **What key factors has led to this rise in forex reserves?**

- FPI inflows: The FPI inflows has risen following the government's decision in September 2020 to cut corporate tax rate.
- Between April and December 2019, FPIs pumped in \$15.1 billion.
- Dip in crude oil prices: India's oil import bill has declined since February 2020.

- This is due to the global spread of coronavirus that roiled the stock markets and led to a crash in the Brent crude oil prices.
- The crude accounts for almost 20% of India's total import bill.
- Brent crude oil prices fell to levels of \$20 per barrel towards March end, and it dropped further and traded between \$9 and \$20 in April.
- In January, Brent crude was trading between \$60 and \$70 per barrel.
- Import savings: Lockdown across countries in response to the pandemic impacted global trade.
- It has resulted in a sharp dip in import expenditure — electronics, gold and also crude oil prices among others.
- FDI inflows: Between September 2019 and March 2020, FDI stood at \$23.88 billion and in April and May it amounted to \$5.9 billion.
- A lot of FDI has also come in June and July too.
- Thus FDI inflow has been a significant contributor to the rise in foreign exchange reserves.
- Dip in gold imports: Gold import has dipped sharply in the quarter ended June 2020 following the high prices and the pandemic-induced lockdown.
- According to the World Gold Council (WGC), gold imports plummeted by 95% to 11.6 tonnes in the quarter as compared to 247.4 tonnes in the same period a year ago.
- This was due to logistical issues and poor demand.

#### **What does the rising forex reserves mean?**

- It gives a lot of comfort to the government and the Reserve Bank of India in managing India's financial issues at a time when the economic growth is set to contract by 5.8% in 2020-21.
- It's enough to cover the import bill of the country for a year.
- It has also helped the rupee to strengthen against the dollar.
- The forex reserves to GDP ratio is around 15%.
- Reserves will provide a level of confidence to markets that a country can meet its external obligations.
- It demonstrates the backing of domestic currency by external assets.
- Adequate forex reserves should provide room for the RBI to cut rates and support recovery.

#### **What does the RBI do with the forex reserves?**

- The RBI functions as the custodian and manager of forex reserves.
- It operates within the overall policy framework agreed upon with the government.
- The RBI allocates the dollars for specific purposes.
- The RBI uses its forex kitty for the orderly movement of the rupee.
- It sells the dollar when the rupee weakens and buys the dollar when the rupee strengthens.
- Of late, the RBI has been buying dollars from the market to shore up the forex reserves.
- When the RBI mops up dollars, it releases an equal amount in the rupees.
- This excess liquidity is sterilised through issue of bonds and securities and LAF operations to prevent a rise in inflation.

#### **Are forex reserves giving returns to India?**

- Only gold reserves have given big returns to India.
- The RBI has not disclosed the actual returns from forex reserves.
- But the experts estimate that India is likely to get only negligible returns as interest rates in the US and Eurozone are around 1%.
- On the contrary, India could be facing a cost to keep the reserves abroad.

- Out of the total foreign currency assets,
- 59.7% was invested in securities abroad,
- 33.37% was deposited with other central banks of other countries and the BIS and
- 7.06% comprised deposits with commercial banks overseas as of March 2020.
- As at end-March, 2020, the RBI held 653.01 tonnes of gold.
- Of these reserves, 360.71 tonnes is held overseas in custody with the Bank of England and the Bank for International Settlements.
- The remaining gold is held domestically.
- With gold prices shooting up around 40% to over Rs 55,000 per 10 grams this year, the value of gold holdings has shot up.

## 8.7 Negative List of Defence Imports

### Why in news?

Defence Minister has announced a list of 101 items that the Defence Ministry will stop importing.

### What is the decision?

- The negative list means that the Armed Forces will only procure all of these 101 items from domestic manufacturers.
- [Armed Forces - Army, Navy and Air Force.]
- The manufacturers could be private sector players or defence Public Sector Undertakings (DPSUs).
- The manufacturers can develop these items by using their own design and development capabilities.
- Or they can also adopt the technologies that can be designed by the Defence Research and Development Organisation (DRDO).

### Why this decision was taken?

- As per Stockholm International Peace Research Institute, India has been the second largest importer between 2014 and 2019.
- The government wants to reduce the dependence on imported items in defence.
- By denying the possibility of importing the items on the list, the domestic industry is given an opportunity to manufacture for the needs of the forces.
- Announcing the policy, the Defence Ministry is now ready for a big push to Atmanirbhar Bharat initiative.
- The Ministry will introduce import embargo on 101 items beyond given timeline to boost indigenisation of defence production.
- The government has been hoping that the defence manufacturing sector can play a leading role in boosting the economy.

### What does the list include?

- The negative list includes a range of items from simpler items to advanced technologies.
- The items include water jet fast attack craft to survey vessels, pollution control vessels, light transport aircraft, GSAT-6 terminals, radars, unmanned aerial vehicles, etc.,
- It also includes simpler items like certain rifles, artillery guns, bullet proof jackets, missile destroyers, etc.
- Almost 260 schemes of such items were contracted by the Armed Forces at Rs 3.5 lakh crore between April 2015 and August 2020.
- The government expects that contracts worth Rs 4 lakh crore will be placed upon the domestic industry within the next 6 to 7 years.

### Were the Armed Forces consulted?

- The government announced the list after due consideration by all stakeholders involved.

- This includes the three services who use the equipment, weapons and platforms that will be embargoed.
- The Ministry also consulted the public sector and private players.
- They were consulted to assess the capabilities of the Indian industry for manufacturing various ammunition & equipment within India.
- The items mentioned on the list worth almost Rs 1,30,000 crore each are anticipated for the Army and the Air Force.
- The items worth almost Rs 1,40,000 crore are anticipated for the Navy over the same period.

#### **Will it come into effect immediately?**

- Not immediately, but it will be starting this year.
- However, not all the 101 items mentioned in the list will be embargoed starting this year.
- The embargo on imports is planned to be progressively implemented between 2020 to 2024.
- The government wants to apprise the Indian defence industry about the anticipated requirements of the Armed Forces.
- So that they are better prepared to realise the goal of indigenisation.
- The list may grow as more such equipment for import embargo would be identified by the Department of Military Affairs after consulting all stakeholders.
- A due note of this will be made in the Defence Acquisition Procedure to ensure that no item in the list is processed for import in the future.
- One item in the list, Long Range – Land Attack Cruise Missile will not be allowed to be imported after December 2025.

#### **Is this a new policy?**

- It was announced in May 2020.
- Defence Minister has taken cue from Prime Minister Narendra Modi's 'Atmanirbhar Bharat' announcement.
- The Defence Ministry has bifurcated the capital procurement budget for 2020-21 between domestic and foreign capital procurement routes.
- A separate budget head has been created with an outlay of nearly Rs 52,000 crore for domestic capital procurement in the current financial year.

#### **What are the future plans of the Ministry?**

- The Defence Ministry wants to raise the Foreign Direct Investment in defence manufacturing from 49% to 74% under the automatic route.
- It also wants to improve the autonomy and accountability of the Ordnance Factory Board by their corporatisation.
- It also wants to build a time-bound defence procurement process and faster decision-making.

### **8.8 China's Renminbi**

#### **Why in news?**

Four commercial banks in China began large-scale testing of the digital currency, Renminbi.

#### **What does this testing mean?**

- The state-run lenders are no 'small change'.
- They are Bank of China, China Construction Bank, Industrial and Commercial Bank of China, and Agricultural Bank of China.
- These are the largest banks of the world, with a customer base that runs into many millions.
- This means, if their tests come out cool, the digital renminbi will become the world's first sovereign digital currency.

### Why does China want a digital currency?

- China is one of the most digitally penetrated countries in the world.
- It has seen impressive acceptance of financial technologies and digital payments.
- China's digital payments ecosystem is more advanced than many of its Western counterparts, including the US and the EU.
- China's new financial system is built on digital wallets, QR codes, and runs through its own big tech firms: Alipay of Alibaba, etc.
- So, it is natural that the government has planned to take the next step and experiment with an all-encompassing digital currency.

### Is China the only country planning an e-currency?

- According to the Bank for International Settlements (2019), most central banks (80%) are fiddling with the idea of a sovereign digital currency.
- This includes the US and the European Central Bank.
- The G7 countries have been planning a collective move on central bank-sponsored digital currencies.
- Even the RBI has been contemplating bringing out a national digital currency if and when safe technologies emerge.
- National Blockchain Strategy of India envisages a sovereign digital currency.
- But it seems China has gone ahead with its plans and is set to roll out one for mass use.

### What is China actually testing?

- Now, its citizens can use the e-wallet to top up accounts, purchase, withdraw and transfer money after pairing the digital currency with the phone number.
- The Chinese banks are also testing if the e-currency can be exchanged offline, that is, without the Internet.

### How different is this from bitcoin or Facebook's Libra?

- It is different in many ways.
- To start with, this is **legal tender**, endorsed by the state.
- Bitcoin is not legally accepted in many geographies, including India.
- A 2018 RBI order disallowed the use and exchange of cryptocurrencies by financial institutions it monitors.
- India is contemplating a law banning cryptocurrencies altogether.
- Bitcoin is designed to be anti-authority and is not controlled by a central bank or a government.
- This makes it prone to giant fluctuations in value.

### What is China trying to do?

- China expects to cash in on the global trend towards digital currencies by being an early-mover (the digital renminbi was announced in 2014).
- Also, it eyes the global disruption it can cause in the currency markets with renminbi.
- The fiat renminbi is often accused of being subjected to manipulation by China's Communist government.
- So, the future of an e-renminbi will also be shrouded in secrecy.
- Still, experts say China thinks that it is much easier to transfer e-payments across the border while controlling it from within the country.

### Is it trying to create a universal currency, then?

- Unlikely, as things stand now.
- China doesn't enjoy the political goodwill to moot an alternative to the dollar, however weak the US economy seems today.
- But, China enjoys a clout in the international money market.



- Also, it secretly aims to plug the yuan as the global currency.
- If the digital renminbi rolled out for regular use soon, it could lead to major shifts in the way money moves within China and beyond.

## 8.9 New Taxpayer's Charter

### Why in news?

The Centre has launched a platform for faceless assessment and appeals of tax, and a new Taxpayer's Charter.

### What is Taxpayers' Charter?

- Taxpayers' Charter was announced by the Finance Minister in her Budget 2020 speech.
- The aim of introducing the charter is to build a trust between a tax payer and the tax administration and reduce harassment.
- It provides responsibilities of the Income Tax (I-T) department towards the taxpayers.
- It also lists duties of the taxpayers towards the I-T department.
- The objective is to enhance the efficiency of the delivery system of the I-T Department.

### What is the need for a new charter?


- Only a small fraction of the 130 crore people in the country are paying taxes.
- So, there is certainly a need to improve the compliance level.
- This can be done only by coaxing people to voluntarily come forward and pay tax, without the fear of the taxman harassing them.
- The new platform for faceless assessment and appeals of tax, along with the Charter, is an attempt by the Centre to hold out the olive branch to the taxpayers.
- The 14-point Charter states that taxpayers can look forward to fair and reasonable treatment from tax authorities.
- They can look at an efficient mechanism for appeal and review and a system that maintains confidentiality of the taxpayers' information.

### What is a significant part?

- The Charter's most important part is the promise that the tax authorities shall not be too intrusive in inquiry and examination, or enforcement.
- This part is what the most taxpayers will be hoping that the Centre adheres to.

### How the Centre implements the Charter?

- The Central Board of Direct Taxes (CBDT) issued an order.



## TAXPAYERS' CHARTER

### THE INCOME TAX DEPARTMENT

is committed to	
<p><b>1. provide fair, courteous, and reasonable treatment</b> The Department shall provide prompt, courteous, and professional assistance in all dealings with the taxpayer.</p> <p><b>2. treat taxpayer as honest</b> The Department shall treat every taxpayer as honest unless there is a reason to believe otherwise.</p> <p><b>3. provide mechanism for appeal and review</b> The Department shall provide fair and impartial appeal and review mechanism.</p> <p><b>4. provide complete and accurate information</b> The Department shall provide accurate information for fulfilling compliance obligations under the law.</p> <p><b>5. provide timely decisions</b> The Department shall take decision in every income-tax proceeding within the time prescribed under law.</p> <p><b>6. collect the correct amount of tax</b> The Department shall collect only the amount due as per the law.</p> <p><b>7. respect privacy of taxpayer</b> The Department will follow due process of law and be no more intrusive than necessary in any inquiry, examination, or enforcement action.</p>	<p><b>8. maintain confidentiality</b> The Department shall not disclose any information provided by taxpayer to the department unless authorized by law.</p> <p><b>9. hold its authorities accountable</b> The Department shall hold its authorities accountable for their actions.</p> <p><b>10. enable representative of choice</b> The Department shall allow every taxpayer to choose an authorized representative of his choice.</p> <p><b>11. provide mechanism to lodge complaint</b> The Department shall provide mechanism for lodging a complaint and prompt disposal thereof.</p> <p><b>12. provide a fair &amp; just system</b> The Department shall provide a fair and impartial system and resolve the tax issues in a time-bound manner.</p> <p><b>13. publish service standards and report periodically</b> The Department shall publish standards for service delivery in a periodic manner.</p> <p><b>14. reduce cost of compliance</b> The Department shall duly take into account the cost of compliance when administering tax legislation.</p>

and expects taxpayers to	
<p><b>1. be honest and compliant</b> Taxpayer is expected to honestly disclose full information and fulfil his compliance obligations.</p> <p><b>2. be informed</b> Taxpayer is expected to be aware of his compliance obligations under tax law and seek help of department if needed.</p> <p><b>3. keep accurate records</b> Taxpayer is expected to keep accurate records required as per law.</p>	<p><b>4. know what the representative does on his behalf</b> Taxpayer is expected to know what information and submissions are made by his authorised representative.</p> <p><b>5. respond in time</b> Taxpayer is expected to make submissions as per tax law in timely manner.</p> <p><b>6. pay in time</b> Taxpayer is expected to pay amount due as per law in a timely manner.</p>

Taxpayers can approach the Taxpayers' Charter Cell under Principal Chief Commissioner of Income tax in each Zone for compliance to this charter. For more information, visit <http://incometaxindia.gov.in>

- This **restricts survey** under Section 133A to only the investigative wing of the I-T department and the Commissionerates of TDS.
- As per the existing rules, any I-T officer could enter any place under his/her jurisdiction, to inspect books of accounts and other documents.
- The Centre restricting such intrusive actions (raids) will provide relief to both individual as well as corporate tax payers.
- The number of raids and the resultant tax demands has risen quite sharply in recent times.
- Tax demands amounting to ₹ 11 trillion had been raised towards the end of March 2019, of which 86% were under dispute.

## 8.10 RBI's Annual Report

### Why in news?

The Reserve Bank of India (RBI) has released its annual report.

### What are RBI's assessments?

- The RBI's assessment of the economic landscape and its prognosis for near-term prospects posit a stark picture of:
  1. Demand hollowed out by the severe shock to private consumption,
  2. Public finances strained by the imperative of funding mitigation measures,
  3. Anaemic appetite for investment among corporates and
  4. Credit-flow-impeding risk aversion among bankers.
- The RBI said that the Covid-19-induced economic contraction is almost certain to extend through the July-September period.
- Reimposition of lockdowns in the country in July and August damped the tentative revival in momentum seen in the preceding two months.
- The RBI said that several recent high-frequency indicators pointed to an unprecedented retrenchment in activity.
- It noted that the consumption which survived the shock was now manifesting.
- It said so as essential spending with services including transport and hospitality are almost completely eviscerated.

### What would the governments do?

- The Central government has attempted 'pandemic proofing' demand by increasing its net revenue expenditure by a third in the first quarter.
- However, it is likely to find itself strapped for resources in the coming months.
- So, it would have little leeway to continue to undergird momentum.
- States are expected to find their finances so tightly squeezed as to have to cut capital spending.

### What does the RBI suggest?

- The RBI suggests that the government should help crowd in private investment through targeted public investment.
- This public investment could be funded by monetising assets in steel, coal, power, land and railways.
- But the private companies are too highly in debt and keen to use gains from the government's corporate tax rate cut to repay loans.
- So, it is hard to see the government raising much out of its privatisation efforts.

### What could be done?

- The Centre may opt to marshal its meagre resources more prudently.

- It should wait for the curve of infections to start flattening before committing to any further stimulus spending.
- A revival will ensue only once consumers regain confidence to go out and spend.

## 8.11 GST Arrears

### Why in news?

The Goods and Services Tax (GST) Council has deepened the Centre-States rift over the issue of GST compensation arrears due to them.

### What did the Centre propose?

- An estimated figure of ₹ 3 lakh crore was due as compensation to States for falling short of the 14% annual target under the GST Act.
- The Centre has now proposed that it give only ₹ 1.62 lakh crore.

### How did the Centre jeopardise the GST system's future?

- There is no argument against the principle that a 14% annual increase was never really on the cards this year, after the Covid-19 outbreak.
- But, this 14% increase was added as compensation to the States for transiting into the new system and forgoing their revenue gathering powers.
- The Centre did not negotiate with the States regarding the transition to a new compensation arrangement.
- By doing so, the Centre has jeopardised the future of the GST system.

### What is the Centre's proposal regarding the assistance to States?

- The Centre said that it will assist the States in getting loans at G-Sec rates.
- This will give them two 'options' on the extent of loan that they can take.
- This proposal does not seem to have gone down well with some States.

### How did the States react?

- With the Centre being perceived as high-handed, the Chief Minister of Maharashtra has said that it is perhaps time to exit the GST.
- Punjab, Chhattisgarh and Puducherry have voiced their displeasure.
- But, the GST came into being as a showpiece of cooperative federalism.
- It took a Constitutional Amendment to create the GST Council and a new indirect tax architecture.
- All these efforts were taken to usher simplicity and uniformity in indirect taxes across regions. These efforts should not go in vain.

### What could the Centre do?

- The Centre can prolong the compensation period beyond July 2022.
- It can offer a greater share of the revenues (the SGST part) to the States.
- It is important to bear in mind that the States' finances are under stress due to Covid-related welfare commitments.
- While States have to bear some of the burden, the Centre cannot absolve itself of its constitutional commitment.
- The Centre needs to invest time and energy in 'statecraft' - in reaching across to States and bridging an alarming trust deficit.
- It should reconsider 'conditionalities' for the States to exceed the FRBM limit by more than 0.5% of the SGDP.
- The GST Council should arrest the imminent slide into chaos in these unprecedented times.

## 9. INFRASTRUCTURE

### 9.1 Real-Estate Investment Trust

#### Why in news?

The country's second real-estate investment trust (REIT), Mindspace Business Parks, came out with a public issue recently.

#### What is the REIT?

- Office REITs are investment vehicles.
- They own, operate and manage a portfolio of income-generating office properties in order to generate regular returns for investors.
- It is regulated by the Securities and Exchange Board of India (SEBI).
- REITs are usually commercial properties that are already generating rental income.
- For now, in India, there are only two REITs (Embassy and Mindspace), predominantly owning office properties.

#### How does it work?

- The working of office REITs are similar to mutual funds where money is pooled from a number of investors.
- The only difference is that, in REITs, they invest in rent-generating properties.
- REITs come up with an initial public offer to be listed on the exchanges.
- While retail investors can buy/sell REITs in the secondary market, they do have minimum investment requirements of ₹ 50,000 (200 units).
- This was reduced from ₹ 2 lakh (800 units) by SEBI to encourage investor participation.

#### What is its structure?

- A REIT has a three-tier structure.
  1. There is a sponsor, who sets up the REIT.
  2. There is a fund management company, which is responsible for selecting and operating the properties.
  3. There is a **trustee**, who ensures that the money is managed in the interest of unit-holders.

#### Why is it important?

- For those investors looking to diversify a portion of their portfolio into real-estate, REITs are an option.
- According to SEBI guidelines, REITs are to mandatorily distribute 90% of their income to unit-holders.
- The distribution could be in the form of dividend or interest income or a combination.
- REIT earns income by way of capital appreciation at the time of sale of any of its underlying properties, thereby boosting investors' returns.
- 80% of the value of a REIT should be invested in completed and rent-generating properties, ensuring visibility in returns for investors.

#### What is the risk?

- REITs come with their own risks and investors should be wary.
- Both rent and capital appreciation from a REIT depends on location, infrastructure and industrial development of properties held by it.
- While this risk is mitigated with properties diversified across locations, challenges remain.
- With many working from home since the outbreak of the pandemic, office properties could face a significant slowdown in demand.
- Delays in construction of commercial properties and delays in leasing decisions could impact the REIT's revenue generation for the next 2-3 quarters.

- However, given the lack of quality office space in the country, some of these uncertainties could be temporary.
- Many real-estate players facing liquidity crunch in the last 2-3 years, mostly due to low demand.
- So, the rent-generating properties can be monetised by the developers in the form of REITs.
- They can generate a steady income stream for the investors.
- As long as the pandemic rages, even REITs are not immune.

## 10. AGRICULTURE

### 10.1 Ban on Pesticides

#### Why in news?

The Centre has issued a draft order banning the manufacture and sale of pesticides on grounds of the grave risk they pose to humans and animals.

#### What pesticides would be banned?

- The order may ban 27 widely-used pesticides.
- This would include 12 insecticides, 8 fungicides and 7 herbicides.
- A large number of countries have already banned these pesticides and, experts say India should too.

#### How much pesticide is used in Punjab?

- Punjab has just 1.53% of the country's area.
- But, its pesticide usage stood at 9.2% of the country in 2018-19 and over 8% in 2019-20.
- In Punjab, chemical pesticide consumption is said to be decreasing, it is still continuous and excessive.
- It stands after Uttar Pradesh and Maharashtra in pesticide usage, but both states have a 6-times larger area as compared to Punjab.
- Punjab has started using bio pesticides and its usage has increased from 136 MT in 2014-15 to 286 MT in 2019-20.
- There is still a wide variety of pesticides available to farmers for various uses.
- Punjab tops the country in terms of per hectare usage of fertilisers.

#### On which crops are these 27 pesticides mainly used?

- These pesticides are used on almost all crops - rice, wheat, cotton, oilseeds, various vegetables, fruit etc.
- Punjab can do away with these pesticides, though there are no other alternatives available at present for around 9 of the 27 pesticides.

#### What are the alternatives available to farmers?

- There are three types of alternatives,
  1. Integrated Pest Management (IPM) techniques, which are using cost-effective mechanical methods,
  2. Bio-pesticides, and
  3. Molecular target-specific low toxicity pesticides, usage of which is extremely low, and which are a little more expensive.
- Neem-based biopesticides, which are environment-friendly, is very effective cost-wise and yield-wise.
- It's bitter taste keeps pests away from plants.
- Moreover, the right kind of seeds and precise irrigation can help farmers keep the pests away.
- Both PAU and Punjab agriculture department have been encouraging IPM extensively.





### **Which methods are used to control pests under IPM?**

- Under IPM, simple hand-picking, light traps, pheromone traps, sticky traps, glue boards etc. are used to control pests.
- IPM aims to protect soil and the environment from poisonous elements
- Light trap - Electric bulb is switched on during night time for an hour close to the fields.
- The pests get attracted to the light in the night and then lights are switched it off.
- All the attracted pests fall into the diesel/petrol mixed water and get killed.
- Pheromone traps - They are meant for mating disruption, for suppression of pest population, and mass trapping.
- Such traps slowly release synthetic attractants which help in the detection of a single species of insect in the fields.
- Seed shelters - Farmers attract birds by installing seed shelters in the fields and such birds consume the harmful insects in fields.
- IPM, heavy reliance needs to be placed upon 'monitoring and surveillance' of the crops and fields.

### **How does regular monitoring & surveillance help against pest attacks?**

- It can make farmers aware of the presence of pests and insects in the field at an early stage.
- This will help them arrest the problem before it crosses the Economic Threshold Level (ETL) of the presence of these pests.
- Punjab had seen the lowest cotton productivity in 2015 when whitefly had attacked the cotton crop on a large area.
- But there is a 30% decrease usage of pesticides in the cotton crop from 2016 to date.
- There is an increase in its productivity to 756 kg lint per hectare in 2016, a year after the devastating loss of the cotton crop, and 800 kg in 2019.

### **How else is less usage of pesticides beneficial?**

- Instead of spraying herbicides to clear weeds, farmers can hire manual labour to remove it.
- This will save their fields from chemical sprays.
- Also, the money spent on buying harmful pesticides can be diverted towards paying the labour engaged in handpicking such weeds.
- Farmers use herbicides to clean weeds from their fields and the area around the fields to keep pests away.

## **10.2 Organic Matter in Soil**

### **What is the issue?**

- Punjab soils are degraded and depleted because organic matter is quite below (.5-.2%).
- There is a serious need to increase the organic matter of the soil.

### **Why is there low organic matter in the Punjab's soil?**

- Punjab is the highest consumer of chemical fertilisers per hectare in the country.
- It is also the third highest pesticide consumer while accounting for just 1.53% of the total area of the country.
- In Punjab, farmers usually plant three crops a year.
- This means that the land gets disturbed every time they till, leading to a decrease in organic matter in the soil.

### **What is Organic Matter?**

- Organic matter (OM) consists of plants, animal material which gets converted into humus after decomposing.
- It improves soil quality and fertility.
- It supplies nutrients, increases water-holding capacity and prevents soil erosion.





- This in turn needs lesser irrigation and helps arrest floods by allowing increased infiltration into the soil.
- Good OM also leads to proper utilisation of fertilisers put in the fields.

#### **What is the ideal OM content in soil?**

- Punjab Agricultural University (PAU) said that .75% organic matter in the soil is sufficient.
- Punjab agriculture department said it should be at least 1%.
- International standards suggest having around 2-3% in the soil.

#### **How much OM is present in the Punjab soil?**

- OM in the soil was .33% during the Green Revolution in 1966-67, which has increased to .51% at present.
- In the past over 50 years that have elapsed between the Green Revolution, the state registered a .18% increase of organic matter (OM) in its soil.
- Punjab's soil falls in the 'medium' category as far as availability of OM is concerned.

#### **How much time does it take to increase OM in the Punjab soil?**

- It can be increased by up to .50-1% in a decade's time, even though the increase was between .3 and .11% in the past five decades.
- This requires the collective efforts of Punjab government, experts and farmers.
- PAU had done experiments in their fields where they had added crop residues in the fields and had also done green manuring.
- As a result, the OM has increased from .42% a decade back to .67% now in their fields.
- The same can be replicated across Punjab.

#### **What steps can be taken to increase OM in soil in Punjab?**

- By tilling the land again and again, organic matter gets disturbed and decreases.
- Farmers can opt for two crops a year and grow green manure as a third crop.
- The green manure can be ploughed into the field to improve soil fertility.
- The best time to grow it is after wheat harvesting in April, and then ploughing it in the fields before paddy sowing in June.
- Putting cow dung in the fields, incorporating paddy and wheat stubble in soil, growing pulses are methods to enhance it.

#### **Why is increasing OM important for Punjab?**

- Punjab has already witnessed high productivity in several crops.
- But, enhancing this further with existing land holdings is possible when soil is enriched.
- If OM in the Punjab soil is enhanced, the fertility of the soil of low production areas can be enhanced to bring it at par with soil giving the highest production.
- Fertility of soil with high productivity can also be enhanced further by increasing organic matter to around 1%.

### **10.3 PMFBY Needs a Relook**

#### **What is the issue?**

- Five years after its inception in 2016-17, the Pradhan Mantri Fasal Bima Yojana (PMFBY) has run into rough weather.
- PMFBY needs a relook, as many States are opting out of it.

#### **What is PMFBY?**

- PMFBY is a flagship crop insurance scheme, launched in 2016.
- It is aimed at reducing agricultural distress at instances of monsoon fluctuations induced price risks.

- It fixes a uniform premium of just 2% to be paid by farmers for Kharif crops and 1.5% for Rabi crops.
- The premium for annual commercial and horticultural crops will be 5%.

### Why States are opting out?

- Farmers are dissatisfied with both the level of compensation and delays in settlement.
- Insurance companies have shown no interest in bidding for clusters that are prone to crop loss.
- States (Bihar, West Bengal and Andhra Pradesh, Telangana, Jharkhand and now Gujarat) are opting out of the scheme.
- These States are launching their own versions.
- They couldn't deal with a situation where these companies compensate farmers less than the premium they have collected from them and the Centre.

### What would be the impact, if not opted out?

- The sums can be serious for the States, given the current levels of fiscal stress.
- If this amount is not to benefit farmers directly, States run the risk of being accused of aiding insurance companies rather than farmers.

### What did the companies do?

- In Maharashtra's Beed cluster, farmers are up against the State government and insurance companies for not settling earlier claims.
- The insurance companies have decided to stay out of bids for this region for the current season.
- It is in the nature of the insurance business for entities to make money when crop failures are low and vice-versa.
- Over the last three years, insurance companies have collectively paid claims amounting to about 85% of the premium collected.
- There is a troublesome issue of 50% of farmers' insurance dues being funnelled into less than 50 districts.
- This raises questions on whether the scheme is being gamed by a few.

### What needs to be done?

- The task ahead is to sweeten the deal for farmers and insurance companies.
- **Clusters** - The States are struggling to find insurers for its clusters.
- Insurance companies should bid for a cluster for about 3 years.
- By this, they get a better chance to handle both good and bad years.
- **Bids** - The bids should be closed before the onset of the kharif/rabi season.
- At present, bids remain open even as the monsoon is in progress.
- As a result, farmers may feel persuaded to buy an insurance policy when the weather is adverse, even as the insurer wants to exit the cluster.
- **Change of product** - The farmer is not enthused by crop insurance despite the 95-98% subsidy on premium.
- So, it means that the product per se needs improvement.
- Farmers deserve a better choice of insurance products to meet the specifics of each crop or region.
- For this, insurance companies should be offered more freedom to operate.
- **Beed 'model'** - In this model, a company assumes liability only up to 110% of the premium collected or shares gains in a good year with the State government.
- For now, this model can emerge as a way out of the current mess.

## 11. ENVIRONMENT

### 11.1 Clause 22 of EIA Draft

#### Why in news?

The Clause 22 of the Environmental Impact Assessment (EIA) 2020 draft notification is one of its central issues.

#### What is EIA?

- EIA is the process or study which predicts the effect of a proposed industrial/infrastructural project on the environment.
- It prevents the proposed activity/project from being approved without proper oversight or taking adverse consequences into account
- EIA regulation is one of the few tools that we have to ensure that we are the true trustees of our natural environment.

#### What is the Clause 22?

- The Ministry of Environment, Forests, and Climate Change released this 2020 draft notification.
- Clause 22 of the draft sets out a process for **post-hoc legalisation** of projects that start construction and/or operation prior to receiving an environmental clearance.

#### What are the EIA regulatory violations?

- **History** - The EIA regulation was first introduced in 1994 through a notification under the Environmental Protection Act, 1986.
- It was significantly amended in 2006, superseding the 1994 notification.
- The draft EIA 2020 notification is an attempt to remake many provisions of the 2006 notification.
- **Violation** - Dealing with projects that fail to obtain prior clearance has been a difficult issue for the regulator.
- This because the project proponents could cite sunk investments if the penalty for violation involves shutting down the project.
- On the other hand, post-hoc legalisation of such violations could lead to perverse incentives for the industry.
- This proposal would render the entire regulation redundant.

#### What is the proposed legalisation process?

- The draft has laid out a process that violators should follow in order to continue their operations legally.
- The Appraisal Committee would assess whether the project can be run sustainably under compliance of environmental norms with adequate environmental safeguards.
- If the answer is no, it can recommend closure of the project.
- If the answer is yes, it will require the project proponent to assess the ecological damage and prepare a remediation plan.
- It will want the project proponent to prepare a 'natural and community resource augmentation plan', along with an EIA report.
- The project proponent is needed to submit a bank guarantee, equivalent to the cost of the remediation plan, prior to receiving an environmental clearance.
- In addition, there are monetary penalties specified for each day the violation occurs.

#### What is the concern?

- According to Clause 22, only the violators themselves or a regulatory or governmental authority can bring the violation to notice.
- It is not clear from the notification if any other stakeholders, like interested individuals, have a legal basis to report violations.

### What could be done?

- The Ministry could constitute an official Committee.
- This Committee could conduct meetings with various stakeholder groups like individuals, civil society organisations, etc.
- It could make recommendations to the Ministry on the appropriateness of various amendments.
- Based on these recommendations, the Ministry could finalise the new notification.
- Such participatory processes would generate greater legitimacy for the regulations, potentially reducing conflict during implementation.

## 11.2 Plastic Pollution in the Atlantic Ocean

### Why in news?

A new study has estimated the amount of microplastic pollution in the Atlantic Ocean.

### What are microplastics?

- Microplastics are plastic debris smaller than 5mm in length.
- They come from a variety of sources.
- One of the sources is when larger pieces of plastic degrade into smaller pieces, which are difficult to detect.

### How does plastic reach the oceans?

- There are multiple pathways, which includes,
  1. Riverine and atmospheric transport from coastal and inland areas,
  2. Illegal dumping activities and
  3. Direct-at-sea littering from shipping, fishing and aquaculture activities.
- According to the International Union for Conservation of Nature, at least 8 million tonnes of plastic end up in the oceans every year.
- This makes up about 80% of all marine debris from surface waters to deep-sea sediments.

### Why is plastic pollution especially harmful?

- The durability of plastic makes it difficult to decompose depending on the type of plastic and where it has been dumped.
- In the oceans, plastic pollution impacts marine life, ocean health, coastal tourism and even human health.

### How does it impact the marine life?

- Over the past few years, all sorts of marine animals such as whales, seabirds and turtles unknowingly ingest plastic and often suffocate.
- But bigger marine species tend to get more attention because of the amounts of debris they can hold up.

### How does it impact humans?

- For humans, marine plastic pollution is harmful if it reaches the food chain.
- A 2019 study found that an average person eats at least 50,000 particles of microplastic each year.
- Consumption of plastic by humans is harmful since several chemicals that are used to produce plastics can be carcinogenic.
- Even so, exact risks of the microplastics on the environment and human health are not clearly known.

### What does the study?

- **Study** - In the study, scientists studied pollution of the Atlantic Ocean caused by three types of plastics: polyethylene, polypropylene, and polystyrene.
- These plastics, most commonly used for packaging, were suspended in the top 200 metres of the ocean.

- **Smaller plastic particles** - They are a hazard as it is easier for them to sink to greater ocean depths.
- Some marine species such as zooplanktons show preferential ingestion of smaller particles.
- This makes them easier to enter the food chain and their conversion to fast-sinking faecal pellets.
- **Underestimated** - Scientists say that pollution caused by microplastics has been “severely” underestimated in previous assessments.
- They said that a considerable amount of small microplastics are lost from the surface and are stored in ocean interiors.
- **Amount** - The study have estimated that the Atlantic waters could hold 17-47 million tonnes of plastic waste.
- This estimation is based on the trends of plastic waste generation from 1950-2015.
- This is also based on the fact that the Atlantic Ocean has received 0.3-0.8% of the global plastic waste for 65 years.

### 11.3 BIS' Draft Standard

#### Why in news?

The Bureau of Indian Standards (BIS) has prepared a draft standard for the supply system of piped drinking water.

#### What is the draft?

- The draft is labelled as ‘Drinking water supply quality management system - requirements for piped drinking water supply service’.
- It has been prepared by the BIS’ Public Drinking Water Supply Services Sectional Committee.
- It has been developed keeping in view the Centre’s Jal Jeevan Mission.
- [Jal Jeevan Mission wants to provide safe and adequate drinking water to all rural households by 2024 through tap connections.]

#### What is the focus of the draft?

- The draft **outlines the process of water supply**, from raw water sources to household taps.
- The standard is expected to make the process of piped water supply more uniform, especially in rural and underdeveloped areas of the country.
- At present, the standard is not expected to be made mandatory.
- After the draft is notified, states or water utilities planning to implement the standard can approach BIS for a license.

#### What does the draft say?

- It **outlines the requirements** for a water supplier or utility.
- These requirements are regarding how they should establish, operate, maintain and improve their piped drinking water supply service.
- The process begins with identification of a water source.
- The source can either be groundwater or surface water sources such as rivers, streams or reservoirs.
- It states that after treating, the drinking water should conform to the BIS’ Indian Standard (IS) 10500.
- [IS 10500 outlines the acceptable limit of various substances in drinking water, like heavy metals such as arsenic.
- It also sets the limits on parameters like the pH value of water, its turbidity, the total dissolved solids in it, and the colour and odour.]
- The draft standard also contains **guidelines for top management** of the water utility.
- These guidelines are in terms of accountability and customer focus, establishing a quality policy for their service, monitoring the quality of water released to people, and conducting a water audit.

### What does the draft say about the water supply process?

- **Source identification** - The supply system as outlined in the draft should begin with the identification of a raw water source.
- Water should then be pumped into the treatment plant and treated to achieve the acceptable drinking standards.
- After the water is released from the plant, there should be,
  1. Reservoirs in the distribution system for storage of this water, and
  2. Disinfection facilities to get rid of contamination at any stage of distribution.
- **Accessories** - The draft says that, if necessary, the pumping stations could be provided with accessories shall be installed throughout the distribution system.
- These accessories shall be used as control devices and for water audit.
- **Automation** - The draft reads that the emphasis should be given to operate the systems on automation mode.
- **DMA** - The document also states that the concept of district metering area (DMA) should be adopted where possible.
- DMA would control the leakages in the water network, which is divided into a number of sectors.
- Here, flow meters are installed to detect leaks.
- **Water audit** - The water supplier/utility may provide bulk water meters in the water distribution system to ensure water audit.
- However, the provisions should be made for domestic meters also.
- It shall ensure that the consumers do not have direct access to the meters to avoid possible tampering of the meters.
- It reads that the provision should be made to have automatic meters at household level which shall support in water audit.
- **Quality assurance** - The draft mentions that water should be sampled at the treatment plant every four hours against quality parameters.
- In the distribution system, the sampling should be done every 8 hours at the water reservoirs.
- Random sampling should also be done at household levels.

### What's there in the draft in addition to the water supply process?

- It states that a water audit should be conducted on a quarterly basis.
- [Water audit is a calculation of the amount of water put into distribution against the amount that is consumed.]
- It says that effort should be made by the water agency to bring down the water loss up to 15% of the total water supplied in the system.
- The water utilities are required to conduct surveys among consumers and obtain feedback on their service as per the draft.

## 12. SCIENCE & TECHNOLOGY

### 12.1 National Digital Health Mission (NDHM)

#### Why in news?

The National Digital Health Mission (NDHM) was announced by the Prime Minister on Independence Day.

#### What is the NDHM?

- The NDHM is part of the National Digital Health Blueprint (NDHB).



- [NDHB aims to enhance the healthcare delivery by setting up a core e-health database of international standards.]
- It allows patients to have control over their health data.]
- The NDHM envisages creating a national health ID for every Indian.
- It wants to make use technology to streamline processes such as record-keeping, sharing of healthcare data and similar healthcare processes.
- This well-timed move will help citizens make informed decisions on treatments.

#### Is the fund allocated enough?

- The NDHM is supposed to cover all government health programmes to begin with.
- This will be a huge exercise and would require more resources than the currently allocated ₹ 144 crore.
- This will make private participation a necessity given the strained finances of the Centre.

#### What is the potential of this mission?

- It has the potential to transform the healthcare sector.
- It can make the healthcare sector more technologically advanced, inclusive and delivery-driven.

#### What is the further kind of data that should be integrated?

- Such centralised data, combined with real-time Big Data analytics, can become a surveillance tool.
- Healthcare **data from wearable devices** are getting mainstreamed.
- This data is used by the healthcare providers, doctors and patients for diagnosis, if not for treatment.
- So, the NDHM should spell out its stand on collecting such data from individuals and integrating it with the unique health ID.

#### What are the challenges?

- The NDHM gives rise to logistical challenges and privacy concerns.
- It involves government collaboration between hospitals in both public as well as private sectors, labs, insurance firms, pharmacies and telemedicine.
- So, there is a **risk of exposing** individual healthcare data to hacking and commercial misuse.
- Although the NDHM is now a voluntary exercise, it could become mandatory for availing government health services.
- In such a context, ensuring the **safety** of individual health data becomes paramount.

#### What could be done?

- The government must gain the **confidence of all stakeholders**, including rights groups, before going ahead.
- There should be more **clarity on questions** such as:
  1. Who will maintain and manage the centralised repository of citizen's health data;
  2. Who will own the data — the individual or the state;
  3. Whether individuals can transfer the data between service providers and
  4. Whether the individual has the right to erase irrelevant healthcare data and maintain 'his or her right to be forgotten'.
- Insurance companies should not be allowed to misuse personal data.
- The NDHM must be in **compliance** with the global best practices on data privacy, like the EU's General Data Protection Regulation.
- The potential and pitfalls of digitisation of health data must be appreciated before moving ahead.



## PRELIM BITS

### 13. HISTORY, ART & CULTURE

#### *Panel to conserve Edakkal Caves*

- The Edakkal Caves are located on the Ambukuthi Hills (a part of the Western Ghats) on the Mysore Plateau, in Wayanad district of Kerala. It is located 1,200m above the sea level.
- It has engravings from the late Neolithic period, the only evidence for the existence of true Neolithic Culture in Kerala.
- Some of the carvings in the caves date back to 6000 BC and hence, even sound can impact them.
- The neolithic petroglyphs on the cave walls still await protection from illegal constructions, mining, and urbanisation.
- Authorities had been looking to get the caves labelled as UNESCO World Heritage Site to help conserve the site.
- Recently government has constituted a nine-member expert committee to conduct a detailed study on the present state of the Edakkal caves.
- The committee would consist of experts in archaeology, history, geology, rock mechanics, and conservation.



#### *Nuakhai Juhar*

- Nuakhai Juhar is an agricultural festival, also called Nuakhai Parab or Nuakahi Bhetghat.
- It is adopted from the tribal communities of western Odisha, which is celebrated to welcome the new crop of the season.
- Nuakhai festival traces its origin to the Vedic period in Panchyajna.
- One among them was Pralambana yajna which means the cutting of new crops and offering them to the mother goddess.
- Oral tradition of this festival dates back to the 12th century A.D. when this festival was celebrated by Chauvan Raja Ramai Deo, Bolangir district of Odisha.
- The festival is widely celebrated in Western Odisha, southern Chhattisgarh and adjoining areas of Simdega (Jharkhand).
- Its coastal counterpart is Nabanna, observed in Coastal Odisha.
- Festive activities include farmers offer the first produce from their lands to Goddess Samaleswari, the famous 'Mother Goddess' of Sambalpur district of Odisha.
- Sambalpuri dance forms like Rasarkeli and Dalkhai can be witnessed during the festival.

#### *Dalkhai Folk Dance*

- Dalkhai is the most popular folk dance of Odisha.
- Mainly the theme of this dance is Radha and Krishna, Ramayana, Mahabharata, etc.
- It is known as Dalkhai because in the beginning and end of every stanza men shout the word 'Dalkhai Bo!', it is used as an address to a girlfriend.
- It is performed in various festivals such as Bhaijiuntia, Phagun Puni, Nuakhai, etc.

#### *Behrupiyas*

- Behrupiya festival is a traditional Indian style of street theatre and takes place every year in different locations-



1. Delhi,
2. Ahmedabad,
3. Udaipur,
4. Jaipur,
5. Kumbh,
6. Muzaffarnagar and others.

- Behrupiyas are impersonators, mostly known to perform in villages and markets all over India.
- They put on various costumes to play figures from mythology, folklore and traditional stories.
- They assisted in circulating, transmitting and publicising the various knowledge forms in the popular domain of Samaj, the people.
- The vibrant tradition of Ramlila can also be seen as an extension of this practice which continues even today.
- Arthashastra makes a mention of religious processions in the Mauryan times where artistes dressed as gods and were taken out in tableaux all around the kingdom.
- Behrupiyas are also said to have helped freedom fighters during the struggle for Independence.

### **Chora Museum**

- Chora Museum in Turkey was built initially as a church in 534 AD, during the early Byzantine period.
- It is also known as Kariye in Turkish and the mediaeval Church of the Holy Saviour in Chora.
- In the 11th century, its internal walls, pillars and domes were covered with mosaics and frescoes showing scenes from biblical stories.
- After the conquest of Constantinople (capital city of the Roman Empire) by the Ottomans (1453), the church was seized and turned into a mosque in 1511.
- In 1945, it was converted into a museum.
- Recently, the Turkish President reconverted the Chora museum into a mosque.
- This is the second museum after Hagia Sophia to be converted into a mosque.

### **Queen Velu Nachiar**

- She was the princess of Ramanathapuram and the only child of Raja Vijaya ragunatha Sethupathy of the Ramnad kingdom.
- Velu Nachiar was married to Muthu Vaduganatha Peria Odaya Thevar a native ruler of Sivaganga.
- In 1772, there was a conflict with king Muthu and Arcot rulers who were the allies of British.
- British forces swept in Muthu's kingdom and massacred all of his forces including King Muthu.
- Velu Nachiar determined to avenge her husband's death waged a heroic war against the British.
- She had the support of the Marudu Brothers, fierce warlords who stood by her, along with a band of loyalists.
- Velu Nachiar was protected by Udaiyal, the leader of her bodyguards.
- The British captured her and tortured her to get her to reveal the whereabouts of Velu Nachiar.
- Udaiyal did not give in, and was killed.
- The brave Velu raised one more battalion of women and named it Udaiyal Regiment.
- It was commanded by the fiercely loyal Kuyili.
- Velu Nachiar met Haidar Ali, the king of Mysore, and convinced him to help her.
- Haider Ali sent 5,000 men to help Velu Nachiar to get back Sivaganga.
- But, by now, Sivaganga had been handed over to the British, and they had fortified the place.



- Kuyili smuggled some female guerillas in, and while they held the British at bay, she entered the ammunition store, and set it on fire. She died in the process.
- Velu Nachiar became Queen of Sivaganga and ruled for ten years.
- The Government of India has released a stamp in her honour in 2008.

### ***Benjamin Guy Horniman***

- Benjamin Horniman was a British editor of a newspaper called “The Bombay Chronicle”.
- The Bombay Chronicle was begun by Sir Pherozeshah Mehta.
- As its editor, Horniman spoke up against colonialism and about Indian nationalist causes.
- He defied the censorship of British after the Jallianwala Bagh incident in 1919.
- He smuggled a first-hand report of the massacre out of Punjab and published it, following the incident he was deported.
- He continued to protest against the cruelties of the British rule in India in all his writings from England.
- In 1926, he exploited a loophole in his deportation order and returned to India to continue his work.
- The Horniman Circle Gardens is a large park in South Mumbai, got its name in honor of an Englishman who showed Indians the power of a free press.

### ***Geo-Heritage Monument***

- Geo-heritage refers to the geological features which are inherently or culturally significant offering insight to earth’s evolution or history to earth science or that can be utilized for education.
- Geological Survey of India (GSI) is the parent body which is making efforts towards identification and protection of geo-heritage sites.

### ***Abanindranath Tagore***

- Abanindranath Tagore was an Indian painter who transformed the post-Renaissance academic realism.
- He founded the Indian Society of Oriental Art and also founded the Bengal School of Art.
- He promoted a style based on a modern interpretation of traditional Rajput and Moghul art.
- His sole aim for establishing the school was to counter the English influence on Indian artists.
- National Gallery of Modern Art has decided organize the virtual tour titled “The Great Maestro: Abanindranath Tagore”, to commemorate his 150th Birth Anniversary.

### ***Ebrahim Alkazi***

- Recently Ebrahim Alkazi, the longest-serving director of the National School of Drama passed away.
- Ebrahim Alkazi is remembered as the father of Indian theatre.
- He revolutionized Indian theatre.
- He was the first person to bring regional language plays to NSD.
- He was the first recipient of Roopwedh Pratishthan's the Tanvir Award (2004) for lifetime contribution to the theatre.
- He received the Padma Shri, Padma Bhushan and Padma Vibhushan.
- He received Sangeet Natak Akademi Fellowship for lifetime contribution to theatre.

### ***Urdu Language***

- Urdu is a major language of South Asia, It is spoken in countries including India, Pakistan, Afghanistan, Bangladesh, and Nepal.



- Both Urdu and Hindi belong to the new Indo-Aryan group sharing the same Indic base.
- Urdu is one of the languages mentioned in the 8th Schedule to the Constitution.
- Urdu had developed and flourished in Delhi during the period of 'Delhi Sultanate' from 12th to 16th century.
- Then during the period of 'Mughal Empire' in Delhi from 16th century to 19th century when several court poets used this language in their great poetry and writings.
- Its first major folk poet Amir Khusrau (1253-1325), composed dohas (couplets) and riddles in the newly-formed speech, then called Hindavi.
- When Delhi Sultanate and then Mughal Empire spread in the Deccan, Urdu spread in southern states.
- The language derived even local words from the local languages of those states and developed as a 'Dakhni' language which was a bit distinctive of Urdu language in the North.
- The divide between Urdu and Hindi occurred under the colonial impact.
- Hindi and Urdu got split along religious lines with Hindi in Nagari script becoming identified with Hindus, and Urdu in Persian script identified with Muslims.
- World Urdu Conference 2020 was held recently by the National Council for Promotion of Urdu Language (NCPUL)

#### **National Council for Promotion of Urdu Language**

- National Council for Promotion of Urdu Language started functioning as an autonomous body in 1996, under the Union Ministry of Education.
- It is the National Nodal Agency for Promotion of Urdu.
- NCPUL has also been assigned the responsibility of promotion of Arabic and Persian.
- NCPUL would advise the Government on issues connected with Urdu language as may be referred to it.

## **14. GEOGRAPHY**

### ***Depsang Plains***

- Depsang Plains are located at the Line of Actual Control that separates the Indian and Chinese controlled regions.
- The Chinese Army occupied most of the plains in 1962.
- India controls the western portion of the plains as part of Ladakh, whereas the eastern portion is part of the Aksai Chin region, which is controlled by China and claimed by India.
- Depsang is also close to the Karakoram Pass, overlooking the very strategic Saltoro Ridge and Siachen glacier.
- Daulat Beg Oldie (DBO) is a historic campsite and current military base located in Ladakh, on an ancient trade route connecting Ladakh to the Tarim Basin.
- Recently military level strategic talks were held about the region between India and China at the Daulat Beg Oldie
- This is the first Major General-level talks since the violent clash at Galwan.

### ***Indus Water Treaty***

- Indus system comprises of main Indus River, Jhelum, Chenab, Ravi, Beas and Sutlej.
- The basin is mainly shared by India and Pakistan with a small share for China and Afghanistan.
- Under the treaty signed between India and Pakistan in 1960, all the waters of three rivers, namely Ravi, Sutlej and Beas (Eastern Rivers) were allocated to India for exclusive use.
- While, the waters of Western rivers - Indus, Jhelum, and Chenab were allocated to Pakistan except for specified domestic, non-consumptive and agricultural use permitted to India as provided in the Treaty.



- India has also been given the right to generate hydroelectricity through run of the river (RoR) projects on the Western Rivers which, subject to specific criteria for design and operation is unrestricted.
- Recently India has refused a request by Pakistan to hold a meeting on issues around IWT at the Attari checkpoint border.
- This is in concern with the governing the technical aspects of the construction of the Ratle run-of-the-river (RoR) project on the Chenab in the Kishtwar district of Jammu and Kashmir.
- India has called for the appointment of a 'neutral' party while Pakistan favours a Court of Arbitration to agree upon a final resolution for the project.
- IWT meetings are led by Indus Water Commissioners from both countries and discuss a range of issues on construction of dams and hydropower projects concerning the Indus river system.

### ***Indian Dams in Indus River System***

- To utilize the waters of the Eastern rivers which have been allocated to India for exclusive use, India has constructed following dams:
  1. Bhakra Dam on Satluj,
  2. Pong and Pandoh Dam on Beas and
  3. Thein (Ranjit Sagar) on Ravi.
  4. Beas-Sutlej Link,
  5. Madhopur-Beas Link,
  6. Indira Gandhi Nahar Project etc,
- These dams have helped India utilize nearly entire share (95 %) of waters of Eastern Rivers.

### ***Barakah Nuclear Power Plant***

- Barakah is the Arab world's first nuclear reactor started by UAE.
- Barakah, means "blessing" in Arabic, it was built by a consortium led by the Korea Electric Power Corporation.
- Recently the power plant achieved its criticality, the first step towards power production.
- **Criticality of a nuclear power plant** - A nuclear reactor is said to be critical when the nuclear fuel inside a reactor sustains a fission chain reaction.
- Each fission reaction releases a sufficient number of neutrons to sustain a series of reactions.
- Heat is produced in the event, which is used to generate steam that spins a turbine to create electricity.

### ***Lonar Lake***

- Lonar Lake is a saline and alkaline lake located in Maharashtra.
- It was created by an asteroid collision with earth impact during the Pleistocene Epoch.
- It is one of the four known, hyper-velocity, impact craters in basaltic rock anywhere on Earth.
- The other three basaltic impact structures are in southern Brazil.
- It is a notified National Geo-heritage Monument, situated inside the Deccan Plateau.
- Recently, the lake turned red/pink due to lowered water levels and high salinity caused growth of Halo bacterium and increased Carotenoid levels.

### ***Fujiwhara Effect***

- The Fujiwhara effect, is a phenomenon that occurs when two nearby cyclonic vortices move around each other and close the distance between the circulations of their corresponding low-pressure areas.

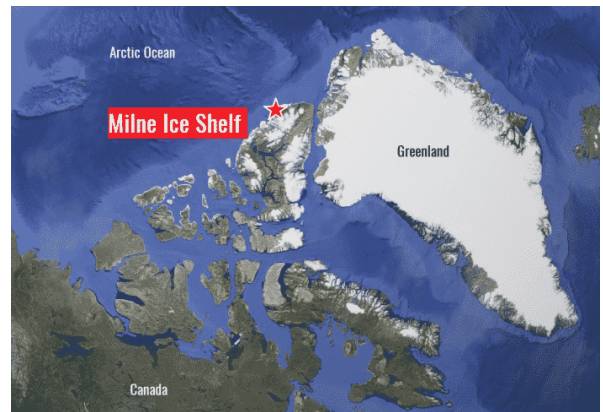


- When cyclones are in proximity of one another, their centers will circle each other cyclonically (counter-clockwise in the Northern Hemisphere and clockwise in the Southern Hemisphere) about a point between the two systems due to their cyclonic wind circulations.
- The two vortices will be attracted to each other, and eventually spiral into the center point and merge.
- When the two vortices are of unequal size, the larger vortex will tend to dominate the interaction, and the smaller vortex will circle around it.
- Recently two tropical storms, formed in the western Atlantic Ocean at nearly the same time, are likely to impact the Gulf of Mexico, sparking concerns of the rare Fujiwhara effect that occurs when two hurricanes combine to form a mega hurricane.
- The last time two tropical storms formed at the same time and struck the region was in 1933.
- Marco is the 13th named storm of the Atlantic hurricane season which runs from June to November.
- It is likely to make landfall along the Louisiana state coastline August 24 evening.
- Tropical storm Laura is the 12th named storm of the season and is currently hovering over the Caribbean.
- This makes Marco and Laura the earliest 13th and 12th named storms respectively in the recorded history of Atlantic Hurricane season.
- Their simultaneous formation in the western Atlantic Ocean created a Fujiwhara effect scare.



### **Idukki Landslides**

- Idukki district lies in the Western Ghats region of Kerala, it's known as "Spice garden of Kerala".
- Recently a landslide occurred in the hamlet of pettimudi in Munaar's Rajamala.
- The landslide was triggered from a Chola forest region in the eravikulam national park that lies in Rajamala.
- Factors that triggered land slide are
  1. **Heavy rain fall** recorded in Rajamala made the epicenter of the landslide vulnerable to slippage, because of the high sand content in the soil and 40 degree slope.
  2. **Human Interventions** – Buildings on the slopes without adequate protective measures
  3. **Blockage of river** channels and change of river course due to previous landslides.



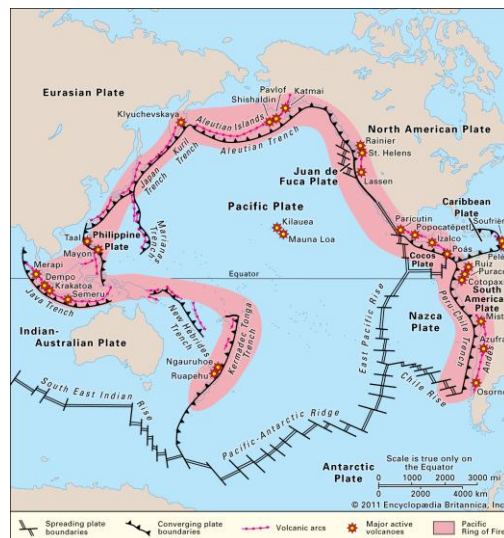
### **Milne Ice Shelf**

- Ice shelves are large floating pieces of ice that form when a glacier or ice sheet flows into the sea surface.
- Milne ice shelf is in Ellesmere Island, Canada and recently it was broken.
- The Milne ice shelf lost more than 40 % of its ice over 2 days end of July 2020.
- This has increased concerns over the rapid melting of ice and the breaking of old ice shelves due to global warming.

- This also meant the last known Epishelf Lake, a water body dammed by the ice shelf and floating on the ocean surface on the Milne ice shelf, no longer exists.

### Mount Sinabung

- Indonesia's active volcano Mount Sinabung erupted recently.
- A volcano can erupt when magma (a thick flowing substance), formed when the earth's mantle melts, rises to the surface.
- Because magma is lighter than solid rock, it is able to rise through vents and fissures on the surface of the earth.
- After it has erupted, it is called lava.
- Not all volcanic eruptions are explosive, since exclusivity depends on the composition of the magma.
- Indonesia is home to many active volcanoes, due to its position on the "Ring of Fire", or the Circum-Pacific Belt, which is an area along the Pacific Ocean characterized by active volcanoes and frequent earthquakes.



### Bhadbhut project

- Bhadbhut project in Bharuch is planned to be a 1.7-km causeway-cum-weir barrage with 90 gates, across the river Narmada.
- The barrage will stop most of the excess water flowing out of the Sardar Sarovar Dam from reaching the sea and thus create a "sweet water lake" of 600 mcm (million cubic metres) on the river.
- The sweet water from the reservoir will aim to meet the residential and industrial water requirements of Bharuch, Ankleshwar and Dahej.
- The project also aims to prevent flooding in years when rainfall is higher than normal.
- Embankments 22 km long will be made and will extend upstream towards Bharuch, from either side of the river.
- The barrage design also has a navigation lock to enable any future plans to run a ferry service or boats under the inland waterway scheme.
- The Inland Waterway Authority of India has given clearance for this project.
- The project as faced protests from local fishermen for its likely impact on fishing patterns, notably those of hilsa.
- A marine fish, hilsa migrate upstream and arrives in the brackish water of the Narmada estuary near Bharuch for spawning usually during the monsoon months of July and August, and continue doing so till November.
- Once the barrage is built, it is expected to block their natural entry.

### Boreal Summer Intra-Seasonal Oscillation

- BSISO is a movement of convection (heat) from the Indian Ocean to the western Pacific Ocean roughly every 10-50 days during the monsoon (June-September).
- The BSISO of the Asian summer monsoon (ASM) is one of the most prominent sources of short-term climate variability in the global monsoon system.
- Researchers at the Indian National Centre for Ocean Information Services (INCOIS), Hyderabad have reportedly found a way to better forecast the Boreal Summer Intra-Seasonal Oscillation (BSISO).
- They found that waves induced by active phases of BSISO are nearly 0.5 meters higher than those which occur during other phases of BSISO.
- The active phase (between June and August) enhances monsoon winds and hence the surface waves.
- Some other phases induce high wave activity in the north Indian Ocean and the Arabian Sea

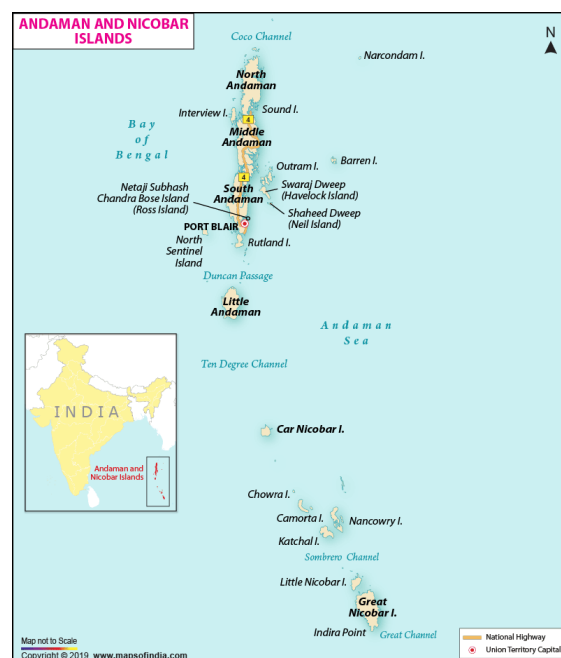
- Compared with the related Madden-Julian Oscillation (MJO) it is more complex in nature, with prominent northward propagation and variability extending much further from the equator.
- Wave forecast advisories based on the BSISO would be more useful for efficient coastal and marine management.

### **Madden Julian Oscillation**

- MJO is an oceanic-atmospheric phenomenon which affects weather activities across the globe. It brings major fluctuation in tropical weather on weekly to monthly timescales.
- It can be defined as an eastward moving 'pulse' of clouds, rainfall, winds and pressure near the equator that typically recurs every 30 to 60 days.
- It's a traversing phenomenon and is most prominent over the Indian and Pacific Oceans.
- The MJO consists of two parts or phases.
- **Enhanced rainfall (or convective) phase** - winds at the surface converge, and the air is pushed up throughout the atmosphere.
- Such rising air motion in the atmosphere tends to increase condensation and rainfall.
- **Suppressed rainfall phase** - winds converge at the top of the atmosphere, forcing air to sink and, later, to diverge at the surface.
- As air sinks from high altitudes, it warms and dries, which suppresses rainfall.
- The Indian Ocean Dipole (IOD), El Nino and MJO are all oceanic and atmospheric phenomena, which affect weather on a large scale.
- IOD only pertains to the Indian Ocean, but the other two affect weather on a global scale-up to the mid-latitudes.
- IOD and El Nino remain over their respective positions, while MJO is a traversing phenomenon.

### **Undersea Optical Fiber Cable**

- India's first-ever undersea optical fiber cable has been introduced as part of a new project for Andaman and Nicobar Islands.
- The cable system will help provide for faster internet speeds and get rid of the cobweb of wires needed for the same.
- The 2,312-Kilometers long submarine optical fiber cable project connects Chennai - Andaman and Nicobar Islands (CANI).
- The project allow for high-speed broadband connectivity, i.e. 400 Gbps for Port Blair and 200 Gbps for other islands.
- The project can be used by all the telecom operators for mobile and internet services.
- Apart from Port Blair, the cable will cover other islands namely Swaraj Dweep (Havlock), Long Island, Rangat, Little Andaman, Kamorta, Car Nicobar, and Greater Nicobar.



### **Agatti Island**

- It is in the UT of Lakshadweep.
- It is at a distance of 459 km (248 nautical miles) from Kochi and is located to the west of Kavaratti Island.
- The lagoon area of this island is habitat of coral growth and multicolored coral fishes in the lagoons.
- Fishing is the most important industry which is perhaps the only island besides Minicoy getting surplus fish.



- Next to fishing, coir (coconut fibre) and copra (dried meat or kernel of the coconut) are the main industries.
- Recently, the southern bench of the National Green Tribunal (NGT) has granted an interim stay on felling of coconut trees on Agatti Island in Lakshadweep.
- The tree-felling is also violating the Union Territory's (UT) Integrated Island Management Plan (IIMP).
- IIMP was formulated on the basis of a report submitted by the Supreme Court-appointed Expert Committee, headed by Justice R.V. Raveendran.
- It includes holistic island development plans prepared by the National Centre for Sustainable Coastal Management (NCSCM) for implementation by coastal States/ UTs.

## 15. POLITY

### ***Arunachal Pradesh Demand for 6<sup>th</sup> Schedule***

- The 6th Schedule of the Constitution provides for the administration of tribal areas in Assam, Meghalaya, Tripura and Mizoram to safeguard the rights of the tribal population in these states.
- This special provision is provided under Article 244(2) and Article 275(1) of the Constitution.
- The tribes in the above states have not assimilated much with the life and ways of the other people in these states.
- According to Bordoloi Committee formed by the Constituent Assembly, the 6th Schedule was formulated to provide limited autonomy to the tribal regions of North-East.
- The committee report stated that there was a need for a system of administration that would allow tribal areas to become developed.
- The report also called for the protection of these tribal areas from exploitation by the people in the plains and preserving their distinct social customs.
- Recently few [Autonomous Councils](#) in Arunachal Pradesh has led to the call for bringing the entire Arunachal Pradesh under the ambit of the 6th Schedule or Article 371 (A) of the Constitution.
- Currently Arunachal Pradesh is neither under 5th Schedule nor under 6th Schedule.
- It is under the Inner Line Permit (ILP) system.
- The 6th Schedule is applied in Assam, Meghalaya, Mizoram and Tripura.
- The 5th Schedule areas are declared in the States of Andhra Pradesh, Telangana, Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha and Rajasthan.
- On the other hand, Article 371 A is applied in Nagaland which provides special status to Nagaland.

#### **Article 371 A**

- The Acts of Parliament relating to the following matters would not apply to Nagaland unless decided by the State Legislative Assembly:
  1. Religious or social practices of the Nagas.
  2. Naga customary law and procedure.
  3. Administration of civil and criminal justice involving decisions according to Naga customary law.
  4. Ownership and transfer of land and its resources.

### ***DNA Technology Regulation Act***

- DNA Technology (Use and Application) Regulation Bill, 2019 tries to check use of DNA technology to establish the identity of a person.
- The bill proposes DNA sampling and profiling of citizens accused of crime or reported missing and storing their unique genetic information for administrative purposes.
- The bill has been flagged with some alarming provisions that could be misused for caste or community-based profiling.
- **Sensitive Info** - DNA profiles can reveal extremely sensitive information of an individual such as pedigree, skin color, behavior, illness, health status and susceptibility to diseases.



- This is particularly worrying as it could even be used to incorrectly link a particular caste/community to criminal activities.
- **Misuse of DNA Database** - The Bill proposes to store DNA profiles of suspects, under trials, victims and their relatives for future investigations.
- There is no legal or moral justification for a database with DNA of the other categories, given the high potential for misuse.
- **Authoritative** - In the Bill, if a person is arrested for an offence that carries punishment up to seven years, investigation authorities must take the person's written consent before taking the DNA sample.
- The Bill refers to consent in several provisions, but in each of those, a magistrate can easily override consent, thereby in effect, making consent perfunctory.
- There is also no guidance in the Bill on the grounds and reasons of when the magistrate can override consent, which could become a fatal flaw.
- **Issues in Data banks** - The Bill also provides that DNA profiles for civil matters will also be stored in the data banks, but without a clear and separate index.
- Storage of DNA profiles violates the fundamental right to privacy and does not serve any public purpose.

### ***Committee on Minimum Age of Marriage for Women***

- Union government has set up a committee to reconsider the minimum age of marriage for women, which is currently 18.
- Union Ministry for Women and Child Development set up a committee to examine matters pertaining to
  1. Age of motherhood,
  2. Imperatives of lowering Maternal Mortality Ratio
  3. Improvement of nutritional levels among women.
- The Committee is headed by Jaya Jaitley.
- It will also look at key parameters like - Infant Mortality Rate (IMR), Maternal Mortality Rate (MMR), Total Fertility Rate (TFR), Sex Ratio at Birth (SRB) and Child Sex Ratio (CSR).
- It will examine the possibility of increasing the age of marriage for women from the present 18 years to 21 years.

### ***RTI request on PM-CARES***

- The Prime Minister's Office (PMO) has denied a Right to Information (RTI) request related to the PM-CARES Fund on the grounds that providing it would "disproportionately divert the resources of the office."
- Provisions related in RTI act with respect to the move of PMO are as follows
  1. Section 8 (1) which lists the various valid reasons for exemptions under the Act, which would allow denial of information.
  2. Section 7(9), on the other hand, only says, "An information shall ordinarily be provided in the form in which it is sought unless it would disproportionately divert the resources of the public authority or would be detrimental to the safety or preservation of the record in question."
- However a High Court judgment and multiple orders of the Central Information Commission (CIC) have held that it can only be used to change the format of information provided, not deny it altogether.

### ***Article 257(1)***

- It states that the executive power of every State shall be so exercised as not to impede or prejudice the exercise of the executive power of the Union.
- It also authorizes the Union to give such directions to a State as may appear to the Government of India to be necessary for that purpose.



- In case if the state failed to comply with (or to give effect to) any directions given by the Centre under Article 257(1), it will be lawful for the President to impose President's rule under Article 356.

### **Contempt of Court**

- Contempt of court is a concept that seeks to protect judicial institutions from motivated attacks and unwarranted criticism, and as a legal mechanism to punish those who lower its authority.
- Article 129 of the Constitution conferred on the Supreme Court the power to punish contempt of itself.
- Article 215 conferred a corresponding power on the High Courts.
- It is one of the restrictions on freedom of speech and expression under Indian Constitution
- The punishment for contempt of court is simple imprisonment for a term up to six months and/or a fine of up to Rs. 2,000.
- **Civil contempt** is committed when someone willfully disobeys a court order, or willfully breaches an undertaking given to court.
- **Criminal contempt** consists of three forms:
  1. Words, signs and actions that "scandalize" or "lower" the authority of any court.
  2. Prejudices or interferes with any judicial proceeding.
  3. Interferes with or obstructs the administration of justice.
- Fair and accurate reporting of judicial proceedings and fair criticism on the merits of a judicial order after a case is heard and disposed of will not amount to contempt of court.
- The Contempt of Courts Act, 1971 was amended in 2006 to introduce truth as a valid defence against a charge of contempt, if it was in public interest and was invoked in a bona fide manner.

## **16. GOVERNMENT INITIATIVES**

### **Open API Service**

- 'Application Programming Interface' (API) is an interface that can be used to program software that interacts with an existing application.
- In practice, an API is "a set of functions and procedures" that allow one to access and build upon the data and functionality of an existing application.
- An open source API, also called public API, is an application programming interface made publicly available to software developers.
- Open APIs are published on the internet and shared freely, allowing the owner of a network-accessible service to give universal access to consumers.
- Recently Union government has announced a new feature 'Open API Service' for its contact tracing app Aarogya Setu.
- The Open API Service of Aarogya Setu addresses the fear/risk of Covid-19 infections and will help the people, businesses and the economy to return to normalcy.
- It can be availed by organizations and business entities, with following conditions,
  1. Entities who are registered in India.
  2. Entities with more than 50 employees.
- It will be used to get the health status of employees or any other Aarogya Setu User.
- It enables organizations to check the status of Aarogya Setu and integrate it into its various Work from Home features.
- It shall only provide the Aarogya Setu status and name of the Aarogya Setu User (strictly, with User's consent only), no other personal data shall be provided through the API.



### Trifood

- Union Tribal Affairs Minister has e-launched the tertiary processing centers of 'Trifood Project'.
  - Trifood Project is being implemented by TRIFED, Ministry of Tribal Affairs in association with Ministry of Food Processing (MoFPI).
  - TRIFOOD aims to enhance the income of tribal through better utilization of and value addition to the MFPs collected by the tribal forest gatherers.
  - To achieve this, as a start, two Minor Forest Produce (MFP) processing units will be set up in the following locations.
1. **Raigad Unit**, Maharashtra that will be used for value addition to Mahua, Amla, custard apple and Jamun and will produce Mahua drink, amla juice, candy, Jamun juice and custard apple pulp.
  2. **Jagdulpur multi-commodity processing centre**, Chhattisgarh will be used for the processing of commodities like Mahua, Amla, honey, cashew, tamarind, ginger, garlic and other fruits and vegetables.

### Digha-Gopalpur Coastal Highway

- The Coastal Highway project will link Gopalpur in Odisha and Digha of West Bengal (NH-516A).
- Digha-Gopalpur coastal highway would act as an economic corridor between the two major ports of Paradip and Dhamra.
- The coastal highway project was in 2015, spreads over 415 kilometers.
- The coastal highway would play a crucial role in the supply chain during natural calamities like cyclones and floods.



### Ninja UAVs

- Recently, Indian Railways started deploying "Ninja UAVs" for establishing a drone-based surveillance system.
- It will be deployed in railway areas like station premises, Railway track sections, yards, workshops, etc.
- They are capable of real-time tracking, video streaming and may be operated on Automatic Fail-Safe mode
- They can be used to launch surveillance on criminal and anti-social activities like gambling, throwing of garbage, hawking etc in Railway premises.
- It can be used at disaster sites for helping in rescue, recovery and restoration and coordination in efforts of various agencies.
- A team of Railway Protection Force (RPF) has been trained for drone flying, surveillance and maintenance.

### Swasthya Portal

- Union Tribal Affairs Minister has e-launched "Swasthya" Portal.
- It is the first of its kind comprehensive platform for health and nutrition related information of the tribal population of India.
- Ministry of Tribal Affairs in collaboration with Piramal Swasthya, the Centre of Excellence has developed this Tribal Health and Nutrition Portal.
- It has a dashboard, knowledge repository, partner segment, Sickle Cell Diseases (SCD) support corner.
- It encourages people with Sickle Cell disease or trait to register themselves.
- The dashboard presents data curated from multiple sources for the 177 identified high priority tribal districts.

### Kisan Rail

- Kisan Rail or India's first Kisan Special Parcel Train has been inaugurated recently.

- The train will transport material between Maharashtra's Devlali and Bihar's Danapur Railway station.
- It will carry fruits and vegetables and will make stoppages at several stations and pick-up and deliver them.
- This will help in bringing perishable agricultural products like vegetables, fruits to the market in a short period of time.
- The Kisan Rail train with frozen containers is expected to build a seamless national cold supply chain for perishables, inclusive of fish, meat and milk.

### ***Bharat Air Fiber***

- Bharat Air Fibre Services have been inaugurated in Maharashtra providing the residents wireless internet connections on demand.
- The Bharat Air Fibre services are being introduced by Bharat Sanchar Nigam Limited (BSNL) as a part of the Digital India initiative by the Government of India. It is being scaled pan-India.
- It aims to provide BSNL fibre-to-the-home (FTTH) wireless connectivity up to a range of 20 km from the BSNL points of presence.
- The connectivity speed is 100 Mbps and BSNL is offering various broadband plans in wireline and wireless segments.
- It provides high-speed broadband to subscribers of remote areas by bridging the gap of last-mile connectivity through radio waves.

### ***Sub-Mission on Agricultural Mechanization***

- The Sub-Mission on Agricultural Mechanization (SMAM) was launched in April 2014 with an aim to have inclusive growth of farm mechanization to boost productivity.
- Recently union government has released Rs. 553 crore to states under the scheme to promote mechanization in the agriculture sector.
- In the year 2020-21, budget of Rs.1,033 crore has been provided for the scheme, out of which Rs.553 crore has been released to state governments.
- Under the scheme Individual farmers are also provided subsidy for procurement of machinery.
- Agricultural mechanization helps in increasing production through timely farm operations and cut in operations by ensuring better management of inputs.
- Mechanization also enhances the productivity of natural resources and reduces drudgery associated with various farm operations.

### ***Medicinal and Aromatic Plants Genetic Resources***

- National Medicinal Plants Board (NMPB) and ICAR-National Bureau of Plant Genetic Resources (NBPGR) have entered into a MoU to conserve the Medicinal and Aromatic Plants Genetic Resources (MAPGRs).
- The conservation will be done in long-term storage module in the National Gene bank and/or at Regional Station for medium term storage module.
- The authorized institute NMPB and the ICAR-NBPGR on behalf of the ICAR would develop detailed modalities for seed storage of MAPGRs.

### ***National Transit Pass System***

- Union Environment Ministry launched the National Transit Pass System (NTPS).
- It is an online system for issuing transit permits for timber, bamboo and other forest produce.
- Through mobile application e-pass will be issued for transit of forest produce.
- NTPS will bring ease of business and expedite issuance of transit permits for timber, bamboo and other minor forest produce without physically going to forest offices.

- The pilot project will be functional in Madhya Pradesh and Telangana for now.
- The system will be operational in all states by November 2020, to enhance seamless movement of forest produce.
- Transit of timber, bamboo and other forest produce is governed by various state specific acts and rules.

### ***Nationally Determined Contributions –TIA***

- NITI Aayog has launched Indian Component of the Nationally Determined Contributions (NDC)–Transport Initiative for Asia (TIA).
- NDC–TIA aims to promote a comprehensive approach to decarbonize transport in India, Vietnam, and China.
- NDC–TIA is a joint programme with a duration of 4 years, supported by the
  - a) International Climate Initiative (IKI) of the German Ministry for the Environment,
  - b) Nature Conservation
  - c) Nuclear Safety (BMU).
- It is implemented by a consortium of seven organizations, namely:
  1. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
  2. International Council on Clean Transportation (ICCT)
  3. World Resources Institute (WRI)
  4. International Transport Forum (ITF)
  5. Agora Verkehrswende (AGORA)
  6. Partnership on Sustainable, Low Carbon Transport (SLoCaT) Foundation
  7. Renewable Energy Policy Network for the 21st Century e.V. (REN21)
- The India Component is implemented by six consortium organizations, all except SLoCaT.
- The NDC–TIA India Component will focus on
  - a) Strengthening GHG and transport modelling capacities,
  - b) Providing technical support on GHG emission reduction measures,
  - c) Financing climate actions in transport,
  - d) Offering policy recommendations on electric vehicle (EV) demand and supply policies etc.

### ***Kiran Helpline***

- The Ministry of Social Justice & Empowerment has postponed the launch of “KIRAN” Helpline.
- It is Toll-Free Mental Health Rehabilitation helpline 1800-599-0019, developed by Social Justice and Empowerment Ministry.
- It aims at providing support for early screening, first-aid, psychological support, distress management, mental wellbeing, preventing deviant behavior and psychological crisis management.
- The helpline will offer support in 13 languages for any individual, family, NGOs, DPOs, parent associations, professional associations, rehabilitation institutes, hospitals or anyone in need of support across the country.
- The helpline will have a capacity of handling 300 clients per hour.
- The helpline will be coordinated by the
  1. National Institute for the Empowerment of Persons with Multiple Disabilities (NIEPMD, Chennai)
  2. National Institute of Mental Health Rehabilitation (NIMHR, Sehore).



### ***Health Data Management Policy***

- National Health Authority (NHA) has released the Draft Health Data Management Policy of the National Digital Health Mission (NDHM).
- NHA is the apex agency of the Government of India responsible for the implementation and management of Ayushman Bharat and the National Digital Health Mission (NDHM) across the country.
- The draft health data management policy acts as a guidance document to set out the minimum standard for health data privacy protection.
- It aims to create a National Digital Health Ecosystem through provision of a wide-range of data, information and infrastructure services ensuring the privacy of health-related personal information.

### ***International Women's Trade Centre***

- Kerala will set up India's first international women's trade Centre (WTC), at Angamaly.
- This project has been established in collaboration with the United Nations Sustainable Development Goals (SDs) as a part of Gender Park initiative of the state government.
- This initiative aims to accelerate women entrepreneurship and secure gender parity while providing women with a safe place away from home to start new businesses, set up or expand, and get their products marketed globally.
- WTC will enable women entrepreneurs to Participate in international trade, Enjoy greater economic benefits, Enhance their competitiveness to tap market opportunities and Reduced dependency on the informal channels to get access to finances and expertise
- Along with WTC, REACH or Resource Enhancement Academy for Career Heights is also aimed at empowering women with the required life-skills to ensure success in life.

## **17. GOVERNMENT SCHEMES**

### ***Namath Basai Scheme***

- Kerala State government is carrying out a unique programme called “Namath Basai” of teaching tribal children in their mother tongue.
- The programme is being implemented by the Samagra Shiksha Kerala (SSK).
- SSK is an overarching programme for the school education sector extending from pre-school to class 12.
- It aims at improving school effectiveness measured in terms of equal opportunities for schooling and equitable learning outcomes.
- It has succeeded in retaining hundreds of tribal children in their online classes using their mother tongue as language of instruction.
- It offers pre-recorded classes through a YouTube channel in three tribal languages in Attappady valley in Palakkad District Kerala.
- These languages belong to the Irula, Muduka and Kurumba tribes.
- It is being introduced in the tribal belts of Wayanad and Idukki as well.
- Classes are offered in the Oorali, Muthuvan and Paniya languages in Idukki.

### ***Naya Savera Scheme***

- Naya Savera Scheme is being implemented under the Ministry of Minority Affairs.
- It aims to empower the students belonging to minority communities and prepare them for competitive examinations.
- It emphasizes to increase the participation of minority communities in government and private jobs.

- The scheme provides financial support for free coaching to notified minority students in selected coaching institutions.

### **Gramodyog Vikas Yojana**

- Gramodyog Vikas Yojana aims to promote and develop the village industries through common facilities, technological modernization, training etc.
- The scheme is under the Ministry of Micro, Small and Medium Enterprises.
- Under the scheme, R&D support would be given to the institutions that intend to carry product development, new innovations, design development, product diversification processes etc.
- The village institutions will be provided market support by way of preparation of product catalogue, Industry directory, market research, new marketing techniques, buyer seller meet, arranging exhibitions etc.
- Recently, a new programme has been approved under the scheme for the benefit of artisans involved in manufacturing of Agarbatti.
- Under this mission, Khadi and Village Industries Commission (KVIC), will provide training, and assist artisans with agarbatti manufacturing machines.

## **18. GOVERNMENT ORGANIZATIONS**

### **TIFAC**

- TIFAC is an autonomous organization, a think tank set up in 1988 under DST.
- It aims to assess the technology trajectories, and support innovation by networked actions in select areas of national importance.
- TIFAC embarked upon the major task of formulating a Technology Vision for the country in various emerging technology areas.
- Under the leadership of Dr. APJ Abdul Kalam, the then Chairman of TIFAC, Technology Vision 2020 exercise led to set of 17 documents, including sixteen technology areas and one on services.
- In more than 25 years of its service to the nation, it has delivered number of technology assessment and foresight reports.
- Recently TIFAC has flagged the lack of infrastructure in the chemical industry in the country as a barrier to competing with China.
- It is also highlighted that India is almost entirely dependent on China for chloroquine and hydroxychloroquine (HCQ).

### **NCAER**

- The National Council of Applied Economic Research is a Delhi based think tank that was established in 1956.
- The TATA Foundation and other premier organizations came together to form the think tank with the support of Government of India.
- The aim of the body is to give support to both government and private sector economic researches.
- Since 1991, the council is tracking the business confidence in the country on a quarterly basis.
- The NCAER survey elicits responses from firms across six cities to assess business sentiments in the four regions of India:
  1. Delhi-NCR represents the north;
  2. Mumbai and Pune, the west.
  3. Kolkata the east.
  4. Bengaluru and Chennai represent the south.



## 19. BILATERAL RELATIONS

### *High Impact Community Development*

- HICDPs constitute an important dimension of the dynamic development partnership between India and the Maldives.
- Under HICDP, India and Maldives have committed to execute projects under a total grant of USD 5.5 million.
- These projects are driven by the needs of communities on the islands.
- They will be implemented by City and Local Councils.
- It will enhance the capacities of locally-elected representatives and support the decentralization efforts of the Government of Maldives.
- Recently, India and Maldives signed a contract for setting up Neighborhood Fish Processing Plants at two of the islands in the neighboring country.
- These fish-processing plants are the first in a series of High Impact Community Development projects.

### *Border Work Group*

- The BWG is a joint agency constituted by the governments of India and Nepal in 2014.
- It aims to carry out works in the fields of construction, restoration and repair of boundary pillars including clearance of 'no-man's land' and other technical tasks.
- It is led by the Surveyor General of India, the BWG is different from the foreign secretaries meeting that is being sought to discuss the Kalapani border dispute, but it is an important mechanism to review the boundary work.
- Survey of India is the National Mapping Agency under the Department of Science & Technology.
- The group so far has held six meetings, the last meeting was on 28th August 2019 in Dehradun.
- Recently Nepal has proposed a meeting of the Boundary Working Group (BWG) in August end or early September 2020.

## 20. INTERNATIONAL ORGANISATIONS

### *Cuba's Election to UNHRC*

- The United Nations Human Rights Council (UNHRC) has 47 members elected for staggered 3-year terms on a regional group basis from 5 groups.
- To become a member, a country must receive the votes of at least 96 of the 191 states of the UN General Assembly (an absolute majority).
- The members are elected for a period of 3 years, with a maximum of two consecutive terms.
- In electing Council members, the resolution provides that General Assembly members "shall take into account the candidates' contribution to the promotion and protection of human rights and their voluntary pledges and commitments made thereto.
- The US withdrew from the council in 2018 because the council adopted resolutions condemning Israel.
- U.S. Secretary of State has recently urged UN members not to support Cuba's bid to join the organization's Human Rights Council.
- Cuba, previously in the UNHRC in 2014-2016 and 2017-2019, has applied to fill one of the regional vacancies for 2021-2023.
- U.S. Secretary of State has described Cuba's sale of medical services, Havana's main source of foreign exchange, as a form of human trafficking.





### ***Alliance to End Plastic Waste***

- Alliance to End Plastic Waste was founded in 2019 as a nonprofit organization, in Singapore.
- It helps to solve the serious and complex issue of 8 million tons of plastic waste entering the ocean every year.
- Nearly 50 companies across the plastics value chain have joined the Alliance.
- They have committed to invest USD 1.5 billion towards solutions that will prevent the leakage as well as recover and create value from plastic waste.
- Recently, it has announced to invest between USD 70 million to 100 million in India over the next five years to reduce plastic waste.
- Currently, 'Alliance to End Plastic Waste' is working on the Project Aviral which aims to reduce plastic waste in the Ganga River.

## **21. INTERNATIONAL ISSUES & EVENTS**

### ***India @ 75 Summit***

- India @75 Summit is organized by Confederation of Indian Industry (CII).
- It envisions how India should be in her 75th year of independence.
- The summit seeks to bring together all stakeholders including the industry, government, institutions, community groups and individuals to translate the vision into a reality.

### ***1947 Agreement on Gurkha Regiment***

- From the first quarter of the 19th century, Gurkhas had served under the British, first in the armies of the East India Company, and then the British Indian Army.
- East India Company first recruited Gurkhas after suffering heavy casualties during the Anglo-Nepalese War, also known as the Gurkha War.
- The war ended with the signing of the Treaty of Sugauli in 1816.
- It ensured that Gurkhas in British and Indian service would enjoy broadly the same conditions of service as that of British and Indian citizens.
- In 1947, when India became independent, it was decided to split Gurkha regiments between the British and Indian armies.
- After the 1947 Tripartite Agreement, the British Army amalgamated the Gurkha regiment into combined Royal Gurkha Rifles (RGR).
- Currently, the Gurkhas comprise up to 3% of the British Army.
- The Gurkhas are recruited every year at the British Gurkha camp at Pokhara in Nepal.
- The camp enlists fresh recruits not only for the British Army, but also for the counter-terror arm of the Singapore Police Force.

## **22. ECONOMY**

### ***Emergency Credit Line Guarantee Scheme***

- The Emergency Credit Line Guarantee Scheme was rolled out in May as part of the Centre's Aatma-nirbhar package in response to the COVID-19 crisis.
- It has a corpus of Rs. 41,600 crore and provides fully guaranteed additional funding of up to Rs. 3 lakh crore.
- Eligibility – As of February 29, 2020, MSMEs which have an annual turnover up to Rs. 100 crore and with outstanding loans of up to Rs. 25 crores.

- Union government has recently decided to expand the scheme, to cover enterprises with a turnover up to Rs. 250 crore, with outstanding loans up to Rs. 50 crore.
- It aims to cover loans given to larger firms, as well as to self-employed people and professionals who have taken loans for business purposes.
- Individual beneficiaries include both professionals such as doctors, lawyers and chartered accountants, as well as self-employed people such as vendors or taxi drivers.

### ***Agri Infra Fund***

- Union government has launched a financing facility of Rs.1 lakh crore under the Agriculture Infrastructure Fund.
- The fund will cover Agri-entrepreneurs, Startups, Agri-tech players, Farmer groups for post-harvest management, Nurturing farm assets.
- Agri Infra Fund is a pan India central sector scheme, duration of which will be 10 years till 2029.
- It aims to provide medium - long term debt financing facility for investment in viable projects for post-harvest management Infrastructure and community farming assets.
- The fund will be managed and monitored through an online Management Information System (MIS) platform.

### ***Credit Guarantee Scheme for Subordinate Debt (CGSSD)***

- Union Ministry of MSME has launched subordinate debt scheme to provide financial facility to stressed MSMEs.
- It aims to provide emergency credit support to MSMEs impacted by coronavirus lockdown.
- Under CGSSD the government has operationalized Rs 20,000 crore stressed fund which is likely to benefit around 2 lakh medium and small entrepreneurs.
- CGSSD is a part the Rs 20.97 lakh crore [Aatma Nirbhar Bharat Abhiyan package](#).
- The highlights of the scheme are
  1. It seeks to extend support to the promoters of the operational MSMEs which are stressed and have become NPA as on April 30, 2020.
  2. The promoters of the MSME unit will be given credit equal to 15 percent of stake in the company or Rs 75 lakh, whichever is lower.
  3. As per the latest norms, this scheme seeks to extend support to MSMEs whose accounts have been standard as on March 31, 2018, and have been in regular operations, either as standard accounts, or as NPA accounts during financial year 2018-19 and 2019-20.
  4. Fraud/willful defaulter accounts will not be considered under the proposed scheme.
  5. The scheme is valid for stressed MSME units which were Special Mention Accounts (SMA-2) and NPA as of April 30, 2020, who were eligible for restructuring as per RBI guidelines on the books of the lending institutions.

### ***MSME Restructuring Scheme***

- Reserve Bank of India's (RBI's) announced restructuring package for small businesses in 2019.
- It aimed to recast Rs. 1 lakh crore of loans for 7 lakh eligible micro, small and medium enterprises (MSMEs).
- The scheme announced by RBI is a one-time scheme wherein a loan tenor and interest rate can be revised without classifying the asset as a NPA.
- The facility is available for standard advances of up to Rs 25 crore only.
- Banks will need to make a provision of 5% towards these restructured loans.
- As per the existing scheme, the borrower account had to be standard as on January 1, 2020.



- Recently Union government has extended the scheme till March 2021.

### ***Integrated Market Surveillance System***

- Market surveillance is the prevention and investigation of abusive, manipulative or illegal trading practices in the securities markets.
- It helps to ensure orderly markets, where buyers and sellers are willing to participate because they feel confident in the fairness and accuracy of transactions.
- Without market surveillance, a market could become disorderly, which would discourage investment and inhibit economic growth.
- Market surveillance can be provided by the private sector and the public sector.
- In India Financial Markets Regulation Department (FMRD) undertakes surveillance of financial markets regulated by the RBI.
- RBI has shortlisted few private vendors for implementation of Integrated Market Surveillance System.

### ***Committee for Stressed Assets***

- Recently RBI set up an expert committee under K V Kamath to suggest financial parameters for resolution of covid-19 related stressed assets.
- The committee will submit its recommendations to the RBI, which will notify them along with modifications, if any, in 30 days.
- Resolution Framework for Covid-19-related Stress envisages to make recommendations on the required financial parameters to be factored in into the resolution plans, with sector-specific benchmark.
- Assets of the banking system comprises of loans given and investment (in bonds) made by banks.
- Quality of the asset indicates how much of the loans taken by the borrowers are repaid in the form of interests and principal.

### ***Liquidation Process***

- The Insolvency and Bankruptcy Board of India (IBBI) notified the Insolvency and Bankruptcy Board of India (Liquidation Process) (Third Amendment) Regulations, 2020.
- IBBI is a key institution in implementing the Insolvency and Bankruptcy Code (IBC), which provides for market-linked and time-bound resolution of stressed assets.
- IBC provides for market-linked and time-bound resolution of stressed assets.
- In case the insolvency resolution process does not succeed, then the company concerned goes for liquidation.
- When a company goes into liquidation under IBC, the committee of creditors (CoC) appoints a liquidator and decides on a fixed fee to be paid for their services.
- A liquidator can claim fees only on the basis of the amount of work they have done during the liquidation process of a company, be it in terms of the amount realised or distributed.
- The new regulations require the committee of creditors to fix the fee payable to the liquidator.
- Where the fee has not been fixed by the committee of creditors, the regulations provide for a fee as a percentage of the amount realized and of the amount distributed by the liquidator.

- **Stressed assets** = NPAs + Restructured loans + Written off assets
- **NPA** - means interest or principal is not repaid by the borrower during a specified time period ('overdue' for a period of 90 days.)
- Bad assets are further classified into substandard asset, doubtful asset, and loss assets depending upon how long a loan remains as an NPA.
- **Restructured loans** - Assets which got an extended repayment period, reduced interest rate, converting a part of the loan into equity, providing additional financing, or some combination of these measures.
- Hence, under restructuring a bad loan is modified as a new loan.
- **Written off Assets** - Those the bank or lender doesn't count the money borrower owes to it.
- The financial statement of the bank will indicate that the written off loans are compensated through some other way.

- It also amended the regulations for voluntary liquidation to enable a corporation to appoint an alternate liquidator at any point during the process through a resolution of members or partners, or contributories.

### **Priority Sector Lending Guidelines**

- Under Priority Sector Lending (PSL) guidelines, banks have to set aside a specific portion of bank lending to sectors deemed important by the central bank.
- The following are the categories listed by RBI under PSL
  1. Agriculture
  2. Micro, Small and Medium Enterprises
  3. Export Credit
  4. Education
  5. Housing
  6. Social Infrastructure
  7. Renewable Energy
- All scheduled commercial banks and foreign banks with a sizeable presence in India are mandated to set aside 40% of their Adjusted Net Bank Credit (ANBC) for lending to these sectors.
- RBI has recently assigned PSL status to India's startup sector.
- Startups were considered under the MSME category and were required to show three years of profitability
- RBI also recently increased the limits for renewable energy, including solar power and compressed bio-gas plants.
- It would benefit smaller bootstrapped businesses that had earlier faced challenges in getting low-priced debt from banks.
- An incentive framework has been established to help banks address regional disparities, with respect to flow of priority sector credit.
- Higher weighting will be assigned to incremental priority sector credit in identified districts where credit flow is comparatively lower.
- Whereas a lower weighting will be assigned in case of a comparatively higher credit flow.

#### **TGFIFL**

- Technical Group on Financial Inclusion and Financial Literacy (TGFIFL) was set up in November 2011 by the FSDC.
- It is responsible for periodic monitoring and implementation of NSFE under the oversight of Financial Stability and Development Council (FSDC).

### **India-UN Development Partnership Fund**

- The India-UN Development Partnership Fund is a dedicated facility within the United Nations Fund for South-South Cooperation established in 2017.
  1. It is supported and led by the Government of the Republic of India.
  2. It is managed by the United Nations Office for South-South Cooperation.
  3. It is implemented in collaboration with the United Nations system.
- The Fund project portfolio aims to contribute to the efforts of developing countries towards the realization of the 2030 Agenda for Sustainable Development.
- The Fund now encompasses 36 projects, approved in partnership with nine United Nations agencies in 37 countries.
- It has made significant strides in advancing the national development goals and commitments of the 2030 Agenda by enlisting the global presence and operational capabilities of the United Nations system in the following areas
  1. Least developed countries (LDCs),
  2. landlocked developing countries (LLDCs)
  3. Small Island developing States (SIDS)

- Recently India has contributed \$15.46 million to the India-UN Development Partnership Fund, to support developing nations in their developmental priorities across all the Sustainable Development Goals.
- The tranche of \$15.46 million includes \$6 million to the overall fund, in which all the developing countries are eligible for partnership, and \$9.46 million dedicated to the Commonwealth countries.

### Positive Pay Mechanism

- Positive Pay is a fraud detection tool adopted by banks to protect customers against forged, altered or counterfeit cheques.
- It cross verifies all details of the cheque issued before funds are encashed by the beneficiary.
- In case of a mismatch, the cheque is sent back to the issuer for examination.
- By following such a system, a bank knows of a cheque being drawn by the customer even before it is deposited by the beneficiary into his/her account.
- RBI has introduced a new 'Positive Pay' mechanism which will make cheque payments safer and reduce instances of frauds.
- Under the new system Issuers will be able to send all details to their bank, thereby ensuring faster clearance of cheques above Rs 50,000.
- All cheques will be processed as per the information sent by the account holder at the time of issuance of cheques.
- This will cover approximately 20 per cent of transactions by volume and 80 per cent by value.

### Pan-India entity for retail payments

- RBI releases framework for pan-India entity for retail payments
- As per the framework, the companies with a net worth of over 500 crore rupees will be eligible to set up an umbrella entity which among other things will be permitted to set up, manage and operate new payment systems in the retail space comprising the following

1. ATMs,
2. White Label PoS,
3. Aadhaar-based payments
4. Remittance services.

- This entity, to be incorporated under the Companies Act, 2013, would need to focus on retail payments systems
- The entity will be expected to monitor national as well as international developments so as to avoid shocks and frauds that may adversely affect the system and the economy in general.
- The entity will operate clearing and settlement systems for participating banks and non-banks, identify and manage relevant risks, monitor retail payments system developments and related issues in the country and internationally.

#### White Label PoS

- Currently, merchant services providers have two common options when it comes to offering their clients a POS system.
- Customers with access to a third-party branded POS system - Companies which choose this route believe that their clients want to feel comfortable by knowing they are using a well-known brand.
- Where a white label POS system is an off-the-shelf solution built by software specialists, which channel partners can rebrand and sell as their exclusive offering to merchants.

### FDI in Commercial Coal Mining

- Union government clarified process on FDI in commercial coal mining.
- Any country that shares land borders with India, which wishes to invest in commercial coal mining will be allowed only after government approval.





- A citizen of Pakistan or an entity incorporated in Pakistan can invest only under the government route in sectors/activities other than defence, space, atomic energy, and sectors/activities prohibited for foreign investment.
- While the central government auctions coal blocks, state governments need to handle local issues efficiently and with sensitivity.

## **23. ENVIRONMENT**

### ***Methane Budget***

- Methane is emitted from a range of anthropogenic sources like landfills, agriculture, and fossil fuels, as well as natural systems like wetlands.
- It is the second most important greenhouse gas that humans are contributing to.
- Since pre-industrial times, increases in atmospheric methane have contributed to a quarter of the climate-warming effect from greenhouse gases.
- But unlike carbon dioxide, methane has a shorter lifetime in the atmosphere.
- If big changes are brought in our emissions, methane can be removed relatively quickly.
- Recently international team of scientists has published an update on the global methane budget as part of the Global Carbon Project.
- They estimated annual global methane emissions at nearly 570 million tons for the 2008 to 2017 decade.
- This is 5% higher than emissions recorded for the early 2000s and the equivalent of 189 million more cars on the world's roads.
- Anthropogenic sources like agriculture, waste, and fossil fuels contributed to 60% of these emissions, while wetlands made up for the largest natural source of methane.
- Global wetland methane emissions remained largely unchanged between the last decade and the early 2000s, these landscapes have continued to introduce some of the greatest uncertainties in estimating the global methane budget.
- Wetlands are estimated to make up 20% to 30% of the global methane budget, but emissions vary by latitude.
- The fluxes are larger in the tropics than in the high latitudes and temperate zones.

#### **Global Carbon Project**

- The Global Carbon Project (GCP) is an organization seeks to quantify global greenhouse gas emissions and their causes.
- Established in 2001, its projects include global budgets for three dominant greenhouse gases
  1. Carbon dioxide,
  2. Methane,
  3. Nitrous oxide
- GCP's complementary efforts are in areas of urban, regional, cumulative, and negative emissions.
- The main object of the group has been to fully understand the carbon cycle.
- The project has brought together emissions experts, earth scientists, and economists to tackle the problem of rising concentrations of greenhouse gases.
- The Global Carbon Project is currently chaired by Rob Jackson of Stanford University.

### ***Report on Construction and Demolition Waste***

- Construction and demolition waste is generated whenever any construction/demolition activity takes place, such as, building roads, bridges, fly over, subway, remodeling etc.
- It consists mostly of inert and non-biodegradable material such as concrete, plaster, metal, wood, plastics etc.
- Centre for Science and Environment (CSE), a Delhi based think tank has released a report on construction and demolition (C&D) waste.
- The Highlights of the report are as follows
- India recycles just one per cent of its construction and demolition (C&D) waste, i.e. meagre 6,500 tons per day.





- The country generates an estimated 150 million tons of C&D waste every year, according to the Building Material Promotion Council.
- Unofficial estimates of the total waste generated in the country put the figure at three-five times more than the official estimate.
- About 53 cities were expected to set up recycling facilities to recover material from C&D waste by 2017, but only 13 cities have done that by 2020.
- Heaps of concrete, bricks and metal waste from construction were choking waterbodies, green areas and public spaces in Indian cities.
- Toxic dust particles from the debris were polluting air at a time when cities had to reduce their particulate pollution by 20-30 per cent by 2024, under the ongoing National Clean Air Programme.

### **Section 5 of Environment Protection Act**

- Section 5 of the Environment Protection Act that allows the Centre to shut down industrial units that grossly violate the law.
- **Violation Committee Rules of MoEFCC** - These rules allow industrial projects in violation of environmental laws to apply to a special panel of experts called the 'Violations Committee' of the MoEFCC, provided they meet certain criteria and make appropriate modifications become compliant operations.
- The Union Ministry of Environment, Forests and Climate Change ordered closure of the LG Polymers plant in Vishakapatnam, Andhra Pradesh.
- The ministry has also sought updated information on whether the company had abided by the MSIHC rules by MoEFCC.
- Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 prescribe how hazardous and industrial chemicals ought to be stored.
- From LG Polymers plant styrene gas leaked on May 17, 2020.
- The chemical factory had been working since 1997 without appropriate clearances and had applied for clearance, in 2018, under rules made by the MoEFCC itself.
- LG Polymers had applied to violation committee and its case was under consideration.

### **NGT order on Ground Water Extraction**

- The National Green Tribunal (NGT) has called for commercial entities to follow new rules for getting permission to extract groundwater.
- Environmental Impact Assessments (EIA) will now form the basis of granting such permissions.
- The Union Ministry of Jal Shakti and the Central Ground Water Board (CGWB) were ordered by the NGT to ensure no general permission was given for withdrawing groundwater, particularly to any commercial entity.
- Under the order, plants involved in commercial extraction of ground water will undergo individual assessment through an expert committee.
- All overexploited, critical and semi-critical (OCS) assessment units must undergo water mapping.
- Water management plans need to be prepared for all OCS assessment units in the country based on the mapping data, starting with overexploited blocks.
- NGT had also mentioned permission to extract groundwater must be for specified times and quantity of water, not for perpetuity.

#### **Air Unique-quality Monitoring (AUM)**

- The AUM Photonic System is developed under the Clean Air Research Initiative of Department of Science and Technology.
- The system is based on principals of statistical mechanics, laser backscattering, optoelectronics, AI, machine learning and IoT.
- The system identifies, make classification and quantifies various pollutants present in the air atmosphere.
- It does these three steps simultaneously of the order of less than one part per billion and following the standards of meteorology with high precision and accuracy.
- Karnataka State Pollution Control Board will be operating this system by following the standards of the Central Pollution Control Board of India.



- It must be necessarily subject to digital flow meters, which cannot be accessed by proponents, with mandatory annual calibration by the authorized agency at proponents.

### ***Air Quality in Mega Cities***

- Centre for Science and Environment (CSE), a Delhi based think tank has analyzed air quality, in the following Mega cities
  1. Delhi
  2. Mumbai
  3. Kolkata
  4. Hyderabad
  5. Chennai
  6. Bangalore
- Local meteorological events have also influenced the air quality of different cities.
- Highlights of the Analysis
  1. All cities other than Delhi had better air quality, in terms of PM<sub>2.5</sub> levels.
  2. Throughout the COVID-19 lockdown, air pollution in Delhi was less compared to 2019, however the air quality of the city was still worst among six large cities in different parameters
  3. The daily average PM<sub>2.5</sub> levels in Delhi had breached the safe value on 56 days between March 25 and May 31 in 2019 and it exceeded the safe limit on 14 days this year.
  4. The cleanest period is usually during monsoon and this essentially means that the PM<sub>2.5</sub> levels of Chennai and Kolkata were better during the lockdown than last year's monsoon.
  5. In Bangalore and Delhi, the average air quality during 54 days of lockdown was only 20% worse than last year's monsoon.

### ***Microplastics***

- According to recent study Maldives beaches have the most Micro plastics in the world.
- These are small pieces of plastic, less than 5 mm in length, that occur in the environment as a consequence of plastic pollution.
- The debris can be of any size and shape, but those which are less than 5 mm in length (or about the size of a sesame seed) are called micro plastics.
- Micro plastics come from a variety of sources, including from larger plastic debris that degrades into smaller and smaller pieces.
- In addition, microbeads, a type of Micro plastic, are very tiny pieces of manufactured polyethylene plastic that are added as exfoliants to health and beauty products.
- These tiny particles easily pass through water filtration systems and end up in the ocean or other water bodies and cause serious environmental and food safety concerns.
- The problem with micro plastics is that, like plastic items of any size, they do not readily break down into harmless molecules.
- Plastics can take hundreds or thousands of years to decompose and in the meantime, wreak havoc on the environment.
- On beaches, micro plastics are visible as tiny multicolored plastic bits in sand.
- In the oceans, micro plastic pollution is often consumed by marine animals.

### ***Biochar***

- Biochar is charcoal used as a soil amendment for both carbon sequestration and soil health benefits.



- Biochar technically defined as the solid material obtained from the thermochemical conversion of biomass in an oxygen-limited environment.
- Like most charcoal, biochar is made from biomass via pyrolysis (decomposition brought about by high temperatures).
- Biochar may increase the following
  1. Soil fertility of acidic soils (low pH soils),
  2. Agricultural productivity,
  3. Protection against some foliar and soil-borne diseases.
  4. Soil's water-holding capacity,
  5. Nutrient supply and retention.
- A recent research in Ghana, an African nation proved biochar application could help promote cowpea growth and crop yield in the country as well as fight climate change impact on soil.

### **Source - Sink Dynamics & Tiger Population**

- Source-sink dynamics is a theoretical model used by ecologists to describe how variation in habitat quality may affect the population growth or decline of organisms.
- In this model, organisms occupy two patches of habitat.
  1. Source, is a high-quality habitat that on average allows the population to increase.
  2. Sink, is very low-quality habitat that, on its own, would not be able to support a population.
- However, if the excess of individuals produced in the source frequently moves to the sink, the sink population can persist indefinitely.
- The tiger survey has highlighted that the tiger population in the source-sink is in the ratio of 60:40.
- 33% of the tiger population in India lives outside its source i.e, tiger reserves.
- 17/50 tiger reserves in India are going to achieve its maximum capacity to hold the tiger populations.
- Tiger survey suggested that there is a need to create buffer areas around the habitat zones of tigers where guided land-use and faster conservation interventions can help reduce human-tiger conflict.

### **Ecological Trap**

- Ecological trap theory describes the reasons why organisms may actually prefer sink patches over source patches.
- The concept stems from the idea that organisms that are actively selecting habitat must rely on environmental cues to help them identify high-quality habitat.
- If either the habitat quality or the cue changes so that one does not reliably indicate the other, organisms may be lured into poor-quality habitat.
- It thought to occur when the attractiveness of a habitat increases disproportionately in relation to its value for survival and reproduction.
- The result is preference of falsely attractive habitat and a general avoidance of high-quality but less-attractive habitats.

### **Thumbimahotsavam**

- Thumbimahotsavam is a part of a national dragonfly festival.
- It is being organized by the following organizations –WWF India, Bombay Natural History Society, National Biodiversity Board, UNEP, UNDP and IUCN-Centre for Environment Conservation, India Dragonfly Society
- The third edition of the National Dragonfly Festival was organized online in August, 2020.
- Kerala is set to host first-ever state Dragonfly Festival.



- WWF-India State unit has joined hands with the Society for Odonate Studies (SOS) and Thumbipuranam for the state dragonfly festival.
- It aims at building awareness about the importance of dragonflies and damselflies and the need to conserve them.
- Some specific target groups for this festival include zoology teachers.
- Dragonflies act as important bio-indicators of the ecological health of an area.

#### **African Cheetahs**

- Around 6,500-7,000 African cheetahs present in the wild.
- These are bigger in size as compared to Asiatic Cheetah.
- Were as Asiatic cheetahs has more fur, a smaller head and a longer neck and they have a more cat-like appearance.
- IUCN Status is Vulnerable for the animal.
- It is protected under CITES Appendix-I of the List.
- This List comprises of migratory species that have been assessed as being in danger of extinction throughout all or a significant portion

#### **Reintroduction of African Cheetahs**

- Recently three African hunting cheetahs from South Africa has been introduced in Mysore zoo.
- A year after zoo lost its last surviving African hunting Cheetah Mysore zoo has received three big cats from Ann Van Dyke Cheetah Centre, South Africa.
- Mysuru is the second zoo to house hunting cheetah in India, Hyderabad zoo has a pair of big cats.
- In January 2020 SC has lifted its seven-year stay on a proposal to introduce African cheetahs from Namibia into the Indian habitat on an experimental basis.
- The plan was to revive the Indian cheetah population.
- In May 2012, the top court had stalled the plan to initiate the foreign cheetahs into the Palpur Kuno sanctuary in Madhya Pradesh fearing they may come into conflict with a parallel and a much-delayed project to reintroduce lions into the same sanctuary.

### **SPECIES IN NEWS**

#### **Haloarchaea**

- Halophiles are a group of microorganisms that can grow and often thrive in areas of high salt (NaCl) concentration.
- Halo archaea or halophilic archaea is a bacteria culture which produces pink pigment and is found in water saturated with salt.
- Because of the biomass of Halo archaea microbes, the surface of Lonar Lake turned red or pink.
- As the biomass subsides, the color will disappear.
- Halo archaea microbes were ingested by Flamingos.
- These microbes acted as carotenoid (pigment) rich food for the birds.
- Flamingos get their red-pink color from special coloring chemicals called pigments found in the algae and invertebrates they eat.

#### **Leopard**

- The Indian leopard is one of the big cats occurring on the Indian subcontinent, apart from the Asiatic lion, Bengal tiger, snow leopard and clouded leopard.
- Melanism is a common occurrence in leopards, wherein the entire skin of the animal is black in color, including its spots.
- A melanistic leopard is often called Black Panther or jaguar, and mistakenly thought to be a different species.
- In India, the leopard is found in all forest types, from tropical rainforests to temperate deciduous and alpine coniferous forests.



- It is also found in dry scrubs and grasslands, the only exception being desert and the mangroves of Sundarbans.
- It shares its territory with the tiger in 17 states.
- Conservation Status
  1. Listed on a par with Tigers under Schedule 1 of the Wildlife Protection Act (WPA), 1972.
  2. Listed in Appendix I of CITES.
  3. Listed as Vulnerable on the IUCN Red List.
- The last formal census on India's leopards was conducted in 2014 which estimated the cat's population at between 12,000 and 14,000.
- They also estimated 8,000 leopards in the vicinity of tiger habitat.
- As part of its global tiger census, the Wildlife Institute of India (WII) is set to release a dedicated report on leopard sightings by the month-end.

### **Asiatic Lion**

- Asiatic lions are found in protected areas and agro-pastoral landscape of Saurashtra, covering nine districts in Gujarat.
- Its current estimated population is 674.
- India has recorded a 29% increase in its population in the past five years — from 523 in 2015 to 674 in 2020.
- Asiatic Lions are listed as 'Endangered' under the IUCN Red List.
- Asiatic Lions are protected under Schedule I of Wildlife Protection Act (1972).

### **Collaring of Fishing Cats**

- Fishing Cats (*Prionailurus viverrinus*) are nocturnal (active at night).
- Apart from fish, it also preys on frogs, crustaceans, snakes, birds, and scavenges on carcasses of larger animals.
- In India, fishing cats are mainly found in the mangrove forests of the Sundarbans, on the foothills of the Himalayas along the Ganga and Brahmaputra river valleys and in the Western Ghats.
- Despite multiple threats, the Fishing Cat was recently down listed to "Vulnerable" from "**Endangered**" in the IUCN Red List species assessment.
- Fishing cats are listed under CITES: Appendix II and Indian Wildlife Protection Act, 1972: Schedule I
- Shrimp farming is a growing threat to mangrove habitats of the Fishing Cats.
- Wildlife Institute of India (WII-Dehradun) and the Andhra Pradesh Forest Department are has planned for a maiden exercise of collaring 10 fishing cats in the Coringa Wildlife Sanctuary.
- The sanctuary is located in the Godavari estuary to study the species' ecology, home range, and behavior in different seasons, feeding habits, threats, movements and use of space.
- The project aims to capture the fishing cats and collaring them with light weight equipment containing the Geographical Information System.

### **Hornbill**

- Hornbills are found in tropical and subtropical Africa, and Asia.
- They are referred as 'forest engineers' or 'farmers of forest' for playing a key role in dispersing seeds of tropical trees and indicated the prosperity and balance of the forest.
- India has 9 hornbill species, of which 4 are found in the Western Ghats.
- These are



1. Indian grey hornbill (endemic to India),
  2. Malabar grey hornbill (endemic to the Western Ghats),
  3. Malabar pied hornbill (endemic to India and Sri Lanka)
  4. Great Indian hornbill (Endangered).
- The Narcondam hornbill are found only on the island of Narcondam in the Andaman Sea.
  - Papum Reserve Forest in Arunachal Pradesh is a nesting habitat of 3 hornbill species - Great, Wreathed and Oriental Pied.
  - The Pakke reserve houses a fourth species, the Rufous-Necked.
  - They are hunted by the ethnic communities specially the Nyishi of Arunachal Pradesh.
  - Recently, a study based on satellite data has flagged a high rate of deforestation in a major hornbill habitat in Arunachal Pradesh.
  - Papum Reserve Forest (RF) adjoining the Pakke Tiger Reserve as well as a part of Assam affected by illegal felling and ethnic conflict.

### **Dhole**

- Dhole is also known as Asian wild dog, Asiatic wild dog, Indian wild dog, whistling dog, red dog, and mountain wolf.
- Besides the tiger, the dhole is the only large carnivore in India that is under the IUCN's 'endangered' category.
- It play an important role as apex predators in forest ecosystems.
- A research paper on conserving the endangered dhole was published in Mammal Review.

### **Highlights**

1. Karnataka, Maharashtra and Madhya Pradesh rank high in the conservation of the endangered dhole in India.
2. On the other hand, Arunachal Pradesh, Chhattisgarh, Odisha, Telangana and Goa will need to increase reduce the ease of granting forest clearances for infrastructure projects.
3. Improving habitat conditions and prey densities in the Eastern Ghats of Andhra Pradesh, Telangana and Odisha would "strengthen the link" between dhole populations in the Western Ghats and central India.
4. India has the highest number of dholes in the world, but India don't have targeted management plans for scientific monitoring of the species.

### **Hoolock Gibbons**

- Hoolock Gibbons are native to eastern Bangladesh, Northeast India and Southwest China.
- The tailless Hoolock Gibbon is the only ape found in India.
- In the areas of high tree canopies, the gibbons swing from branch to branch.
- They cannot adapt to living on the ground and cannot bear the high temperatures brought about by the loss of green cover.
- The Hoolock Gibbon is categorized into two types:
  1. **Western hoolock gibbon** - It inhabits in all the states of the north-east, restricted between the south of the Brahmaputra River and east of the Dibang River.
- It is listed as Endangered under the International Union for Conservation of Nature (IUCN) Red List.
- 2. **Eastern hoolock gibbon** - It inhabits specific pockets of Arunachal Pradesh and Assam in India, and in southern China and north-east Myanmar outside India.
- It is listed as Vulnerable under the IUCN Red list.







- In India, both the species are listed on Schedule 1 of the Indian (Wildlife) Protection Act 1972.

## **24. SCIENCE & TECHNOLOGY**

### **SPACE**

#### ***Brown Dwarfs***

- Recently, Citizen Scientists and NOIR Lab facilities discovered almost 100 nearby cool Brown Dwarfs.
- Brown dwarf are an astronomical object that is intermediate between a planet and a star.
- They are usually have a mass less than 0.075 that of the Sun, or roughly 75 times that of Jupiter.
- They are outside the solar system, they give off little light and energy and they are challenging to locate.
- Brown dwarfs are also called failed stars, because their masses are heavier than planets but lighter than stars.
- Due to their small masses, they are unable to sustain fusion of their hydrogen to produce energy.
- It is believed that some of the more massive brown dwarfs fuse deuterium or lithium and glow faintly.

#### ***Sarabhai Crater***

- A crater is a bowl-shaped depression produced by the impact of a meteorite, volcanic activity, or an explosion.
- The Sarabhai Crater is around 250 to 300 kilometres east of the crater where the Apollo 17 and Luna 21 Missions had landed.
- It is eight kilometres in diameter and located in the Mare Serenitatis in the Northeast quadrant of the Moon.
- The Crater has a depth of around 1.7 Kms taken from its raised rim.
- Chandrayaan 2 orbiter's Terrain Mapping Camera-2 (TMC-2) instrument has captured a photograph of the Sarabhai Crater on the Moon.
- The crater's outer region is dominated by numerous smaller craters of various sizes and is distributed over the flat Mare plains,
- It has defining features like a raised rim, gradient inner walls and the small hummocky floor.

#### ***Mare Serenitatis***

- It is one of the lunar mare regions on the Moon which were formed between 3.9 and 3.8 thousand million years ago with vast lava plains creating a flat surface
- It was during this period when the Moon was heavily bombarded by asteroids and the major impact basins on the Moon were formed.
- The Sarabhai crater is an 'excellent example' to study the impact process of the Mare Serenitatis.
- It will help the Space Scientists to understand further the process on the lunar region filled with lava.

#### ***Helium Enhanced Cool Stars***

- Indian Institute of Astrophysics (IIA) an autonomous institute of DST, have discover He-enhanced cool bright stars among the metal-rich parts of Omega Centauri globular cluster.
- This is the first time He-abundance has been found in Omega Centauri.
- Globular clusters are the stellar systems with millions of stars formed from the same gaseous cloud.
- Omega Centauri is the brightest and the largest globular cluster in our Milky Way Galaxy.
- Usually, the stars formed will be homogeneous in their chemical composition of elemental abundances.
- But, there are clusters which deviate from this norm.



- The different stars of Omega Centauri do not show the same metal content, a parameter that indicates its age, but a large range in it.
- The study provides a very important clue for the origin of the He-enhanced population establishing that these are the second generation of stars formed from the metal-rich and He-enhanced material from the first generation of stars.

### **AR2770 Sunspots**

- A Sunspot is an area on the Sun that appears dark on the surface and is relatively cooler than surrounding parts.
- The sun spots are as large as 50,000 km in diameter, are the visible markers of the Sun's magnetic field.
- It forms a blanket that protects the solar system from harmful cosmic radiation.
- Sunspots are the areas where the star's magnetic field is the strongest, around 2,500 times more than the Earth's magnetic field.
- Most Sunspots appear in groups that have their own magnetic field, whose polarity reverses during every solar cycle, which takes around 11 years.
- In every such cycle, the number of Sunspots increases and decreases.
- A massive Sunspot group, AR2770, was observed using images of the Sun's surface from NASA's Solar Dynamics Observatory (SDO).
- This massive sunspot on the Sun will be turning towards earth which could result in major strong flares.
- Sunspots may release a huge amount of energy which in turn will lead to solar flares.

### **Perseids Meteor Shower**

- The Perseids are one of the brighter meteor showers of the year it was active from august 17-26.
- They occur every year between July and August and tend to peak around mid-August.
- Perseids are made of tiny space debris from the comet Swift-Tuttle.
- The Perseids are widely sought after by astronomers and stargazers because most years at its peak, one can see 60 to 100 meteors in an hour from a dark place.
- They are visible in the Northern Hemisphere and can be viewed in skies all across.

### **Discovery of Exoplanet using Radio waves**

- An exoplanet is a planet that orbits a star outside the solar system.
- These exoplanets are hard to detect because they are hidden by the bright glare of the stars they orbit around.
- One of the key features of the exoplanet is that its orbit is wobbly because the star's gravitation is not at its center which makes the phenomenon possible.
- Recently, scientists have been able to discover an exoplanet and a wobbly star using just radio waves.
- In this method, scientists detect an exoplanet via auroras formed on it by the interaction of the star and a strong magnetic field around a planetary body.

### **Dragon Capsule**

- Crew Dragon is a part of the Dragon 2, a class of reusable spacecraft developed and manufactured by American aerospace manufacturer SpaceX.
- It is the 5th class of US spacecraft to take human beings into orbit, after the Mercury, Gemini, Apollo and Space Shuttle programs.
- Falcon 9, which carried the spaceship into the orbit, was also built by SpaceX.
- It is done under the Demo-2 Mission of NASA and SpaceX.

- The Demo-2 mission is part of NASA's Commercial Crew Program with the aim of developing reliable and cost-effective access to and from the International Space Station.
- Recently, dragon capsule returned back to earth after its short test flight, this clears the way for possible tourist flights in the near future.
- It was the first splashdown by U.S. astronauts in 45 years, with the first commercially built and operated spacecraft to carry people to and from orbit.
- The last time NASA astronauts returned from space to water was on July 24, 1975, in the Pacific to end a joint U.S.-Soviet mission known as Apollo-Soyuz.

### Coronal Magnetic Field

- International team of solar has measured the global magnetic field of the Sun's corona, or outer atmosphere, for the very first time.
- The team used a technique known as coronal seismology or magneto seismology to measure the coronal magnetic field which has been known for a few decades.
- This method requires the measurement of the properties of magneto hydrodynamic (MHD) waves and the density of the corona simultaneously.
- The team used the improved measurements of the Coronal Multi-channel Polarimeter (CoMP) and advanced data analysis to measure the coronal magnetic field.
- There are two main puzzles about the Sun which this advancement will help address.
- **Coronal Heating Problem** - Though the core of the Sun is at a temperature of about 15 million degrees, its outer layer, the photosphere is a mere 5700 degrees hot.
- However, its corona or outer atmosphere, which stretches up to several million kilometres beyond its surface, is much, much hotter than the surface.
- It is at a temperature of one million degrees or more, attempts to explain this puzzle invoke the magnetic field of the corona.
- **Mechanisms of Eruptions of the Sun** - Solar flares and coronal mass ejections are driven by magnetic reconnections happening in the Sun's corona.
- Magnetic reconnection is a process where oppositely polarity magnetic field lines connect and some of the magnetic energy is converted to heat energy and also kinetic energy which leads to the generation of heating, solar flares, solar jets, etc.
- **India's Contribution** - India's first solar mission, Aditya-L1 satellite will aim to measure the solar coronal magnetic fields regularly.
- This will help understand the spectacular solar eruptions and predictions of space weather and many more things.

#### Coronal Multi-channel Polarimeter (CoMP)

- CoMP is an instrument operated by High Altitude Observatory, of the U.S.
- It is located at Mauna Loa Solar Observatory, near the summit of that volcano on the big island of Hawaii.
- It is very important to measure the coronal magnetic fields regularly since the solar corona is highly dynamic and varies within seconds to a minute time scale.
- While photospheric magnetic fields are measured regularly from space.

## DEFENCE

### Draft Defence Production and Export Promotion Policy 2020

- Recently, the Ministry of Defence (MoD) has formulated a draft Defence Production and Export Promotion Policy 2020 (DPEPP 2020).
- It aims to provide impetus to self-reliance in defence manufacturing under Atmanirbhar Bharat Package.
- The policy aims to achieve a turnover of Rs 1,75,000 Cr (US\$ 25Bn) including export of Rs 35,000 Cr (US\$ 5 Billion) in Aerospace and Defence goods and services by 2025.



- **The Policy brings out multiple strategies under the following focus areas:**

1. Procurement Reforms
2. Indigenization & Support to MSMEs/Startups
3. Optimize Resource Allocation
4. Investment Promotion, FDI & Ease of Doing Business
5. Innovation and R&D
6. DPSUs and OFB
7. Quality Assurance & Testing Infrastructure
8. Export Promotion

### ***Srijan Portal***

- Defence Ministry has launched 'SRIJAN' portal, a one stop shop online portal.
- The portal provides access to the vendors to take up items that can be taken up for indigenization.
- On this portal, DPSUs/OFB/SHQs can display their items which they have been importing or are going to import which the Indian Industry can design, develop and manufacture as per their capability or through joint venture with OEMs.
- The concerned DPSUs/OFB/SHQs, based on their requirement of the items and their guidelines & procedures will interact with the Indian industry for indigenization.

### ***Sarthak***

- It is an offshore Patrol Vessel (OPV), 4<sup>th</sup> in the series of five OPVs deployed by the Coast Guard to enhance maritime security.
- The Ship is fitted with state-of-the-art Navigation and Communication equipment, sensor and machinery.
- The ship is designed to embark and carry a twin-engine helicopter, four high speed boats and one inflatable boat for swift boarding and Search & Rescue operations.

### ***Naval Innovation and Indigenization Organization (NIIO)***

- Union Defence ministry has launched the Naval Innovation and Indigenization Organization (NIIO).
- Draft Defence Acquisition Policy 2020 (DAP 20) envisaged establishment of NIIO by the Service Headquarters.
- The NIIO is a three-tiered organization.
  1. **Naval Technology Acceleration Council (N-TAC)** will bring together the twin aspects of innovation and indigenization and provide apex level directives.
  2. **A working group** under the N-TAC will implement the projects.
  3. **A Technology Development Acceleration Cell (TDAC)** has also been created for induction of emerging disruptive technology in an accelerated time frame.
- The NIIO puts in place dedicated structures for the end users to interact with academia and industry towards fostering innovation and indigenization for self-reliance in defence.

### ***Hammer Missile***

- Highly Agile Modular Munition Extended Range Missiles (HAMMER) is a medium-range modular air-to-ground weapon designed for the French Air Force and the Navy.
- It a rocket-enabled precision missile with a range of 60 km perfectly suited for high altitude.
- India has decided to fit HAMMER missiles on the newly-acquired Rafale jet aircraft
- Earlier Rafale jets with HAMMER missiles carried out airstrikes in Libya, Afghanistan, Iraq, and Syria.

- Apart from the HAMMER missiles, the Rafale aircraft will also be armed with beyond-visual range missiles like Meteor, SCALP, and MICA, increasing their ability to take on incoming targets from a distance.

### ***Munitions and their origins***

- **HAMMER** - Highly Agile Modular Munition Extended Range Missile – Made in France
- **MICA** - Fire and Forget short and Medium-Range Missile System – Made in France
- **Meteor** - Radar guided beyond-visual-range air-to-air missile – Made in France
- **SCALP** - Beyond visual range air to air missile – Made in France
- **SPICE** - Smart, Precise Impact, Cost-Effective Air-to-Surface missile – Made in Israel
- **Strom Shadow** - General Purpose Long Range Cruise Missile – Made in UK

## **HEALTH**

### ***Flavonoids***

- Flavonoids are part of the polyphenol class of phytonutrients (plant chemicals) found in almost all fruits and vegetables.
- Along with carotenoids (organic pigments), they are responsible for the vivid colours in fruits and vegetables.
- Polyphenols have historically been used in Chinese and Ayurvedic medicine and are associated with skin protection, brain function, blood sugar and blood pressure regulation.
- These are powerful antioxidants with anti-inflammatory and immune system benefits as well.
- A diet rich in flavonoids can protect from diseases related to heart, liver, kidney, brain and other infectious diseases.
- Recently, scientists from Agharkar Research Institute (ARI), found the first synthetic route for producing flavonoids molecules related to the treatment of tuberculosis and chikungunya.
- It will ensure their availability at all seasons without the dependence on natural timings of the plantations.
- It is for the first time that scientists have been able to synthesize the flavonoid molecules such as rugosa flavonoids, podocare flavone and isoflavone in a lab.
- These three molecules have so far been isolated from plants only and are found to inhibit tuberculosis and chikungunya.

### ***Saliva Direct***

- Saliva Direct is an inexpensive test, which has high sensitivity and can detect the virus even when the number of virus copies in the saliva sample is as low as 6-12 copies per microliter.
- Collecting and testing saliva samples involves three steps
  1. Collecting saliva without preservative buffers,
  2. Proteinase K treatment and heat inactivation,
  3. Dualplex RT-qPCR virus detection.
- U.S. Food and Drug Administration (FDA) has authorized the use of Saliva Direct.
- The testing protocol has been provided as an “open source”, allowing laboratories in the U.S. to perform the tests.
- The new saliva test would increase efficiency and avoid shortage of crucial test components such as reagents.
- The new test makes sample collection non-invasive and reduces the need for trained healthcare workers to collect the samples, reducing the risk of infection during collection.
- In contrast, tests using nasopharyngeal swabs lead to false negative results due to errors at the time of sample collection.



### ***Sickle Cell Diseases***

- SCD is group of disorders that cause red blood cells to become misshapen and break down.
- With sickle cell disease, an inherited group of disorders, red blood cells contort into a sickle shape.
- The cells die early, leaving a shortage of healthy red blood cells (sickle cell anemia) and can block blood flow causing pain (sickle cell crisis).
- Infections, pain and fatigue are symptoms of sickle cell disease.
- Treatments include medication, blood transfusions and rarely a bone-marrow transplant.
- Treatment can help, but this condition can't be cured

### ***Pavitrapati and Aushada tara***

- Pune based Defence Institute of Advanced Technology, developed an Ayurvedic based Biodegradable Nanofibres Face Mask “Pavitrapati”.
- **Pavitrapati** acts a virus neutralizer to resist against the bacteria / virus.
- It has also developed an anti-microbial body suit in the name of “Aushada tara”.
- **Aushada tara** suit has super hydrophobic, breathing, anti-microbial, comfort feeling properties.
- The fabric material of the suit has the approval for fighting against the COVID-19.
- The suit had cleared the splash resistant tests and it has got good repellent property of any fluids.
- The above two products are the Trademarked products of DIAT (DU).

### ***G6PD deficiency***

- Glucose-6-phosphate dehydrogenase (G6PD) deficiency is an inherited condition usually occurring in males.
- It is condition causing red blood cells to break down in response to certain medication, infections or other stresses.
- It's more common in those of African and Mediterranean descent.
- Triggers include infections, stress, fava beans, aspirin and other drugs.
- When symptoms are triggered, they include fever, dark urine, abdominal and back pain, fatigue and pale skin.
- Most people recover in a few days without treatment.
- However, patients are at risk of recurrent episodes, so avoidance of triggers is critical.
- The deficiency is chronic and cannot be cured.

### ***Human African Trypanosomiasis***

- Human African Trypanosomiasis or sleeping sickness, is a disease caused by parasites transmitted through infected tsetse flies.
- Sleeping sickness is currently found in 36 sub-Saharan African countries, according to the WHO.
- If untreated, it can become fatal.
- There are two types of sleeping sickness.
- **Trypanosoma brucei gambiense** – This occurs due to the parasite found in 24 countries in west and central Africa.
- It caused more than 88 per cent of reported cases of sleeping sickness in 2019, according to updated estimates made available by the WHO.
- **Trypanosoma brucei rhodesiense** - This parasite found in 13 countries in eastern and southern Africa.
- This type accounted for the remaining 12 per cent of reported cases in 2019.





- Recently Togo has become the first country in Africa to eliminate human African Trypanosomiasis.
- Togo did not report any cases in the past 10 years.
- The World Health Organization (WHO) August 27, 2020 certified so, after the country applied for it in 2018.

## **OTHERS**

### ***Ammonium Nitrate***

- Ammonium nitrate ( $\text{NH}_4\text{NO}_3$ ) is one of the world's most widely used fertilizers.
- It is produced as small porous pellets, or 'prills',
- Ammonium nitrate does not burn on its own, instead it acts as a source of oxygen that can accelerate the combustion (burning) of other materials.
- Ammonium nitrate prills provide a much more concentrated supply of oxygen than the air around us.
- This is why it is effective in mining explosives, where it's mixed with oil and other fuels.
- At high enough temperatures, however, ammonium nitrate can violently decompose on its own.
- This process creates gases including nitrogen oxides and water vapour.
- It is this rapid release of gases that causes an explosion.
- Recently there was an ammonium nitrate blast in Lebanese capital Beirut injured many.

### ***Nitrogen di-oxide***

- Nitrogen dioxide ( $\text{NO}_2$ ) is a red, bad-smelling gas.
- An ammonium nitrate explosion produces massive amounts of nitrogen oxides.
- Nitrogen oxides are commonly present in urban air pollution, and can irritate the respiratory system.
- Elevated levels of these pollutants are particularly concerning for people with respiratory conditions.

### ***Hydrogen Evolution Reaction***

- Hydrogen is projected as one of the next generation low carbon fuels.
- The future of use of hydrogen as a fuel lies in the design of efficient electro catalysts for facilitating electrochemical splitting of water to produce hydrogen.
- The effectiveness of the electro catalyst for the hydrogen ( $\text{H}_2$ ) evolution reaction (HER) largely depends on its ability to lower the potential of an electrochemical reaction maximally, and cost of synthesis (production).
- The commercially used Platinum (Pt) / Carbon (C) catalysts are efficient but expensive and suffer from metal ion leaching or electro catalyst corrosion when used for long duration.
- Metal-organic frameworks (MOFs) and coordination polymers (COPs) are envisioned as the next generation catalysts.
- Centre for Nano and Soft Matter Sciences (CeNS) an autonomous institute under Department of Science and Technology, have synthesized a novel COP consisting of palladium  $\text{Pd}(\text{II})$  ions.
- The recent invention serve as a source of active sites for H-adsorption, and benzene tetra mine (BTA) chelating ligands capable of better charge transfer.

## **25. INDICES & REPORTS**

### ***Science and Technology Indicators***

- Science and Technology Indicators (STI) is a periodic compendium of the state of scientific research in India.

- It is prepared by the National Science and Technology Management Information System, a division of the Department of Science Technology.
- According to highlights of Science and Technology Indicators (STI), 2018,

  1. India's private sector research companies appear to employ a larger proportion of women in core research and development activities than government-funded major scientific agencies do.
  2. For every one woman, there are six male scientists in private sector R&D establishments. However, the ratio is four for one in major scientific agencies.
  3. The bulk of scientists (in private and publicly funded organizations included) were in 'Engineering Technology' followed by the Medical Sciences and Natural Sciences.

### **Digital Quality of Life (DQL) Index 2020**

- DQL Index has been released by Surf Shark, an online privacy solutions provider.
- It is global research on the quality of digital wellbeing in 85 countries (81% of the global population).
- The study indexes the countries by looking at five fundamental pillars that define the digital quality of life namely, internet affordability, internet quality, electronic infrastructure, electronic security and electronic government.
- Underpinning these pillars are 12 indicators that are interrelated and work together to provide a measure of the overall digital quality of life.
- According to DQL India ranks among the lowest in the world in terms of Internet quality.
- India stands at the overall rank of 57 out of the 85 countries.
- However in internet affordability, India has secured 9th place and outperforms countries like the UK, the USA and China.

### **ARIIA Ranking**

- Atal Ranking of Institutions on Innovation Achievements (ARIIA) is an initiative of Ministry of Human Resource Development (MHRD), Govt. of India.
- ARIIA systematically ranks all major higher educational institutions and universities in India.
- The calculation is based on indicators related to "Innovation and Entrepreneurship Development" amongst students and faculties.
- It also measures the impact created by these innovations and Startups from Higher Educational Institutions (HEIs) in society and market.
- It aims to uplift India's Position in the Global Innovation Index from 52th to top 30 in a time period of 5 Years.
- ARIIA metrics considers all major parameters used globally to rank education institutions and some parameters which are India specific in nature.
- The parameters are primarily organized in major broad parameters with 7 indicators.
- Scores are computed based on the weights allotted to each head, overall score can take a maximum value of 100.
- All recognized Higher Educational Institutions of India are eligible to participate in the ARIIA ranking.
- In the recent ARIIA IIT Madras has bagged the top position under the category of Institutes of National Importance, Central Universities.

### **Global Innovation Index**

- The Global Innovation Index (GII) is an annual ranking of countries by their capacity for, and success in, innovation.
- The index was started in 2007 by INSEAD and World Business, a British magazine.

- Now it is published by Cornell University, INSEAD, and the World Intellectual Property Organization, in partnership with other organizations and institutions.
- It is based on both subjective and objective data derived from several sources, including the International Telecommunication Union, the World Bank and the World Economic Forum.
- The GII is commonly used by corporate and government officials to compare countries by their level of innovation.

### ***Export Preparedness Index (EPI) Report***

- Recently, the NITI Aayog in partnership with the Institute of Competitiveness released the Export Preparedness Index (EPI) report 2020.
- It aims to identify challenges and opportunities, enhance the effectiveness of government policies and encourage a facilitative regulatory framework for export.
- The index ranked states on four key pillars, such as
  1. **Policy** - A comprehensive trade policy providing a strategic direction for exports and imports.
  2. **Business Ecosystem** - An efficient business ecosystem helping states attract investments and create an enabling infrastructure for individuals to initiate start-ups.
  3. **Export Ecosystem** - Assess the business environment, which is specific to exports.
  4. **Export Performance** - This is the only output-based parameter and examines the reach of export footprints of States and Union Territories.
- The EPI is a data-driven effort to identify the core areas crucial for export promotion at the sub-national level (states and union territories).
- The Index would be a helpful guide for the state governments to benchmark regional performance with respect to export promotion and thus deliver key policy insights on how to improve and enhance the exports.
- Observations from recent EPI
  1. Gujarat has topped the overall EPI 2020 followed by Maharashtra and Tamil Nadu.
  2. Among the landlocked states, Rajasthan has topped the index, followed by Telangana and Haryana.
  3. Among the Himalayan states, Uttarakhand topped the index, followed by Tripura and Himachal Pradesh.
  4. Across Union Territories, Delhi has performed the best.

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