



VISION IAS

www.visionias.in

CURRENT AFFAIRS

APRIL 2020

Copyright © by Vision IAS


All rights are reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of Vision IAS.

Table of Contents

1. POLITY & CONSTITUTION	4	4.1. Epidemics and National Security	49
1.1. Panchayats and Pandemic	4	4.2. Organisation for the Prohibition of Chemical Weapons	50
1.2. Role of Civil Society in Times of Crisis	6	5. ENVIRONMENT	52
1.3. COVID-19 and India's Legal Framework	8	5.1. COVID-19 and Disaster Management	52
1.3.1. Ordinance to Protect Health Workers	10	5.2. Green Bonds	53
1.4. Reservation Policy	11	5.3. Supreme Court Relaxes BS-IV Deadline	55
1.5. Online Justice Delivery	12	5.4. Petcoke	56
1.6. Regulation of Government Advertisements	14	5.5. Uranium Contamination	58
2. INTERNATIONAL RELATIONS	17	5.6. Arctic Ozone Hole	59
2.1. Medical Diplomacy	17	5.7. Petersberg Climate Dialogue	59
2.2. Collective Action in the Times of COVID	18	5.8. Naming Of Tropical Cyclones	60
2.3. Role of WHO	20	5.9. Antarctica Experiences First Known Heat Wave	61
2.4. Trans-boundary River Water Management	23	6. SOCIAL ISSUES	62
3. ECONOMY	26	6.1. Urbanisation of Pandemics	62
3.1. National Infrastructure Pipeline (NIP)	26	6.2. Gender Violence and COVID-19	63
3.2. Revised FDI Policy	28	6.3. Global Report on Internal Displacement	66
3.3. COVID-19 and Poverty	30	6.4. Global Education Coalition	66
3.4. Other Reports on Various Impacts of COVID-19	32	6.5. Vidyadaan 2.0	67
3.4.1. Shared Responsibility, Global Solidarity" Report	32	7. SCIENCE AND TECHNOLOGY	69
3.4.2. ILO Monitor: COVID-19 and the World of Work	33	7.1. BCG Vaccine and COVID-19	69
3.4.3. Update of UNCTAD's Trade and Development Report	34	7.2. Updates on Various aspects of CoVID-19	70
3.4.4. Global Energy Review 2020	36	7.2.1. Transmission, Testing and Prevention methods	70
3.5. Special Liquidity Facility for Mutual Funds (SLF-MF)	36	7.2.2. Vaccines and Other Treatment methods	71
3.6. Public Utility Service	37	7.2.3. Tracking and Surveillance	72
3.7. Report on Industrial Relations Code	38	7.2.4. Awareness Generation and Grievance Redressal	72
3.8. Negative Oil Prices	39	7.2.5. Capacity Building And Promoting Innovation	73
3.9. WTO Peace Clause	41	7.3. Indian Initiative on Earth BioGenome Sequencing (IIEBS)	74
3.10. Special Drawing Rights	42	8. CULTURE	75
3.11. Minor Forest Produce	43	8.1. National List for Intangible Cultural Heritage (ICH)	75
3.12. District Mineral Foundation (DMF)	44	8.2. Qissa Khwani Bazaar Massacre	76
3.13. Draft Electricity (Amendment) Bill, 2020	45	9. ETHICS	77
3.14. Open Market Sale Scheme (OMSS)	47	9.1. Social Stigma: COVID-19	77
3.15. Atal Innovation Mission	48	10. NEWS IN SHORT	79
4. SECURITY	49		

10.1. Issue of nomination of Maharashtra Chief Minister _____	79	10.20. China to Launch Communication Satellites Named after Wuhan _____	84
10.2. Bodoland Territorial Area Districts (BTAD) _____	79	10.21. Tianwen-1 _____	84
10.3. Press Freedom Index _____	79	10.22. SunRise Mission _____	84
10.4. India remains on U.S. Priority Watch List _____	80	10.23. DEMO-2 Mission _____	84
10.5. Certificate of Origin _____	80	10.24. Digital Geological Map of Moon _____	84
10.6. Bank of Schemes, Ideas, Innovation & Research Portal _____	80	10.25. Lithium Rich Giant Stars _____	85
10.7. Trends in World Military Expenditure, 2019 Report by SIPRI _____	80	10.26. Fomalhaut B _____	85
10.8. Global Terrorism Index _____	80	10.27. Kepler-1649c _____	85
10.9. UN75 _____	81	10.28. June Almeida _____	85
10.10. EIA Notification Amended For Production Of Bulk Drugs _____	81	10.29. Sodium Hypochlorite _____	86
10.11. Global Groundwater Maps _____	81	10.30. Cytokine Storms _____	86
10.12. Rare Snow Leopards Spotted in Uttarakhand _____	82	10.31. Anthurium _____	86
10.13. Great Barrier Reef's Mass Bleaching _____	82	10.32. Self-Service Blockchain Track and Trace Platform for Businesses _____	86
10.14. Daporijo bridge over Subansiri river _____	82	10.33. Maze Ransomware _____	87
10.15. Anak Krakatau _____	83	10.34. Exercise NCC Yogdan _____	87
10.16. New Model to Predict Ionospheric Electron Density _____	83	10.35. Stranded in India Portal _____	87
10.17. Bharat Padhe Online _____	83	10.36. Festivals in News _____	87
10.18. UGC Guidelines on Examinations and Academic Calendar for the Universities _____	83	10.37. Nihangs _____	88
10.19. Hospital Empanelment Module (HEM) Lite _____	83	10.38. Dekho Apna Desh _____	88
		11. GOVERNMENT SCHEMES IN NEWS _____	89
		11.1. PM-CARES Fund _____	89
		11.2. Intensification of Research in High Priority Areas (IRHPA) _____	90
		11.3. E-NAM Platform _____	90

FOUNDATION COURSE 2021 PRELIMS CUM MAINS | GENERAL STUDIES



Features of the Program:

- Includes a comprehensive coverage of all topics of GS Mains, GS Prelims, CSAT and Essay
- Comprehensive coverage of Current Affairs through Live / Online classes of PT 365 & Mains 365 & News Today - A Daily Current Affairs Initiative
- One senior mentor will be provided for each group consisting of 25 students for regular mentoring, performance monitoring, guidance and support. It will be done through various modes like Google Hangouts & Groups, email and telephonic communication.

TURN YOUR ROOM INTO A CLASSROOM

LIVE / ONLINE CLASSES

Date & Timings 21st MAY | 5 PM

1. POLITY & CONSTITUTION

1.1. PANCHAYATS AND PANDEMIC

Why in news?

Prime Minister in an interaction with Panchayats on National Panchayati Raj Day lauded the local governments for their proactive approach to fight the crisis.

Introduction

- The **73rd Constitutional Amendment** mandates the constitution of panchayats at the district, intermediate and village levels as devolved institutions of self-government.
 - It provides for the **endowment of powers and responsibilities** to plan and implement programmes for social justice and economic development at grassroot level.
- With **more than three million elected representatives**, India's local government, or the Panchayati Raj are in the **forefront of the country's fight against the pandemic**.
 - They are proactive in **readying the infrastructure** to treat people, to arrange massive movements of **food grains** for community kitchens and also to maintain **hygiene and "social distancing"** at village level.
 - They have emerged as the **bridge between the decision makers and the community** that would have to adapt or implement such decisions.

On the occasion of National Panchayati Raj Day, 2020

Prime Minister interacted with Sarpanchs of Gram Panchayats throughout the country through Video Conferencing. He launched a unified e-GramSwaraj Portal and Svamitva Scheme.

- **e-GramSwaraj** will help prepare and execute Gram Panchayat Development Plans. The portal will ensure real time monitoring and accountability. The portal is a major step towards digitization down to the Gram Panchayat level.
- **Svamitva Scheme** provides for an integrated property validation solution for rural India; the demarcation of inhabited land in rural areas would be done by the use of latest surveying methods – Drone's technology with the collaborated efforts of the Ministry of Panchayati Raj, State Panchayati Raj Department, State Revenue Department and Survey of India.

Role of Panchayats in Pandemic

- **Practical consideration of local level knowledge.**
 - Due to their proximity, panchayats are usually the **first point of contact** for most citizens and thus best placed to know about mobility, as well as, social security needs.
 - **Community-level engagement** and **dissemination of information** become an easier task than deploying resources from the state level.
 - Additionally, **tracing individuals** who have crossed states or districts, make it imperative to have coordination efforts continuing till the last mile, with **panchayats being the eyes and ears** on the entry and exit of individuals and families, especially during community quarantine.
- **Administrative consideration**
 - Administratively, while their functions vary, panchayat members are the **nodal point** across most social welfare programmes and have the **power of direct reach** in their hands.
 - With **2.6 lakh rural local bodies** (or gram panchayats) and over **10 lakh frontline functionaries** (ASHAs, ANMs etc.), they can play a vital role in ensuring that **welfare services get delivered** on the ground and **no person is left behind** from accessing relief packages for want of documentation or lack of knowledge.
 - **Reservation for women** in three-tier Panchayati Raj Institutions (PRI) gives the PRIs extra advantage to work in coordination with lakhs of members of **women self-help groups (SHGs)** who are engaged in the fight against COVID-19.
- **Level of Trust**
 - From the citizen's perspective, the **panchayat represents the quintessential community**. Citizens have a **comparatively higher trust in their local governments** and thus, are most likely to approach them rather than other officials for their needs.

Panchayati Raj Institutions (PRIs) fighting at the forefront

- The Health Ministry's '**Micro Plan for Containing Local Transmission of Coronavirus Disease (COVID-19)**' has **placed panchayats at forefront** in increasing community mobilisation and ensuring active surveillance.
- The government **allowed the panchayats to use the earmarked funds under the 14th Finance Commission for COVID-19 related activities**. It made a special exemption for these works.
 - Constitutionally, **sanitation is the function of the local government**. COVID-19 related works have been brought under this function.
- Many states too have made **panchayats the nodal agency for coordination** – from ensuring health activities, information dissemination, and determining that all vulnerable communities have access to food supplies.
- **Kerala**
 - With its **long history of decentralisation** and both primary and secondary healthcare having placed under the purview of the third-tier institutions, panchayats in Kerala are on the forefront of coordinating government in tracing, organising health checkup camps, sanitation, social distancing messages among others.
 - Nearly a **third of Kerala's plan funds have been given to the panchayats** as flexible development and maintenance funds.
 - The **Kudumbashree system**, which encourages women to form self-help groups and their federations, acts as an organised civil society counterpoint to the panchayats, **collaborating with and yet holding to account** the latter for their performance.
- **Odisha**
 - It delegated **sarpanchs with the powers of a district collector** to impose quarantine at a village level.
 - To ensure a **decentralised way of tackling pandemic**, Odisha government has ensured every Gram Panchayat with registry facility and mechanisms for community-based monitoring.
- **Andhra Pradesh**
 - Village volunteers (nearly 2.5 lakh) have **helped survey 14.1 million** of the 14.3 million households in the state.
 - They have conducted a survey to help the state **trace people with travel history to foreign countries** and prevent the spread of COVID-19 infections in the state.

Way forward to strengthen the PRIs

- While many functions have been transferred to Panchayats as mandated by the Constitution, we are **yet to fully transfer the right funds and functionaries** to them to effective function like an elected government. It is time to give these governments their constitutional rights to better handle such crisis.
- The starting point could best be **Entry 23 of the Eleventh Schedule** (under Article 243G) that reads, "**Health and sanitation, including hospitals, primary health centres and dispensaries**".
- Until the full resumption of normal economic activity, there would be a need to provide free or heavily subsidised food to millions of villagers, including repatriated migrant labour.
 - **Entry 28 of the Eleventh Schedule** mentions the "**public distribution system**" as among the subjects for devolution.
- The most important requirement is **planning to receive the migrant labour influx**, including testing, quarantine, isolation, social distancing to the extent possible, and ensuring that all without exception are fed and housed and receive the monetary grants.

Village Volunteer System of Andhra Pradesh

- Under the system, a new department of Gram Volunteers/Ward Volunteers and Village Secretariat/Ward Secretariat was created.
- Each **Village Secretariat** has been set up for a population of 2,000, with each one comprising close to a dozen village officials.
- Each volunteer is **paid Rs. 5,000 per month** and the person has to ensure that benefits reach the people in the **50 households** in the village. (In towns, ward volunteers have been appointed)

Rationale for creating such a system

- The system was created to ensure **better delivery** of various benefits to the public **under welfare schemes**. These volunteers coordinate and implement government welfare programmes in more than 11,000 villages of the state.
- The system indirectly **creates employment** in the rural hinterland and simultaneously creates an **accessibility and accountability chain**. This in turn increases **decentralization** in implementation of schemes and also ensures **capacity building of local functionaries**.

- **Last mile delivery** can only be comprehensively ensured by empowered panchayats (and municipalities) reporting to their respective gram sabhas and ward sabhas mandated under **Articles 243A and 243S**.
- Planning for withstanding the ingress of COVID-19 requires the full deployment of the mechanisms for **district planning envisaged in Article 243 ZD** involving all three tiers of the panchayats and the municipalities brought together in the **district planning committee**.

1.2. ROLE OF CIVIL SOCIETY IN TIMES OF CRISIS

Why in news?

Civil Society Organisations (CSOs) are at the forefront assisting people during the COVID-19 pandemic.

Introduction

- The **World Bank defines civil society organizations (CSOs)** as a wide array of formal and informal organizations: community groups, non-governmental organizations (NGOs), labour unions, indigenous groups, charitable organizations, faith-based organizations, professional associations, and foundations.
- Faced with an unprecedented Covid-19 global pandemic, government has constituted the **Empowered Group (EG 6) chaired by CEO, NITI Aayog to leverage the network of CSOs**.
- The EG 6 has succeeded in **galvanising a network of 92,000 CSOs/NGOs** to harness their strengths and resources, expertise in key social sectors such as nutrition, health, sanitation, education, and extensive reach in the community.

Role of CSOs in Crisis times

- **Mobilise and channel resources:** CSO can leverage **strong relationships with communities and ready pool of volunteers** and resources, while also being a channel for the private sector to deploy resources.
 - CSOs/NGOs mobilised by EG 6 have been assisting and supporting the local administration in delivering essential services particularly for migrants and homeless population working in urban areas.
- **Provide immediate relief:** Just like in any other disaster, **civil society can serve as first responders** by providing food, ensuring water and sanitation facilities in camps, and distributing protective gear – particularly in far flung areas. Government reports that **NGOs mobilised by EG 6 were successful in**
 - **providing shelter** to homeless, daily wage workers, and urban poor families.
 - **extending support for distribution of Personal Protective Equipment (PPE)** for community workers and volunteers.
 - supporting the government in **setting up health camps**.
 - **identifying hotspots** and deputing volunteers and care givers to deliver services to the elderly, persons with disabilities, children, transgender persons, and other vulnerable groups.

Contribution of CSOs during COVID-19

According to a reply submitted by the central government in the Supreme Court on 7th April, a total of approx. 84 lakh people were provided meals across the country during the lockdown that started on 25th March.

- Of these, 54.15 lakh people were fed by state governments while the remaining 30.11 lakh were fed by NGOs.
- State-wise data presented by the Centre shows that **in 13 states and UTs, NGOs outperformed state governments** in providing humanitarian relief in the form of free meals. **Most of these meals were provided to stranded migrant labourers and the poor** who have been hit the worst owing to loss of income during the lockdown.
 - Overall, there were **9 states and UTs** where **NGOs fed more than 75% of the people** who were provided meals during the lockdown.
- Apart from providing meals to the needy, NGOs across the country also opened **relief or shelter homes** for people to take refuge. The analysis of the central government's reply shows that
 - 10.37 lakh people in India took refuge in shelter homes provided by state governments and NGOs. Of these 10.37 lakh, or **39.14%, are staying in camps set up by NGOs**.
 - In Maharashtra, 83.56% people were in camps set up by NGOs. In Meghalaya, this figure was 95%.
- In another development which reflects upon the critical importance of grassroot organisations and workers, government has directed the Food Corporation of India to **provide wheat and rice to these organisations at the open market sale rates (OMSS) without going through the e-auction process**.

- handling the **mass exodus of migrant labourers**. NGOs are coordinating efforts and working closely with the district administrations and state governments so that **measures of care, quarantine, and treatment** go hand in hand.
- **Run awareness campaigns:** Given the amount of misinformation going around, CSOs have a major role to play in building awareness among communities, panchayats, and public representatives. As reported by the Government, CSOs/NGOs network of EG 6 was successful in creating awareness about
 - prevention, hygiene, social distancing, isolation, and combating stigma.
 - **Developing communications strategy** in different vernaculars whereby they become active partners in creating awareness at the community level so that COVID-19 spread is tightly controlled.
- **Holding Government accountable:** There are **significant corruption risks** during times of crisis. Civil society has an important role to play in ensuring funds to tackle the Covid-19 pandemic reach their destination.
 - For instance, RTI petitions demanding details on how money donated in PM-CARES is being utilized.

Challenges being faced by civil society during the pandemic

During the ongoing pandemic, civil society is facing several constraints on its ability to carry out its work, as a result of lockdown, distancing, and quarantine measures.

- **Concerns related to their accountability**
 - The crackdown on thousands of NGOs in recent years had positioned CSOs at the margins of administrative decision making. Several NGOs have been criticized as being corrupt and in violation of foreign funding norms.
 - This makes it difficult for CSOs to hold government accountable in such crisis times even as they themselves try to protect their credibility.
- **Access to information**
 - Lockdowns prevent physical access to information, which was previously available from work, an educational institution, a library, etc.
 - Moreover, **lack of digital connectivity** along with **restrictions on internet** and **digital illiteracy** further restricts the widespread digital engagement with the stakeholders or access to information and communication.
- **Gaining momentum for civic initiatives is difficult**
 - During times of crisis it can be very difficult to gain momentum and participants for a cause, as media and public orientation are focused on the emergency.
- **Restriction of movement prevents activities that require meeting physically**
 - This is particularly the case for **civil society's social accountability role**, as most social accountability tools require engaging local communities to come together to participate in initiatives. This is not possible when social distancing measures are in place.

Opportunities for civil society during the pandemic

- **Potential to increase legitimacy of civil society** through **building broader participation** by a network of online reporters and activists with strong links to the communities in which they live. This may counter the tendency of NGOs to be driven by donor demands and the need to secure funding.
- **Potential for widespread engagement:** The current situation has released an urge to participate, demonstrated by the huge donations to PM-CARES Fund and helping hands coming forward to help migrants enroute to their hometowns. Some of this engagement could be channelled into constructive support and alternative forms of civic engagement.
- **Building of new alliances** with other types of CSOs beyond NGOs, such as professional associations (e.g. nurses unions), and other membership-based organisations.
 - These different forms of CSOs often have **good communication structures** and can engage different people in the monitoring and oversight of Covid-19 responses.
 - Building new alliances and networks can help civil society organisations to **break down silos** and **create new synergies** between organisations, which can prove useful in emergencies.
- **Exploring platforms for digital civic engagement:** There are several examples of how civic engagement and accountability have moved online, with many **untapped resources** to draw upon to **mobilise digital participation**.

- For example, in the UK, **'Frontline PPE'** provides information about availability of personal protective equipment (PPE). In Spain, **'Frene La Curva'** publishes requests for help or offers to collect food or medicine.

Conclusion

The **United Nations** refers to civil society as the **"third sector"** alongside government and private businesses. In such testing times, CSOs have emerged as key supporting partners for the state in charting out a response. They have helped in widening the reach of the state. Going forward, keeping in mind their potential, there is a need to institutionalize the way they interact with the state. This not only will increase their legitimacy but will also pave the path for even wider and deeper cooperation.

1.3. COVID-19 AND INDIA'S LEGAL FRAMEWORK

Why in news?

The ongoing pandemic of COVID-19 has highlighted **glaring gaps in India's domestic laws and the need for an overarching law to deal with such health emergencies.**

Background of the issue

- Public order and health are subjects that lie with the States as per the Indian Constitution thus **various states invoked the Epidemic Diseases Act, 1897** to pass orders and guidelines on social distancing measures, closure of establishments and limitation on activity.
- **Disaster Management Act, 2005 (DM Act), was then invoked by the Central government** to impose a blanket lockdown to ensure "consistency in the application and implementation of various measures across the country".
- The **Seventh Schedule to the Constitution does not have an explicit entry on disaster management.** Hence, **Parliament had to resort to Concurrent List entry 23** on "Social security and social insurance; employment and unemployment" to trigger provisions of the Act.
- The fragmented manner in which these legal provisions have been invoked highlighted a **lack of clarity in how the Centre and States have interpreted their roles** under the Constitution as it stands.
- Several experts thus are advocating for an over-arching legal framework to deal with similar situations.

Indian Penal Code sections used during COVID-19

- **Section 271 of IPC** - Whosoever disobeys the quarantine rule shall be punished with imprisonment or fine or both.
- **Section 269 of IPC** -Negligent act likely to spread infection of disease.
- **Section 188 of IPC**- It is used for defaulters who disobey the orders of the public servants during the lockdown.

The Epidemic Diseases Act and its limitations

- The Act **came into effect amidst the outbreak of the bubonic plague in Bombay.**
- This colonial-era act is **India's solitary law** that has been historically used as a framework for containing the spread of various diseases including cholera and malaria.
- The law **authorises the Central and state governments to take "exceptional measures and prescribe regulations"** to be observed by the citizens to contain the spread of a disease.
 - Section 2 of the act states that State Government may take measures and prescribe regulations for the inspection of persons travelling.
- It **also specifies consequences that will be faced by those violating the Act.**
- The **EDA is deficient for three key reasons:**
 - First, the law **fails to define "dangerous", "infectious", or "contagious diseases", and an "epidemic".** There is no elaboration in the Act on the extant rules and procedures for arriving at a benchmark to determine that a particular disease needs to be declared as an epidemic.
 - The second limitation is that the EDA **contains no provisions on the isolation and the sequencing required** for dissemination of drugs/vaccines, and the quarantine measures and other preventive steps that need to be taken.
 - Third, the Act **emphasises only the powers of the central and state governments** during the epidemic, but it **does not describe the government's duties** in preventing and controlling the epidemic, **nor does it explicitly state the rights of the citizens** during the event of a significant disease outbreak.

Disaster Management Act, 2005 and associated issues

- **CoVID-19 was declared as a “notified disaster” allowing the central government wide powers** by laying down policies, plans and guidelines for disaster management to ensure a timely and effective response to the disaster.
- **Section 72 of the DMA, 2005**, provides that the provisions of the Act, will have an overriding effect on all other laws, to the extent that they are inconsistent.
- Notifications, guidelines, circulars, and clarifications are being issued from Centre with little coordination or forethought on the implementation or consequences. This asymmetry in power between the centre and the states, which is mediated by the DMA, **leaves the states with no maneuvering space** that could be used to design and enforce lockdowns keeping cultural and social norms in mind.
- Issue have raised that **DM Act should not be seen as a carte blanche to micro-manage the Covid-19 crisis**. The Central government should restrict its actions under the DM Act to ensure coordination between States, rather than dictating consistency across States.

Earlier Initiatives and other recommendations

- **Draft Public Health (Prevention, Control and Management of epidemics, bio-terrorism, and disasters) Bill**
 - The Union Ministry of Health & Family Welfare had brought it in 2017 to fill these gaps. It was jointly prepared by the National Centre for Disease Control (NCDC) and the Directorate General of Health Services (DGHS), and also tried to address the need to empower local government bodies given the peculiarities of each emergency situation.
 - It was expected that with the implementation of this law, the old Epidemic Diseases Act, 1897 would be repealed. The bill was however **not tabled in Parliament**.
- **The National Health Bill 2009** was similarly targeted at providing an overarching legal framework for the provision of essential public health services by recognising health as a fundamental right of the people. It also provided for a response mechanism for public health emergencies by outlining a collaborative federal framework.
 - However, it was **considered by the states as an encroachment on their domains**.
- There have been attempts to draft statutes predicated on community health such as the **Model Public Health Act of 1955** updated in 1987. The Union government, however, has been unable to convince states to adopt the law since health is a State subject.
- The **Second Administrative Reforms Commission (2006)** had recommended the addition of a new entry in the **Concurrent List** for “Management of Disasters and Emergencies, Natural or Man-made”. This had also been recommended by the National Commission to Review the Working of the Constitution (2002) and later by a Ministry of Home Affairs Task Force set up to review the DM Act (2013).

Conclusion

- In a country governed by the rule of law, **it is essential that all power be exercised in a manner that is constitutionally grounded**.
- For responsive and efficient governance that is tailored to meet local exigencies, **State and third-tier governments should be taking the lead in tackling public health crises** (as they had been doing earlier), with ample support from the Centre.
- The COVID-19 public health emergency provides the Union government a **rare opportunity to update the country’s laws and pave the way for a new one** that can better address health emergencies that India might face in the future.

Learning from Global best practices

- **Canada:** Emergency measures and emergency management at the federal level are governed by the Emergency Act, 1988, and the Emergency Management Act, 2007.
 - Most provinces also have their own health Acts that delineate measures that are to be implemented in case of a health emergency.
 - Hence, most health crises in Canada are handled at the provincial level in coordination with the central government.
- **Australia:** National Health Security Act, 2007, puts in place processes and structures to pre-empt, prevent and, in an eventuality, deal with national health emergencies, with designated entities providing coordination and oversight at the national level and the provinces applying their own laws, jurisdictional responses and coordination processes.

- **England:** Public Health (Control of Disease) Act, 1984, was brought into force with the aim of creating specific functions for different authorities in response to a national health emergency. This Act provides for a clear hierarchical chain in which the primary, secondary and tertiary responders need to operate when dealing with a health challenge.

1.3.1. ORDINANCE TO PROTECT HEALTH WORKERS

Why in news?

The President **promulgated an Epidemic Diseases (Amendment) Ordinance, 2020 to amend the Epidemic Diseases Act, 1897** to protect healthcare service personnel and property including their living/working premises **against violence during epidemics.**

Key features of the ordinance

- **Definition:** The Ordinance defines healthcare service personnel as a person who is at risk of contracting the epidemic disease while carrying out duties related to the epidemic. It includes
 - any public and clinical healthcare service providers such as doctors, nurses, paramedical workers and community health workers;
 - any other person empowered under the Act to take measures to prevent the outbreak of the disease or spread thereof;
 - any person declared as such by the State Government, by notification in the Official Gazette.
- **Act of violence:** It includes any of the following acts committed against a healthcare service personnel:
 - harassment impacting living or working conditions,
 - harm, injury, hurt, or danger to life,
 - obstruction in discharge of his duties,
 - loss or damage to the property or documents of the healthcare service personnel.
- **Punishment:** The violence is punishable with imprisonment between three months and five years, and a fine between Rs 50,000 and two lakh rupees, which can be **compounded by the victim with the permission of court.**
 - In case of **grievous harm**, it is punishable with imprisonment between six months and seven years, and a fine between one lakh rupees and five lakh rupees.
 - These offences are **cognizable and non-bailable.**
- **Compensation:** Persons convicted of offences under the Ordinance will also be liable to pay a compensation to the healthcare service personnel whom they have hurt.
- **Investigation:** Cases registered will be investigated by a police officer not below the rank of Inspector. The **investigation must be completed within 30 days** from the date of registration of the First Information Report.
- **Trial:** The inquiry or **trial should be concluded within one year.** If it is not concluded within this time period, the Judge must record the reasons for the delay and extend the time period. However, the time period may not be extended for more than six months at a time.
 - **The burden of proof** for the offence falls on the guilty.

Need for the ordinance

- **No stringent laws:** Several States have enacted special laws to offer protection to doctors and other medical personnel in the past. However, the penal provisions contained in these laws are not stringent enough to deter mischief mongering.
 - They **generally do not cover harassment at home** and workplace and are focused more on physical violence only.
- **Low health literacy** in population perpetuated by myths and false beliefs, lead failure to understand a rational view.
 - **Misconception in society** that every death result from failure of doctors, avoiding one's duties, etc.
- **Lack of adequate security** and crowd control measures in most of the hospitals, especially in the government sector.

Conclusion

- Although the ordinance acts as deterrent to some extent, it is applicable only during epidemics, hence there is a need to bring a **comprehensive law to address the issue of violence on healthcare workers permanently.**

- **The Prevention of Violence against doctors, medical professionals and medical institutions Bill, 2018** should be passed which consists of provisions such as to provide able and timely assistance to the victims of medical negligence or mismanagement, establish a District Wise Committee to aid and advice such victims **for taking recourse to an appropriate forum for a suitable relief.**

1.4. RESERVATION POLICY

Why in news?

The Supreme Court's five-judge Constitution bench held that providing **100 per cent reservation for Scheduled Tribes in scheduled areas of a State is not permissible.**

Details

- The erstwhile State of **Andhra Pradesh** issued an order in 2000 **providing 100% reservation to the Scheduled Tribe candidates, out of whom 33% shall be women**, for the post of teachers in schools located in the Scheduled Areas of the State.
 - Earlier, in 1986 Governor of Andhra Pradesh, in exercise of **power under 5th Schedule**, also directed the posts of teachers in educational institutions in the scheduled tribe areas of the State to be reserved for Scheduled Tribes.
- However recently, **SC held that 100% reservation is discriminatory and impermissible** as it violated Articles 14 (equality before law), 15 (discrimination against citizens) and 16 (equal opportunity) of the Constitution.
 - A 100% reservation to the Scheduled Tribes also deprives General category, Scheduled Castes and Other Backward Classes also of their due representation. **The court referred to the Indira Sawhney judgment, which caps reservation at 50%.**
 - The judgement further includes that **equality of opportunity and pursuit of choice** cannot be deprived of arbitrarily.
 - It also said that the power of Governor to make 'modifications and exceptions' to any parliamentary law under **Fifth Schedule of the constitution** does not entitle him to substitute the law or make a new law altogether.

Fifth Schedule of the Constitution

- The Fifth Schedule under **Article 244** of the Constitution contains provisions regarding administration of Scheduled Areas other than in Northeast India.
- At present, Scheduled Areas have been declared in the States of **Andhra Pradesh (including Telangana), Chhattisgarh, Gujarat, Himachal Pradesh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha and Rajasthan.**
- **Scheduled Area in a State is notified by order of the President**, after consultation with the Governor of that State.
- Governor submits a report, annually or whenever President requires, regarding administration of such areas.
- Each state having 'Scheduled Areas' must have a Tribal Advisory Council consisting of 20 members.
 - Three-fourths of the members have to be representatives of scheduled tribes in State Legislative Assembly.
- The Governor is empowered to direct that any particular law of parliament and state assembly is **either not applicable or can be applied with certain 'modifications and exceptions' to scheduled areas.**

Constitutional Provisions regarding Reservation

- **Article 15 (4)** allows the State to make any special provision for the advancement of any socially and educationally backward classes of citizens or for the Scheduled Castes and the Scheduled Tribes. This provision was extended to **admission in educational institutions by 93rd Amendment Act, 2006 (except minority educational institutions)**
- **Article 16 (4)** allows State to make any provision for the reservation of appointments or posts in favour of any backward class of citizens which, in the opinion of the State, is not adequately represented in the services under the State.
- **Article 46** states that the State shall promote with special care the educational and economic interests of the weaker sections of the people, and, **in particular, of the Scheduled Castes and the Scheduled Tribes**, and shall protect them from social injustice and all forms of exploitation.
- **Article 243D** provides reservation of seats for SCs and STs in every **Panchayat.**
- **Article 243T** provides reservation of seats for SCs and STs in every **Municipality.**
- **Article 330** states that **seats shall be reserved in the Lok Sabha for the Scheduled Caste and Scheduled Tribes.**
- **Article 332** of the Constitution of India **provides for reservation of seats for the Scheduled Castes and the Scheduled Tribes in the Legislative Assemblies of the States.**

Reservation in the Indian Context

- It is a form of **affirmative action** whereby a **percentage of seats are reserved in the government service and educational institutions** for the socially and educationally backward communities and the Scheduled Castes and Tribes who are inadequately represented in these services and institutions.
- **10% Reservation to Economically Weaker Sections (EWS)** was recently provided by **103rd Constitutional Amendment Act, 2018**. It amended **Articles 15 and 16** to provide reservation to economically weaker section in admission to educational institutions and government posts.
- Reservation is provided to Scheduled Castes (SCs), Scheduled Tribes (STs) and Other Backward Classes (OBCs) at the rate of **15%, 7.5% and 27% respectively in case of direct recruitment on all India basis by open competition**.
- **Persons with Disability Act, 1995** provides for reservation for persons with disabilities in India. Under the Act, persons with disabilities got 3% reservation in both government jobs and higher educational institutions.

Judicial pronouncements regarding Reservation

- **State of Madras vs Champakam Dorairajan (1951)**
 - The Supreme Court upheld decision of Madras High Court, which struck down a Government Order of 1927 regarding caste-based reservation in government jobs and educational institutions.
 - This judgement also made basis of adding **Article 15(4)** by the First Constitutional Amendment Act, 1951.
- **Indra Sawhney vs. Union of India (1992)**
 - The 9 Judge Constitution Bench of the Supreme Court by 6:3 majority held that the decision of the Union Government to **reserve 27% Government jobs for backward classes – with elimination of Creamy Layer is constitutionally valid**.
 - The reservation of seats shall only confine to initial appointments and not to promotions, and the **total reservations shall not exceed 50 per cent**.
- **M. Nagaraj vs. Union of India (2006)**
 - A five-judge constitution bench of the Supreme Court validated parliament's decision to extend reservations for SCs and STs to include promotions with **three conditions**:
 - State has to **provide proof for the backwardness** of the class benefitting from the reservation.
 - State has to collect **quantifiable data showing inadequacy of representation** of that class in public employment.
 - State has to show **how reservations in promotions would further administrative efficiency**.
- **Jarnail Singh v. Lachhmi Narain Gupta (2018)**
 - The Supreme Court held that the government **need not collect quantifiable data to demonstrate backwardness** of public employees belonging to the Scheduled Castes and the Scheduled Tribes (SC/STs) to provide reservations for them in promotions.
- Recently the Supreme Court upheld **Karnataka Extension of Consequential Seniority to Government Servants Promoted on the Basis of Reservation (to the Posts in the Civil Services of the State) Act, 2018**. The enactment provides for **consequential seniority** to SCs and STs with restrospective effect from 1978.
 - Consequential seniority allows reserved category candidates to retain seniority over general category peers. If a reserved category candidate is promoted before a general category candidate because of reservation in promotion, then for subsequent promotion the reserved candidate retains seniority. In effect, consequential seniority undoes the 'catch-up rule' that allowed general category candidates to catch-up to reserved category candidates.

1.5. ONLINE JUSTICE DELIVERY

Why in news?

The Supreme Court recently passed directions for all courts across the country to **extensively use video-conferencing for judicial proceedings** so that the congregation of lawyers and litigants can be avoided to maintain social distancing amid the coronavirus pandemic.

More on news

- Supreme Court invoked its power under **Article 142 of the Constitution** to validate all proceedings through video-conferencing.
 - **Article 142** of the Constitution allows the Supreme Court to pass any order necessary for doing complete justice in any cause or matter pending before it.
- Kerala High Court also conducted court proceedings through video conferencing and also live streamed the proceedings.
- Various steps in past have also been taken to ensure online delivery of judicial services such as:
 - **eCourts Mission Mode Project** of Department of Justice, Ministry of Law and Justice, Government of India for the District Courts across the country.
 - Providing Video Conference facilities for 488 Court complexes and 342 jails.

How online delivery of judicial services help in tackling various issues in judicial system?

- **High pendency:** Between 2006 -2019, there has been an overall increase of 22% in the pendency of cases across all courts. Online judicial services can provide additional aid to clear this backlog and reduce the time and cost involved.
- **Enhanced efficiency of courts:** Standard system generated formats of routine judgments and orders, particularly in civil cases, can be used by courts for quick delivery of judgments.
 - **Reduction of paperwork** will relieve judges and other court staff from administrative duties and allow them to focus on judicial functions.
 - Real-time online data would facilitate better identification and classification of cases and also enable High Courts to exercise **proper supervision and control over subordinate courts.**
- **Tackling Infrastructural constraints:** Video and audio enabled hearings can save significant court costs in terms of building, staff, infrastructure, security, transportation costs for all parties to the court proceedings.
- **Availability of judicial data:** The Law Commission of India in its 245th Report noted that the lack of comprehensive and accurate data relating to cases from courts across the country poses a hurdle to efficient policymaking by the government. Digital databases created by online judicial services can address this need.
- **Improving transparency and accountability in the judicial system:** Allowing audio-video recordings of court proceedings can contribute to transparency of court processes by allowing a precise record of the proceedings and at the same time discourage improper conduct in courts and wastage of court time.
 - Information related to judicial statistics placed in the public domain can help the key stakeholders like advocates, litigants, researchers and the public at large to be better informed about the state of the judicial system
- **Promoting ease of doing business:** Online resolution of contractual disputes will boost the confidence of domestic and foreign businesses as they explore investments in India.

Challenges

- **Lack of investment in court and IT infrastructure:** State of the art e-courts require the deployment of new age technology like high speed internet connection, latest audio and video equipments, cloud computing, availability of sufficient bandwidth etc.
- **Lack of technical knowhow among court officials and staff** and absence of dedicated in-house technical support.
- **Low awareness amongst litigants and advocates:** As per a survey less than 40 per cent of cases were filed exclusively through a computerized system.
- **Digital divide in access to justice:** due to insufficient infrastructure, non-availability of electricity and internet connectivity and low digital literacy in rural areas.
- **Interdepartmental Challenges:** due to lack of coordination, communication and interoperability of software between various departments.
- **Cyber security threats:** Judicial data comprise of sensitive case information and litigant data, their electronic storing and transmission fuels security and privacy concerns.
- **Procedural problems:** like admissibility and authenticity of the evidence received through the video and/or audio transmissions, the identity of the witness and/or individuals subject of the hearings, confidentiality of the hearings etc.

Way Forward

- **Development of supporting infrastructure** at every level such as facilitation centres with facilities for **e-filing and video conferencing** at the entrances of court complexes; integrated softwares etc.
- **Making rules for use of electronic evidence:** Procedural laws / rules may also need to be amended to incorporate the suggestions of having audio-video recording of court proceedings and maintaining standard system generated formats of routine judgments and orders.
- **Design and impart regular training courses:** for judges, court staff and paralegals for using online systems and maintenance of e-data (such as records of e-file minute entries, summons, warrants, bail orders, order etc). Courses should optimize the use of virtual teaching tools to maximize reach.
- **Creating a user friendly e-courts mechanism and awareness generation:** which is simple and easily accessible by the common public and provides information in multiple Indian languages.
- **Clear rules on data privacy:** These must include consequences of data breach, infringement of privacy etc. and an appropriate grievance redressal mechanism.

Details of some important initiatives:

- **eCourts Mission Mode Project**
 - It is a **Pan-India Project**, monitored and funded by Department of Justice, Ministry of Law and Justice, Government of India for the District Courts across the country.
 - The objective of the eCourts Project is to provide designated services to the citizens as well courts by ICT enablement of all district and subordinate courts in the country.
 - The services being delivered to citizens include status of registration of cases, Case status, Case list, daily order sheets and final orders/judgments.
 - **e-Courts Services Mobile application and e-Courts National Portal have also been developed.**
- **National Judicial Data Grid:** It is a **web portal** that provides data related to the number of cases pending in any court in the country.
- **Judicial Service Centre:** JSCs have been established at all computerised courts which serve as a **single window for filing petitions and applications by litigants/ lawyers** as also obtaining information on ongoing cases and copies of orders and judgments etc.
- **e-Committee of Supreme Court:** It is a body constituted by the Government of India in the Supreme Court to assist the Chief Justice of India in formulating a National policy on computerization of Indian Judiciary and advice on technological communication and management related changes.
- **Re-engineering committees in High Courts:** These have been established as per the order of the eCommittee of the Supreme Court. The role of these committees is to undertake judicial process re-engineering by streamlining and improvising current court processes, eliminating redundant processes and designing new processes with respect to making court processes ICT enabled.
- **Legal Information Management & Briefing System (LIMBS):** It is a web based portal developed by Department of Legal Affairs, Ministry of Law & Justice for monitoring and handling of various court cases of Govt. Departments and Ministries.
- **Interoperable Criminal Justice System (ICJS):** It is aimed at integrating the Crime and Criminals Tracking Network and Systems (CCTNS) project with the e-Courts and e-Prisons databases, as well as with other pillars of the criminal justice system such as forensics, prosecution and juvenile homes in a phased manner.

1.6. REGULATION OF GOVERNMENT ADVERTISEMENTS

Why in news?

Recently, some states have responded to a letter of Ministry of Information and Broadcasting regarding constitution of committees to implement the Supreme Court guidelines on the issue of government advertisements.

Rationale behind government advertisements

- **Sharing information on government initiatives-** These advertisements facilitate circulation of necessary information with respect to government's policy or initiative, or about any public health or safety or other matters meant for citizens.
- **Right to Information-** It is a fundamental right under **Article 21** of the Constitution, for the citizens to know about their government's actions.
- **Nature of advertisements-** As per the government, 60% of the advertisements released by the Directorate of Advertising and Visual Publicity (DAVP) on behalf of various governmental agencies are related to issues like recruitment, tender and public notices.
- **Measure to check advertisements-** There exists substantive guidelines regulating the Governments' advertisements issued by the erstwhile DAVP.

More on news

- A writ petition was filed by two organisations **Common Cause** and **Centre for Public Interest Litigation** in the Supreme Court on the issue of misuse of public funds for issuing government advertisements, which are usually politically motivated.
 - It asked the court for restraining the Union of India and all the State Governments from using public funds for such advertising by **laying down binding guidelines**.
- Based on this plea, the Court appointed a **committee** to examine best practices in order to demarcate permissible advertising during campaigning from politically motivated advertisements.
 - The committee submitted its report to the Supreme Court in September 2014 which contained a set of guidelines on content regulation in government advertising.
- In 2015, the Supreme Court using its powers under **Article 142**, issued directions regulating the content and expenditure on government advertisements.

Supreme Court Guidelines on Content Regulation of Government Advertising

- **Scope of advertisements-**
 - It includes both **copy** (written text/audio) and **creatives** (visuals/video/multimedia) put out in print, electronic, outdoor or digital media.
 - It **does not** include classified advertisements.
- **Five guiding principles of content in advertisements-**
 - **Related to Government responsibilities-** The content of the government advertisement should be relevant to the governments' **constitutional** and **legal obligations** as well as the **citizens' rights** and **entitlements**.
 - **Presented in objective manner-** Advertisement materials should be presented in an objective, fair, and accessible manner and be designed to meet the objectives of the campaign.
 - Every effort shall be made to pre-test the material in case of large scale campaign with target audiences.
 - **Should not be directed at promoting political interests of ruling party-**
 - They should **not include** the name of ruling party, party symbol or logo, any attack on the views/ actions of opposition parties in any form.
 - They should not include **photographs** of government leaders with the exception of the President, Governor, the Prime Minister, the Chief Minister, other ministers and the Chief Justice of India.
 - **Cost effectiveness of advertisements-** There must be an optimum use of public funds which reflect a need-based advertising approach.
 - **Compliance with procedures-** Government advertising must comply with **legal requirements** (election laws and ownership rights) and **financial regulations** and procedures.
- **Compliance and Enforcement-** Government should constitute a **three-member body** consisting of persons with unimpeachable neutrality and impartiality and who have excelled in their respective fields.
 - It shall ensure the implementation of these directions.
 - It will address complaints from the general public on violation of the guidelines prescribed by the Court.

Need of regulating government advertisements

- **Projection of vested interests-** Against serving the public interest, many government advertisements glorify political personalities and parties.
 - It leads to wastage of scarce funds of state in promotion of private interests, which is against the rule of law.
- **Lack of clarity over public purpose-** There is a very thin boundary between government messaging for citizens and political messaging for voters.
 - There is a need that all government activities satisfy the test of **reasonableness** and public interest, particularly while dealing with public funds and property.
- **Against the democratic setup-** The incumbent government gains an advantage over other parties and candidates, especially before the elections by using such advertisements.
 - Such actions do not allow free and fair elections, as the political opponents may not have similar resource to highlight their promises and pleas.
 - It also allows governments to patronise publications and media organizations, so as to get favourable media coverage by **selective dispersal** of the advertising information.
- **Exponential rise in costs-** The information received through various RTI applications reveal that the government expenditure on advertisements has increased every successive election year by around 40% in recent times.

- As per a parliamentary committee report (2017) on the demand for grants of the Ministry of Information & Broadcasting, the government expenditure appears skewed in favour of election-bound states.

Status of implementation

- Following the directions, the Ministry of Information and Broadcasting issued an order containing-
 - The Supreme Court Guidelines would function as a **stopgap arrangement** until a legislation comes into force to regulate the content projected in government sponsored advertisements.
 - A **three member committee** would be constituted at the Centre and will be set up parallelly at the state level, appointed by the respective State Governments
- **Appointment of Committee-**
 - The Union government constituted a committee in 2016. However, there were criticisms with some members allegedly being close to the political party in power.
 - The State governments were also expected to constitute similar committees, however most of the states except some like Karnataka, Goa, Manipur, Mizo, Nagaland, have **not constituted nor in process of constituting** any such committee.
- **Conflict of Interest-** The government merged the previous departments into the Bureau of Outreach and Communication (**BOC**). Its mandate is to scrutinize the advertisements and report any alleged violation of the Hon'ble Supreme Court's guidelines to the Committee. This goes against the autonomy of the committee, which becomes dependent on this government body's inputs.
 - Earlier also, the DAVP looked after the government's advertising & publicity and was also responsible for disbursing funds to the committee which regulates government advertisements.
- **Flouting of norms-** Various state governments have shown disregard to the SC guidelines. E.g. the Vikas Yatra in Chhattisgarh was advertised using government funds, showcasing photographs of various political leaders.

Bureau of Outreach and Communication (BOC)

- It was setup in **2017** by integration of erstwhile Directorate of Advertising and Visual Publicity (**DAVP**), Directorate of Field Publicity (**DFP**) and Song & Drama Division (**S&DD**).
- It provides **communication solutions** to various agencies of the government.
- It is engaged in **educating people**, both rural and urban, about the Government's policies and programmes to evoke their participation in developmental activities.
- It is headed by **Director General (DG)** and manned by with officers of Indian Information Service and Ex-cadre personnel of erstwhile **DAVP, DFP** and **S&DD**.

Conclusion

- In the past, various bodies including Law Commission Report on Electoral Reforms, the Comptroller and Auditor General (CAG) and the Election Commission (ECI) have repeatedly demanded for standards to regulate such advertising.
 - The ECI has even recommended any advertisements highlighting achievements of existing governments should be prohibited for a period of six months before the due elections to the legislature.
- The flouting of these regulations also raises important concerns about the use of public funds in **political campaigns** and **rallies**.

2. INTERNATIONAL RELATIONS

2.1. MEDICAL DIPLOMACY

Why in news?

India will supply essential drugs, **including paracetamol and Hydroxychloroquine (HCQ)**, to countries which are badly affected by novel Coronavirus including countries in the neighbourhood, thus ensuring India's important role in Global Medical diplomacy.

More about News

- India had lifted the ban on export of **Hydroxychloroquine**, nearly two weeks after imposing a ban on its export.
- Currently, India is supplying **anti-malarial drug hydroxychloroquine** to 97 coronavirus-hit countries as grants as well as on commercial basis.
 - India manufactures **70% of the world's supply of HCQ** and it had exported \$51 million worth of the drug in FY19.
 - **HCQ is an anti-malarial drug** that has been identified by the US Food and Drug Administration as a possible treatment for the Covid-19.
- **The list of 97 countries includes:** US, Russia, France and UK, besides some 20 countries of Africa and many of India's immediate neighbors like Nepal, Maldives etc.
- Apart from supplying HCQ, **India has been sending teams of Indian doctors** to Nepal to deal with the testing and treatment of Corona Virus patients.
 - India is also working closely with countries in the middle-east during the pandemic.
- There has been **online training organized for health care professionals in South Asia** and other neighbouring countries on covid-19 management strategies and related aspects.
- There have been **high level contacts at regional and multilateral levels** – at the insistence of India.
 - These include a virtual summit of South Asian Association for Regional Cooperation (**SAARC**) countries and a similar meet of the leaders of the **G-20 countries**.

What is Medical Diplomacy?

- In the recent years, **health has been adapted as a strategic foreign policy and diplomatic concern** for many countries and regions of the world.
- **Medical Diplomacy** is an emerging field that addresses the **dual goals of improving global health and bettering international relations**.
- It **mainly a component of soft power** which involves winning hearts and minds of people in countries by exporting medical care, expertise and personnel to help those who need it most.
- It is concerned not only with the **economic effect of poor health** on development or of pandemic outbreaks on the global market place but also the **gain from the growing global market** in health goods and services.
- It also reinforces **health as a social value and human right, supporting the United Nations Sustainable Development Goals**, advocating for access to medicines and primary health care, and calling for high income countries to invest in a broad range of global health initiatives.

Factors driving India's Medical Diplomacy

- **Global presence:** India has a strong and widespread pharmaceutical presence in much of the world including the US, Western Europe, Japan and Australia.
 - India has a history of providing medical and pharmaceutical support to poor African nations, regions of Latin America, Middle- East and the Caribbean.
 - India is involved in **tele-medicine initiative like e-ArogyaBharti** in African Countries to use its ICT prowess to help these countries expand their expertise in medical field.
- **Drug Exports:** The total size of the industry, including drugs and medical devices, is approximately \$43bn of which it exports \$20bn worth of drugs.
- **Generic Medicines:** India is also **the leading producer of generic medicines**, with Indian drugs comprised of 20% by value (as of November 2019) of the global generic drug exports, out of which North America had the largest share.
- **Traditional Medicine:** India is also leading global platforms in **traditional medicine such as Ayurveda and Yoga**.

- India successfully lobbied the United Nations to designate June 21 as International Yoga Day.
- India and USA are conducting workshops together for the revival of traditional medicine.
- **Vaccine Manufacturing:** Indian manufacturers have played a critical role in driving down prices and improving access to vaccines and HIV/AIDS treatments for millions of people worldwide.
 - India is also founding member of **Coalition for Epidemic Preparedness Innovation (CEPI)** which is an alliance to finance and coordinate the development of new vaccines to prevent and contain infectious disease epidemics.
- **Training:** India has also taken this opportunity to be a leader in the training of doctors and other medical staff for its neighbours as Indian Doctors and medical specialists have been conducting on-line training camps of doctors and medical staff of the SAARC countries.
- **Medical tourism:** Since the 1990s India has been flaunted as a global leader in “**medical tourism**,” defined as the travel of people to a place other than where they normally reside for the purpose of obtaining medical treatment in that country.
 - In addition to quality medical services provided by its hospitals and doctors, patients go to India because medical costs are a lot cheaper compared with the US and UK.

Challenges in Medical Diplomacy

- **Foreign regulations:** Because more than half of India’s pharmaceutical exports are to highly regulated markets such as the United States, Indian manufacturers have to comply with strict U.S. Food and Drug Administration (FDA) guidelines that include regular and rigorous inspections to ensure compliance.
- **Intellectual property Rights:** It is one of the vital facets that face health practitioners and one of the main issues where health and foreign policy intersect.
 - The TRIPS Agreement allows countries substantial flexibility toward protecting public health. Section 3(d) of Patents Act prohibits evergreening, which is the practice of foreign pharmaceutical companies to extend their patent terms by making small, trivial changes to existing medicines and thereby **preventing entry of generic drugs**.
- **Active Pharmaceutical Ingredients (API):** Despite being a leading supplier of medicines to several countries, India is highly dependent on China for raw materials such as API **and bulk drugs** even to produce medicines as basic as Crocin. According to estimates, 70% of India's imports of APIs come from China.
- **Lack of support & infrastructure:** India has persistently lacked sufficient and effective investment in healthcare through the decades (currently at 3.5% of the GDP, which includes private investment).
 - Quality of doctors and clinical infrastructure is considered good. However, **general infrastructure** does not satisfy the tourists

Way forward

- The **overseas Indians** have distinguished themselves in the field of medicine and healthcare in the countries of their residence.
 - The Diaspora can also help in promoting India as healthcare destination. They can effectively contribute in the expansion and growth of pharmaceutical industry.
- **Individual service providers of medical tourism** must locate their niche segments and market their services accordingly engaging on a long term with targeted communities.
- India needs need to **invest phenomenally high amounts in API** manufacturing so that the buyers of Chinese APIs move towards India.
- The challenges like Covid-19 provide India an opportunity to showcase its humanitarian angle by providing drugs such as HCQ. It can also provide an opportunity for India to **promote traditional wellness techniques** such as yoga during the lockdowns around the world.

2.2. COLLECTIVE ACTION IN THE TIMES OF COVID

Why in news?

The pandemic of COVID has started a global debate on the **need for collective action** to face such global emergencies. Recently, the former UK prime minister Gordon Brown has called for a new ‘**global government**’ to deal with the current crisis.

Need of collective action in such emergencies

- **To develop consensus** - as the countries should work tandem in their response to this pandemic.
 - In such situations, countries should listen to international experts and take scientific inputs, rather than work in silos based on their homegrown demands.
- **Common but differentiated responsibility**- as all the countries may not have the kind of resources required to deal with his menace, such as-
 - **Capital resources**- In low income countries, assistance is required from international community to provide for safety nets, cash transfers and food & logistic costs. E.g. the Central African Republic had just three ventilators to treat patients in this crisis.
 - **International supply chains** need to be put on a wartime footing to produce the supplies needed, from masks to ventilators, to treat rapidly growing numbers of patients who need intensive care.
 - Collective action is also needed to clear barriers to the development, manufacture and equitable **distribution of a vaccine**.
- **Sharing of information**- in the form of scientific research, findings and data in different parts of the world.
 - **Crowd sourcing**- e.g. In the recent crisis, more than 45,000 research papers have been collected in an open source database, which could prove useful for the entire humanity.
 - **Learning from past experiences**- e.g. Liberia's experience during 2014 Ebola outbreak, shows that national leadership, community driven programs and local solutions helped slow the spread of disease.
 - **Success stories**- Any kind of innovation, technology, idea which can be replicated in other countries should be shared among the global community.
- **Stop reactionary forces from misusing this situation**- for which the countries need to come together, such as-
 - **Private Sector**- The big pharmaceutical companies should not be allowed to make hefty profits from drugs and medical devices needed during the pandemic, rather work for the public good.
 - **Terrorism**- There are reports that the current crisis could be exploited by some terrorist groups to further their agendas.
- **Prevent erosion of public trust**- If such emergencies are not tackled effectively by the governments.
 - **India**- There was a mass exodus of migrants from urban centres with many travelling foot with limited help from government.
 - **Philippines**- There was a largescale protest and riots against the government for lack of food and relief supplies during the COVID-19 lockdown.
 - **Spain and Italy**- Given their situation, the analysts believe the government's response might create anarchy and put a question on the entire notion of social contract.

Some steps taken in this direction

- **United Nation Resolution**- titled 'International cooperation to ensure global access to medicines, vaccines and medical equipment to face COVID-19' was adopted. India has supported the above **UN resolution**.
- **COV-access agreement**- Various countries around the world pledged to give everyone equal access to new coronavirus vaccines and treatments around the world.
 - The United Kingdom virtually co-hosted new **Coronavirus Global Response Summit**.
- **COVID Action Platform**- Launched by the World Economic Forum (**WEF**), it aims to convene the business community for collective action, protect people's livelihoods and mobilise support for the COVID-19 response.
- **Vaccine Development**- Global leaders have pledged to accelerate cooperation on a coronavirus vaccine and to share research, treatment and medicines across the globe.
- **COVID-19 Solidarity Response Fund**- Launched by the World Health Organisation (**WHO**), it supports the fundraising plan to fight the pandemic.
- **Fast track financing**- Launched by the **World Bank**, it aims to support countries in their efforts to fight COVID-19 as well as face wide range of consequences in the post-COVID world.
- **Alliance for Multilateralism** – India participated in the virtual summit to fight COVID 19. This initiative was launched by Germany and France in 2019 and is an informal network of countries.

Issues faced in collective action during COVID-19

- **Increasing protectionism and nationalism**- at the cost of human interventions required for larger international community, such as-
 - As per the **Global Trade Alert project**, at least 69 countries have banned or restricted the export of protective equipment, medical devices or medicines.

- Germany also accused the United States for attempting to take over German pharmaceutical company **CureVac**, so as to have manufacturing slots reserved towards exclusive vaccine production for the U.S. market.
- **International Sinophobia**- whereby there have been xenophobic reactions from some parts of the world towards Chinese.
 - The COVID-19 has initiated a new string of US-China rivalry after the trade war between the two countries.
 - There have been calls to ban Chinese people temporarily from Australia.
- **Role of international institutions**- such as
 - World Health Organisation (**WHO**)- It has been accused of **understating coronavirus risk** and acting soft on China.
 - **UN Security Council**- A special session which was convened for it, ended inconclusively.
- **Fault lines in multilateralism**- Experts are of the view that COVID-19, rather than bringing countries close, has resulted in reverse migration, decouple supply chains and marginalise multilateral institutions such as-
 - **G-20**- In the meeting of G-20 leaders, it was promised to strengthen the global financial safety net, but did not lay concrete plan of actions, such as with respect to WHO and global supply of medical equipment.
 - **G-7**- The grouping was unable to release a statement because there was debate whether the virus be called the 'Wuhan Virus' rather than the coronavirus or not.

Way Forward

- **Mobilize funding**- for vaccine development and deployment, using mechanisms like International Finance Facility for Immunization (**IFFIm**), the Vaccine Alliance (**GAVI**) etc.
 - As per the Coalition for Epidemic Preparedness Innovations (**CEPI**), there is a need to mobilize \$2 billion to make three COVID-19 vaccines available to the point at which they can be mass manufactured and deployed.
 - Governments must use innovative finance mechanisms such as **vaccine bonds** and advanced market commitments (**AMCs**).
 - A bond structure backed by high-income countries would allow money to be raised in the capital markets.
 - An AMC is a legally-binding agreement for an amount of funds to subsidize the purchase, at a given price, of an as yet unavailable vaccine against a specific disease causing high morbidity and mortality in developing countries.
- **Suspension of debts**- Temporary suspension of debts so that countries can redirect resources towards addressing the health crisis. It may include-
 - Suspension of Investor-State Dispute Settlement (**ISDS**) and other unjust trade measures that impose a financial burden and undermine countries' capacity to prioritise public needs.
 - Ending all economic sanctions that disproportionately affect poor people in countries like Iran and Venezuela.
- **Responsible role of social media and news organisations**- particularly when it comes to countering the spread of misinformation and conspiracy theories on their platforms.
- **Build new global economic order**- This crisis presents an opportunity to correct the injustices present in global order.
 - The international community should focus on creating systems, structures and policies that can always protect the marginalised in need and assure everyone to live with dignity.

2.3. ROLE OF WHO

Why in news?

Recently, there have been allegations on the course of action pursued by the WHO in the COVID-19 pandemic. These developments have fuelled observers to suspect China's influence on the organisation, and raises questions regarding its politicisation.

About World Health Organisation (WHO)

- **Origins**- The WHO was established in 1948 as a United Nations (UN) **specialised agency**.

- The potential for spread of diseases due to globalisation, mobility and urbanisation called for the need to create a global institution to expand international health cooperation.
- **Structure-** The WHO has a three-tiered structure, comprising:
 - The **World Health Assembly**- It is the supreme decision making body comprising all member states to determine policy direction.
 - The **Executive Board**- It comprises of technical experts to oversee the implementation of WHA's decisions.
 - The **Secretariat**- It is headed by the Director General and functions as WHO's administrative and technical organ with the overall responsibility for implementing its activities.
- **Funding-** The WHO is funded through a system of assessed and voluntary contributions.
 - **Assessed contributions** are paid by all member states, and are calculated on the basis of a country's gross national product and population.
 - **Voluntary contributions** are amounts voluntarily paid by other UN organisations, private companies, individuals, NGOs as well as member states.
 - The US was the WHO's largest contributor and paid a total of \$893 million in both assessed and voluntary contributions in 2019.
- **Authority to challenge governments-** The IHR grants WHO the authority to take actions that can challenge how governments exercise sovereignty in the following ways-
 - WHO can collect **disease-event information** from non-governmental sources, seek verification from governments about such information, and, if necessary, share the information with other states.
 - WHO director-general can declare a **public health emergency of international concern**, even if the state experiencing the outbreak objects.
 - WHO has the authority to **reinforce the requirement** that a state party shall provide the scientific and public health justification for trade or travel restrictions that do not conform to WHO recommendations or accepted disease-control measures.
 - The IHR requires states parties to protect human rights when managing disease events, which are led by the WHO.

Criticisms of WHO during COVID-19

- **Lack of preparedness-** The WHO already had access to data and years of subsequent research about the SARS outbreak.
 - A research paper in 2007 had already warned against the mutable nature of the virus coupled with China's rapid urbanisation, proximity to exotic animals and refusal to tackle illegal wildlife trade.
 - In 2015, the coronavirus family of diseases was selected to be included in a list of priorities requiring urgent research and development.
 - It was earmarked as a primary contender for emerging diseases likely to cause a major epidemic.
 - This assessment was reiterated in WHO's 2018 annual review of prioritised diseases.
- **Delay in declaration-** WHO has been criticised for its unexplained delay in declaring COVID 19 as a '**public health emergency of international concern**' (PHEIC).
 - Various governments across the world reached out to the WHO for an advisory, but the WHO emergency committee was split on whether to declare a PHEIC.
 - WHO did not take any decision and stated that "**the focus is not so much on the numbers**".
 - It finally had to declare once the confirmed cases had increased tenfold across 18 countries.
 - Subsequently, WHO also delayed its declaration as a '**pandemic**', especially when the COVID 19 was exhibiting the characteristics of a pandemic, i.e. spreading rapidly around the world.
- **Indecision in visiting China-** The WHO did show any urgency in sending an investigation team to China. A joint WHO-Chinese team went to Wuhan only in mid-February.

International Health Regulations (2005)

- It represents an agreement between 196 countries including all WHO Member States to work together for global health security.
- Through IHR, countries have agreed to build their capacities to detect, assess and report public health events.
- WHO plays the coordinating role in IHR and, together with its partners, helps countries to build capacities.
- **Public Health Emergency of International Concern-** A PHEIC is defined in the IHR as, "an extraordinary event which is determined to constitute a public health risk to other States through the international spread of disease and to potentially require a coordinated international response".
 - Some instances of PHEIC are H1N1 influenza pandemic (2009), west Africa Ebola epidemic (2014), Zika virus outbreak (2016) etc.

- **Exclusion of Taiwan-** Since China acceded to the UN in 1971, it has periodically blocked Taiwan's WHO membership on the grounds that the democratically governed island is part of China.
 - The WHO's continued support to the "**One China**" principle, which recognizes the government in Beijing as the legitimate Chinese government, became a crucial hurdle in dealing with the pandemic.
- **Delay in acknowledging human-to-human transmission of the virus-** especially, after the first case was announced outside China.
 - This is despite the fact that **Taiwan** had warned the WHO of this as early as end of December, 2019.
 - The recent reports clearly highlight that China stayed silent on its knowledge of human-to-human transmission.
- **Not endorsing the use of trade and travel restrictions-** The explosion of travel restrictions that countries implemented to counter COVID-19 prompted arguments that these restrictions violated the IHR, violations that the WHO did not probe despite having authority to do so.
 - Rather, the WHO urged the international community to not spread fear and stigma by imposing travel restrictions.
 - It even criticised early travel restrictions by the US as being excessive and unnecessary.
 - Following the WHO's advice, the European Centre for Disease Prevention and Control (ECDC) suggested that the probability of virus infecting the EU was low, likely delaying more robust border controls by European states.
- **Alleged lack of independence-** It has been alleged that the current WHO Director General, who won his election with the backing of China has been generous in his approach towards China.
 - **Appreciation of China's swift response-** WHO DG praised the Chinese leadership for "**setting a new standard for outbreak control**" and its "**openness to sharing information**", especially when there is sufficient evidence of concealment of the outbreak.

Arguments against the criticism of WHO during COVID-19

- **Lack of capacity with WHO-**As presented in the box, the WHO lacks functional capabilities to challenge the governments politically.
- **Alleged geopolitics over the issues-** From the beginning itself, the countries framed the epidemic in geopolitical terms and blamed China for the tragedy.
 - The most affected countries in COVID are the United States and European countries which largely fund the WHO.
 - In fact, the WHO was largely unable to keep them following its advice.
 - The **US** didn't recommend school closures or avoiding travel until 16 March.
 - The **UK** kept shifting between the WHO's norms and its own strategies such as the **herd immunity**.
 - Countries like South Korea and Germany who were active were able to contain the spread.
- **Development of vaccines-** WHO's efforts to advance development of coronavirus vaccines and therapeutics have been appreciated.
- **Countering misinformation-** The WHO's efforts in sharing of information and its attempts to counter online misinformation and disinformation have earned widespread praise.

Issues with WHO

- **Lack of defined functions-** There is no single document which comprehensively describes its responsibilities, obligations and powers with respect to infectious diseases.
 - A collection of documents, such as treaties, regulations like International Health Regulations (IHR), WHA resolutions and operational practices manifest WHO's powers
- **Recommendatory powers-** The WHO's authority is recommendatory in nature and include proposing conventions, agreements, public health practices and international nomenclatures.
 - Unlike bodies like World Trade Organisation (WTO), it has no ability to bind or sanction its members.
- **Capacity to work in an outbreak-** The organisation's responsibilities during a pandemic include surveillance, monitoring and evaluation, developing guidance for member states.
 - Its coordinating authority and capacity are weak and it merely works as a **technical organisation**.
 - It relies on bureaucracy and regional offices for control.
 - It lacks the **ability to direct an international response** to a life-threatening epidemic.
- **Limited funding-** WHO's annual operating budget, about \$2bn in 2019, is smaller than that of many university hospitals, and diversified among an array of public health and research projects.

Way Forward

- The criticism being faced by the WHO has done great damage to its global reputation and standing.
 - While the politicisation of the WHO remains a serious concern, it also presents an opportunity to rethink the underpinnings of the broader global governance architecture.
- The WHO reforms announced few months back should be implemented on a war footing.
 - Its donor dependency and weakened capacity should be addressed effectively, to meet its triple billion targets in future.
- India can also contribute towards providing stability and trust to the working of the organisation.
 - India will be appointed to Executive Board of the WHO and could work towards maintaining transparency and accountability in the Covid-19 outbreak and reforms in the WHO.

2.4. TRANS-BOUNDARY RIVER WATER MANAGEMENT

Why in news?

A new study highlighting **the impact of China's dams on the Mekong River** has raised fresh questions on whether dams being built on other rivers that originate in China, such as the Brahmaputra, may similarly impact countries downstream.

More about news

- Study shows that six dams built since the commissioning of the Nuozhadu dam (on the upper Mekong River basin) in 2012 had **altered natural flow of the river**.
- Also, based on satellite data from 1992 to 2019 it was shown that in spite of above-average rainfall, there was **severe lack of water in the lower Mekong**.
- India has also long expressed **concerns over dam-building on the Brahmaputra**.
 - In 2015, China operationalised its first hydropower project at Zangmu, while three dams at Dagu, Jiexu and Jiacha are being developed.
- This raises debate over the **Trans-boundary River Water Management** with neighbouring countries of India.



Need for Trans-Boundary Water Management

- **Dependency on rivers:** Globally, there are more than 260 river basins that are shared by two or more states, and there are 145 treaties in existence.
 - **More than 45 per cent** of the world's population lives in internationally shared river basins.
- **Water Scarcity:** Building of embankment dams and other structure on these rivers can lead to issue of water scarcity.
 - The **Global Risk Report** identified the **water scarcity** as one and at the top of the biggest societal and economic risk to the world which could put 6% of GDP by 2050 in jeopardy.
- **Changing climate:** Over the next 20 years, perceptions of a **rapidly changing ecosystem** may **prompt nations to take unilateral actions** to secure resources and territorial sovereignty.
 - For India, **decreased snow cover** will affect the flows in the Indus, the Sutlej and the Brahmaputra – both originating from Tibet.
- **Spillover effects:** Trans-boundary water cooperation has spillover effects, contributing to political tensions, security and other foreign policy objectives.
- **Value addition to economy:** A better trans-boundary managed of rivers can be commercially used and are value addition like for agriculture, dam building and power generation.
- **Soft Power:** Rivers are an inseparable part of the identities, cultures, and religious perceptions of different peoples and hence the cooperation between the countries can also help in **soft power diplomacy**.

Major issues involved in Trans-Boundary River Management

- **Advantage of upper riparian states:** Some countries such as China have enormous power in trans-boundary rivers as it acts as an upper riparian state leaving other lower riparian countries thirsty.

- Himalayas are called the “water tower” of South Asia. Most of India's northern rivers originate in Tibet. China’s total control over Tibet results into water hegemony by it.

- **Regional imbalances:** Due to regional imbalances in power among the South Asian countries, mutual hostility, suspicion and the **absence of a universally binding international legal regime**, sharing trans-boundary rivers and simultaneously ensuring the health of the riparian ecosystem has become complex.
- **Federal issues:** Sometimes states play major role in Trans-boundary river disputes delaying the conclusion of agreements.
 - **West Bengal opposing the proposed Teesta Agreement** resulted into status quo between India and Bangladesh
 - Teesta originates from the North Eastern state of Sikkim in India and traverses through West Bengal before entering Bangladesh
- **Boundary disputes due to rivers:** Sometimes rivers also act as **boundaries between two nations**. Due to the frequent change in the discourse of the river, it may even result into a boundary dispute.
 - India and Nepal have traditionally disagreed over the interpretation of the **Sugauli Treaty signed in 1816** between the British East India Company and Nepal, which delimited the boundary along the **MahaKali River in Nepal**.
- **Lack of data sharing** between countries creates even more confusion in domestic and international water governance.
 - China doesn’t share the Brahmaputra river water data frequently with its lower riparian states.

Approach needed

- **Integrative approach:** Regional diplomacy should emphasise sharing benefits through an integrative approach.
 - All the trans-Himalayan co- riparian countries must come together to adopt a system of water governance based on minimum international legal principles.
 - Depending on the nature and the use of trans-boundary rivers, the principles of “equal”, “equitable” and “reasonable” must be applied with human rights and environmental considerations for the river-basin communities.
- **Ensure proper stakeholder participation:** To ensure proper representation of **local users**, all water commissions must have a minimum number of representatives from the local committees, including in the trans-national legislative mechanism.

River Water Cooperation between India and neighboring countries

- **Indus Water Treaty (196):** It is an agreement on cooperation between **India and Pakistan** providing mechanisms to resolve disputes.
- **Indo-Bangladesh Joint Rivers Commission (JRC):** It was set up in 1972 by Treaty of Friendship, Cooperation and Peace. It was established with a view to maintain liaison in order to ensure the most effective joint effort in maximizing the benefits from common river systems between India and Bangladesh.
- **Ganga Treaty between India and Bangladesh, 1996:** is an agreement to share surface waters at the Farakka Barrage near their mutual border.
- **Koshi Agreement (1954), Gandak Agreement (1959), Tanakpur Barrage Agreement (1991) and Mahakali Treaty 1996:** These treaties have been signed between India and Nepal.
 - These treaties provided for different withdrawal rights and construction and sharing of hydropower energy.
- **India-Bhutan agreements:** The cooperation between both countries is one of the major success stories of Trans-boundary river water agreements.
 - India and Bhutan collaborated for the construction of **Chuka Dam on Wangchu River**. It helped Bhutan use low cost electricity and excess is sold to India which helped it improve its finances.
- **India-China Water Data Sharing** – In 2006, India and China had signed a pact under which China would share hydrological data from May 15 to October 15 every year for the Brahmaputra and Sutlej rivers. The two sides renewed the agreement in memorandums of understanding signed in 2013 and 2015.



- **Transparency in Data:** Transparency will help for shared benefits on the waters, and building ideas of 'water peace' rather than 'water wars'.
- **Institutionalised mechanism:** Creation of a multi-lateral mechanism in which all the co-riparian countries/basins have proportionate power. Ideally the body should have trans-boundary legislative powers pertaining to the basin and its waters. And this body should be elected and representative.

Some of the international treaties and best practices

- **Berlin Rules on Water Resources:** It is result of revision of the Helsinki Rules and other International Law Association rules on uses of international water resources.
- **United Nations Convention on the Law of the Non-Navigational Uses of International Watercourses, 1997:** dealing with measures of protection, preservation and management related to the uses of those watercourses and their waters.
- **Treaty for Amazon Co-operation in 1978:** signed for equitable sharing in South America between Bolivia, Brazil, Columbia, Guyana, Peru, Suriname and Venezuela.
- **Mekong River Commission:** It is major multilateral development in Asia for the Sustainable Development of the Mekong River, 1995 signed by Thailand, Laos, Cambodia and Vietnam.

“You are as strong as your Foundation”

FOUNDATION COURSE GENERAL STUDIES PRELIMS CUM MAINS 2021

Approach is to build fundamental concepts and analytical ability in students to enable them to answer questions of Preliminary as well as Mains examination

- Includes comprehensive coverage of all the topics for all the four papers of GS Mains, GS Prelims & Essay
- Access to LIVE as well as Recorded Classes on your personal student platform
- Includes All India GS Mains, GS Prelims, CSAT & Essay Test Series
- Our Comprehensive Current Affairs classes of PT 365 and Mains 365 of year 2021

DELHI
21 MAY | 5 PM
LIVE / ONLINE BATCH

DELHI
Regular Batch | Weekend Batch
5 Feb 9 AM | 11 June 1:30 PM | 21 June 9 AM

LUCKNOW
18 June 5 PM

**HYDERABAD | PUNE
AHMEDABAD | JAIPUR** | 17 June

CHANDIGARH
15 July 5 PM

LIVE/ONLINE CLASSES ALSO AVAILABLE

3. ECONOMY

3.1. NATIONAL INFRASTRUCTURE PIPELINE (NIP)

Why in news?

Recently, the Ministry of Finance released the **Report of the Task Force on National Infrastructure Pipeline for 2019-2025** in the public domain.

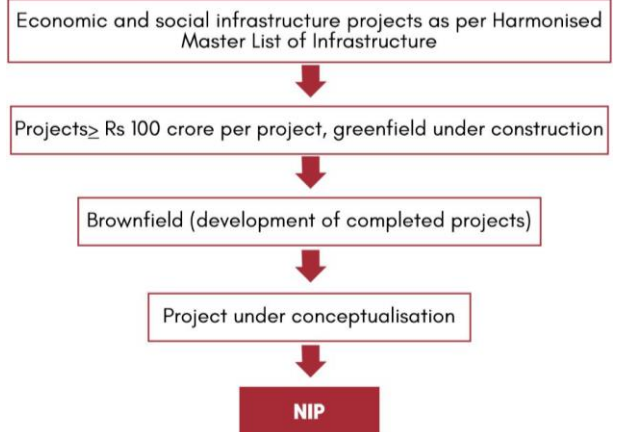
More on National Infrastructure Pipeline (NIP)

- India needs to spend **\$4.5 trillion** on infrastructure by **2030** to sustain its growth rate.
 - The government has announced that infrastructure projects worth Rs **102 lakh crores** will be implemented by 2025.
- The **NIP** seeks to implement and streamline this in an efficient manner.
 - To draw the NIP, all the **economic and social infrastructure projects** as per the **Harmonised Master List of Infrastructure** was taken up and the projects have been identified.
- This, **first of a kind exercise**, is expected to be followed up by a periodical review process.

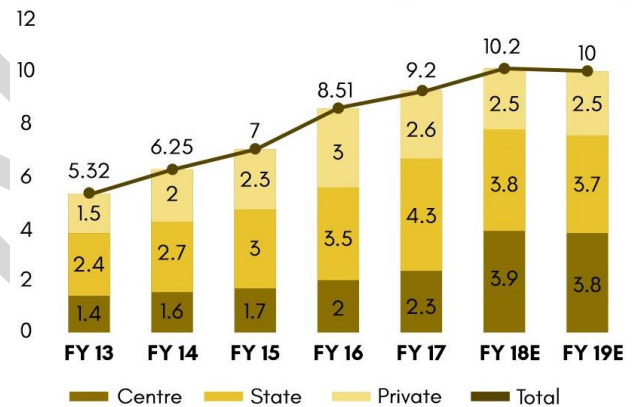
Importance of infrastructure sector

- Boosting the economy-** as India's ambition to sustain a high growth trajectory depends on infrastructure for various economic activities and growing population.
 - Both public and private **investments** depend on the quality of infrastructure in the country.
 - Infrastructure development can also plug the **inefficiencies** in the processes, which as per experts, cost **4-5% of GDP**.
- Improved governance-** Well-developed infrastructure enhances level of economic activity, creates additional fiscal space by improving revenue base of the government, and ensures quality of expenditure focused on productive areas.
- Create employment opportunities-** as quality of infrastructure is among the biggest hurdles in improving India's **manufacturing** capacity and consequent generation of employment.
- Improve global competitiveness-** as infrastructure bottleneck is a primary constraint in terms of India's competitiveness, as reflected in the World Economic Forum's Global Competitiveness Index.
 - India's Rank-** in overall **infrastructure quality** is **70** out of 140 countries. This rank falls to **above 100** in areas like **water and electricity utility infrastructure**.

CONSTITUENTS OF NIP

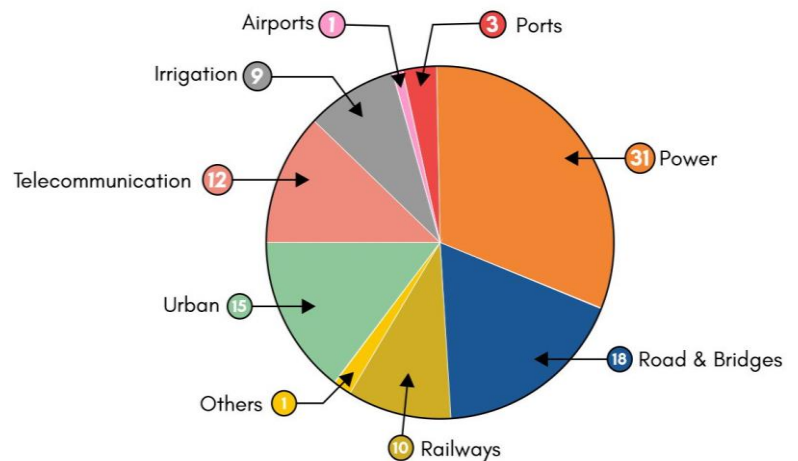


INDIA'S INFRASTRUCTURE INVESTMENT TREND SINCE FISCAL 2013 (Rs LAKH CORE)



Source: Appraisal documents for five-year plans, CRIS estimates (Investments mentioned are at current prices)

SECTOR-WISE SHARE(%) IN INFRASTRUCTURE INVESTMENT OF Rs 57 LAKH CORE DURING FISCALS 2013 TO 2019



Source: Appraisal documents for five-year plans, CRIS estimates (Investments mentioned are at current prices)

- **Builds investor confidence-** as identified projects are better prepared, exposures less likely to suffer stress given active project monitoring by competent authority, thereby ensuring better returns.
 - This improved confidence leads to better prepared projects, reduces aggressive bids/failure in project delivery, ensures enhanced access to sources of finance.
- **Improve ease of living-** as in order to fulfill various Sustainable development goals (SDGs), India needs to develop reliable, sustainable and resilient infrastructure in both regional centers and trans-border areas.
- **Realize potential of growing urban economy-** in required areas such as redevelopment of slum neighborhoods, urban roads, water supply coverage and quality, wastewater treatment facilities, and urban mobility through public transport.

Major constraints in Infrastructure sector

- **Availability of funds for financing large projects-** given the limited fiscal space with public sector and twin balance sheet problem of Indian economy with overleveraged companies and bad assets of banks.
 - Also, the corporate bond market is undeveloped and there is absence of efficient credit risk transfer mechanisms (such as securitization, credit derivatives, credit insurance etc.)
- **Regulatory uncertainty-** due to various risks which include procedural delays, lengthy processes in land acquisition, payment of compensations, environmental concerns, lesser traffic growth than expected etc.
 - Due to these, the sovereign wealth and pension funds do not find investing in Indian infrastructure an attractive option.
- **Weak enforcement framework-** India is currently ranked 163 out of 190 countries when it comes to enforcement of contracts.
 - There are cases when a developer enters into agreements without any intention to honor it as they do not fear enforcement of contracts.
- **Delays in Indian infrastructure projects-** leading to time and cost overruns in the implementation phase.
 - A comparison between Indian and Australian PPP model for infrastructure projects could be analysed-
 - Australia's predefined criteria for infrastructure bid processes have a time frame of **15-18 months** from initial interest to financial closure.
 - India's swiss challenge model to redevelop 23 railways stations had a time frame of **30 months** as the governments had to wait for 18 months to award bids and 12 months more for financial closure.

Major recommendations of the Task Force

<p>General Reforms</p>	<ul style="list-style-type: none"> • Improving project preparation processes- through a framework which consists of a transparent legislative framework, empowered public institution for infrastructure planning, model guidelines and standards, well-defined workflows and enabling special purpose vehicle (SPV). • Enhancing execution capacity of private sector participants- through a clear and consistent policy framework and collaboration with strong global infrastructure developers to achieve the required competence and execution capacity. • Enhancing ease of doing infrastructure projects- through single window approval, mandatory conditions before award of contracts, effective resolution of contracts using mechanisms like power purchase agreements. • Using technology- such as creation of public data sources for adequate data privacy frameworks, enabling data-based policy decisions, creation of smart infrastructure based on advanced technologies like artificial intelligence, virtual reality, cloud etc. • Strengthening Infrastructure quality- by a transparent procurement process, sound governance over the life cycle of the project and alignment with social and environmental sustainability. • Disaster resilience- by adopting the knowledge and expertise through the Coalition for Disaster Resilient Infrastructure (CDRI). • Environmental Sustainability- by adopting appropriate carbon pricing to stimulate low carbon investment in energy, transport and other infrastructure in the requisite scale. • Promoting competition- by speeding anti-trust resolution mechanism, greater collaboration between CCI and sector regulators and operationalizing the National Competition Policy. • Regulatory environment- through equitable allocation of risks in PPP, standardization of contracts and autonomous regulation in all infra sectors that are going in for PPP mode of implementation.
-------------------------------	---

Financial Sector Reforms	<ul style="list-style-type: none"> • Attracting foreign and private capital into infrastructure- aligning investment guidelines to the long-term nature of the infrastructure projects such as for patient capital, i.e. insurance and pension funds. • Revitalising the bond and credit markets- by establishment of a well-capitalised Credit Enhancement Institution, governance reforms in India Infrastructure Finance Company Limited (IIFCL). • Strengthening the municipal bond markets in India- by improving financial discipline and regular disclosures, augmenting revenue base and buoyancy of revenues of local governments, addressing gap in creditworthiness of local governments through innovative credit enhancement structures, and encouraging pooled bond issuances. • Revitalising asset monetization- through sale of land, non-operational assets through long-term lease with significant upfront lease payment, the toll-operate-transfer (TOT) model for operational road assets, Infrastructure investment trusts (InvITs), sale of portfolio of assets to strategic/ financial investors, and loan asset monetisation through securitisation. • Enabling user charges to finance infrastructure- through autonomous regulation of tariffs, regulation by contract with price regulation provisions mentioned in the contract itself and multi-sectoral regulators for regulation across infrastructure.
Infrastructure Financing	<ul style="list-style-type: none"> • Capital Markets- The setting of proposed Credit Enhancement Guarantee Corporation be expedited and the government should reform the pension and insurance systems to achieve savings in these sectors to at least 30% of GDP by 2025. • Right institutions for the right stage in project finance- to bridge the funding gap. It is imperative to develop a new class of investors who can bring in patient capital from insurance companies, pension funds and provident funds. • DFIs with better credit appraisal skills- The Development Finance Institutions (DFIS) should have required domain expertise and project appraisal skills. The government may consider a differential licensing system with an enabling regulatory framework to encourage setting up DFIs in the infrastructure sector, with domestic or foreign capital. • External Aid- The ministries and regulators should simplify the procedural aspects of FDI investment in infrastructure by sovereign wealth funds /global pension funds, improving the ease of investing.
Monitoring and Evaluation	<ul style="list-style-type: none"> • Projects under implementation- will include following measures- <ul style="list-style-type: none"> ○ Resolution of key issues stalling progress, required intervention and responsible party. ○ Timely action to be taken by concerned stakeholders as per the governance structure and escalation matrix provided. • Projects achieved financial closure (FC) but yet to draw-down funds- <ul style="list-style-type: none"> ○ Establishing the project monitoring Tool for various project milestones (cost and time). ○ Establish steering committee comprising representatives from stakeholders such as lenders and equity investors and assign responsibilities. • Projects under development <ul style="list-style-type: none"> ○ Delegate powers to Special Purpose Vehicles and hire competent managers. ○ Design proper risk mitigation strategies. • Projects at the conceptualisation stage <ul style="list-style-type: none"> ○ Map key clearances: environment, CRZ, forest clearance, etc along with land acquisition. ○ Technology choice analysis – disaster resilience, inclusiveness etc.

Conclusion

Well-planned NIP will enable more infrastructure projects, power business, create jobs, improve ease of living, and provide equitable access to infrastructure for all, thereby making growth more inclusive.

3.2. REVISED FDI POLICY

Why in News?

Recently, India's Department for Promotion of Industry and Internal Trade revised its FDI policy in order to curb the possibility of predatory foreign investment exploiting the financial distress of COVID-19-hit Indian companies.

More on news

- In the last five years, Chinese investment in India has drastically increased from **US \$1.6 billion in 2014 to at least US \$26 billion in 2019** (both current and planned), in particular in technology start-up segment.
- In the light of this, it was anticipated that **Chinese entities would take advantage** of the economic slump caused by the COVID-19 outbreak to raise their stakes in Indian entities and companies, exposing them to hostile and opportunistic takeovers.

- To avoid such a situation, **FDI policy has been revised** to curb opportunistic takeovers or acquisitions of Indian companies.

Rising Chinese Investments and related concerns

Until 2014, the net Chinese investment in India was and bilateral trade relationship was highly transactional i.e. limited to imports and exports, and there was negligible interdependence. However, 2014 marks the entry of the Chinese private sector at a large scale in India and subsequent influx of Chinese capital and investments in infrastructure, automobiles, energy, real estate and consumer goods sectors.

Since then, Chinese investors have **invested around \$4 billion** into 90 start-ups in India and 18 of the country's 30 unicorn start-ups are funded by Chinese investors.

While there are **benefits** in pursuing investment from China in terms of **capital-hungry Indian startups** which can benefit from the experience and technological know-how of Chinese companies that have achieved a bigger scale and success in their own home market in similar vertical. But the **concerns** need to be considered as well:

Concerns associated with these investments

- Concerns with such penetration: **Data security, propaganda and platform control.**
- China's State-owned enterprises (SOEs), provincial governments were source of around 50% Chinese investments in India. These have become an important tool in China's diplomacy. Also, it is difficult to differentiate between private sector and SOEs as many times they are indirectly related.
- These investments (including the private sector investments) are part of China's "Made in China 2025" plan. This plan is aimed at acquisition of technology. This is evident through investments in Indian technology startups like PayTM by tech giants like Alibaba.
- India's investment scrutiny mechanism may not be as robust as in developed countries. For instance, As of September 2019, the US, Australia, and Japan were among countries that have blocked Huawei, a private sector giant with close state ties, from their 5G plans. India has not taken a final call, although it has allowed Huawei to participate in initial 5G trials.
- Increasing investment in sensitive sectors such as news services, fin-tech services etc. can be detrimental in the context of privacy of user data and data security. For ex. ByteDance, which plays key role in censorship in China, has invested \$25 million in Indian news aggregator Dailyhunt.

Changes in FDI Policy

- The **present policy** states that a non-resident entity can invest in India, subject to the FDI Policy except in those sectors/activities which are prohibited.
 - **Additional Provision:** A citizen of **Bangladesh and Pakistan** or an entity registered in both countries can only invest under the government route.
 - Additionally, for **Pakistan** sectors/activities such as **defense, space and atomic energy are prohibited** for investment in addition to the sectors/activities already prohibited.
- The **amended policy** states that an entity of a country, which **shares a land border with India** or where the beneficial owner of investment into India is situated in or is a citizen of any such country, can invest **only under the Government route.**
 - This implies that the scope of the above mentioned additional provision has been **expanded** to all our **neighbours (including China)**. The government has refrained from explicitly mentioning China.
- Additionally, the amendment also states that the **transfer of ownership** of an existing or future FDI in an entity in India, **directly or indirectly**, resulting in the beneficial ownership falling within the restrictions imposed by the above rule will also **require government approval.**
 - The guideline was created to **check multi-layered transactions** which traced the beneficial ownership to the seven land border sharing countries.

FDI in Automatic vs. Government Route

- Under the **government route**, foreign investor has to take prior **approval** of respective **ministry/department.**
- Through **automatic route**, the investor just has to **inform the RBI after the investment** is made.
- Also, Proposals involving **FDI exceeding Rs 50 billion** are placed before the **Cabinet Committee on Economic Affairs** irrespective of sector or country.

Sectors in which FDI is prohibited

- Lottery businesses.
- Gambling and betting.
- Chit funds.
- Nidhi Company.
- Trading in Transferable Development Rights (TDRs).
- Real estate business excluding construction and REITs
- Manufacturing of cigars, cheroots, cigarillos and cigarettes etc.
- Sectors not open to private sector investment such as atomic energy, railway operations etc.

- This implies that private equity investors and venture capital funds that have investments from China (or any other land border sharing country) will also need prior approval before they make any investment, even ones that have already been pledged.

Challenges in implementation of the policy

- **Impact on funding for start-ups:** Funding for unicorns, smaller start-ups may be hit as several investors may get discouraged if asked to go through government route.
 - For example, upcoming funding rounds of India's top start-up unicorns including Paytm, Zomato, BigBasket and Dream11 may get dampened.
- **More clarity needed:** Further clarification is required on the reporting mechanism and identification of beneficial ownership structures such as the percentage of holding to ensure full compliance.
- **China alleges flouting of norms:** China states that the barriers created by the policy for investors from specific countries violate WTO's principle of non-discrimination.
 - **India's stand:** India has categorically denied China's allegations regarding its FDI policy. India has given following reasoning-
 - The revised policy **neither restricts market access nor national treatment**— the two tenets of global trade—and is thus not violative of any rules of the WTO.
 - On the investment front, the **measure does not fall** within the **Illustrative List of the Agreement on Trade-Related Investment Measures (TRIMS)**, which details the measures that are inconsistent with the obligation of national treatment.
- **Spill over on neighbourhood relations:** Expansion of restrictions to all land border sharing countries may indirectly affect the FDI from countries such as Myanmar.

Way forward

Chinese investment in India has the potential to **rebalance an extremely lopsided trading relationship**. Although Chinese stakes are increasing in Indian companies, India has also emerged among the key overseas markets for several Chinese companies which can be better leveraged by India's trade strategy to balance the trading relationship or secure market access for Indian firms in China.

In the light of this, there is a need to strike a better balance between **creating a friendly, open and predictable investment environment** on one hand, and **safeguarding longer-term considerations of security and privacy** on the other.

3.3. COVID-19 AND POVERTY

Why in news?

Recently, the United Nations University released the report titled, '**Estimates of the impact of COVID-19 on global poverty**'.

More on news

- India has an estimated **812 million** poor people, which could increase to **915 million**, due to the impact of COVID pandemic, as per the **projections in this report** (in the worst-case scenario).
- This is based on the World Bank's poverty line for lower-middle-income countries which is **\$3.2 a day**.

Impact of COVID

- **Largescale informal sector-** As per the International Labour Organization (ILO), around **400 million workers** from India's informal sector are likely to be pushed deeper into poverty, due to following reasons-
 - Due to strict lockdown measures of the government, large number of such workers have been forced to return to rural areas.
 - Decline in quantity of work, in terms of employment or number of hours.
 - Decline in wages by some employers to avoid layoffs.
- **Reduced sources of income-** due to following reasons-
 - Decline in income of self-employed, due to reduction of economic activity (sales, production) in micro and small enterprises due to fall in demand and disruptions in supply of inputs.
 - Decline in domestic remittances from urban migrants to their households in rural areas.

- Many people just above the poverty, employed in the gig economy are at risk of slipping into poverty.
- There is absence of adequate safety nets like savings and insurance cover. This might force the poor to indulge in activities like sale of productive assets with long-lasting negative effects.
- **Increase in out of pocket expenditure-** due to the following reasons-
 - The poor in urban areas are highly vulnerable to disease as they live in congested settlements with low-quality services.
 - This impacts their ability to work and also invites health spending due to illness or the need to take care of sick household members.
 - The strain on logistics and supply chains could increase the prices of the essential commodities.
 - The school closures can lead to a decline in food intake among children of poor families who rely on government programs like Mid-Day Meal.
- **Impact on economic demand-** The rise in unemployment and fall in incomes could lead to reduced spending and consumption.
 - As per the latest report of Centre for Monitoring Indian Economy (CMIE), India's **unemployment rate** surged to **27.11%** for the week ended May 3.
 - Many people in agriculture sector would be affected by falling prices due to decline in demand in urban areas over time.
- **Impact on poor women-** due to various added pressures in the COVID lockdown such as-
 - They face increased burden due to demand of care of children and elderly, as a result of school closures and their vulnerability to disease.
 - Women are more exposed to infection due to larger share of women in healthcare sectors.
 - Women face a higher likelihood of domestic violence during home confinement.
 - Some of the sectors most affected by lockdown have high concentration of female workers.

Situation of workers in India during COVID-19

The Stranded Workers Action Network (SWAN), group of volunteers connecting relief to workers stranded across India, conducted a survey of 11,159 workers across the country, which revealed the following facts-

- 74% had less than half their daily wages remaining to survive for the rest of the lockdown period.
- 89% had not been paid by their employers at all during the lockdown
- Rate of hunger is exceeding the rate of relief. Percentage of people who said they have less than 1 day of rations increased from 36% to 50% in the third week of lockdown while the percentage of people who received government rations increased from 1% to only 4% in the third week of lockdown.

Challenges

- **Uncertainty over the disease-** as the number of cases continue to increase and consequently the lockdown was extended from 4th of May for another two weeks.
 - With 80% asymptomatic patients and lack of vaccination, the magnitude of the crisis at hand still remains uncertain for the government.
- **Constrained financial resources-** as public finances at both central and state levels have been under considerable strain. It makes it difficult for the government to put more cash in the hands of the distressed.
- **Issues with the public distribution system-** such as lack of documentation and its updating of the PDS beneficiaries.
 - **Divisibility of ration cards-** PDS ration cards are neither portable across locations nor can rations be divided, allowing family members to pick up portions at different locations.
 - **Implementation issues-** such as only 10% out of the total monthly allocation of 1.95 lakh metric ton (LMT) pulses under the Pradhan Mantri Garib Kalyan Ann Yojana (PMGKAY), had been issued by the states till April 22.
- **Inadequate compensation-** Although the governments at Union and state have taken various steps, however, many experts state the relief packages in itself are inadequate.

Recommendations

- **Increase in coverage of existing safety net programs to new beneficiaries** based on geography (e.g. the areas with the highest levels of community transmission and/or economic disruptions), or sector of employment, or focusing on at-risk categories (e.g. families with young children, pre-existing health conditions, and elderly family members).

- **Portability of safety net program benefits** to ensure predictability of coverage as urban migrants will be likely to return to rural areas.
- **Suspension of group activities and conditionalities** to reduce the risk of contagion for all safety net programs.
- **Enhanced public procurement and distribution** of basic food items by incorporating all the players including private sector and civil society.
- **Policies to support firms:** includes providing grants and wage subsidies to firms to minimize layoffs and supporting micro and small enterprises through measures such as tax exemptions, delays, or waivers targeted to small firms, soft loans, and grants.
- **Active labor market programs** to facilitate the transition of workers who have lost jobs that are not coming back into training or new jobs.

Steps taken by the Government

- **Kerala-** Everyone in need, whether the below poverty line (BPL) or not, will get **free rice**. There will be home delivery of mid-day meals and the ASHA workers would ensure that food reached its 26,000 children registered under ICDS.
- **Haryana-** All BPL families received their monthly ration for April free of cost. All government school children and those enrolled in anganwadis were to be given dry rations.
- **Chattisgarh-** Dry ration instead of hot-cooked meals were to be provided to children aged between three and six years and who were registered with anganwadi centres.
- **Uttar Pradesh-** To provide food grains for April and May to more than 8.38 million widows, aged and handicapped pensioners. It is providing 20 kg of wheat and 10 kg of rice per household to a list of beneficiaries, which includes 16.5 million construction workers and daily wage labourers. The state has also announced universalisation of PDS as done by other states like Jharkhand, Rajasthan and Telangana.
- **Bihar-** Provision of direct cash transfers (**DCTs**), depositing funds to the bank accounts of ration card holders. It also decided to give 5 kg rice and 1 kg pulses for three months as lockdown relief.
- **Tamil Nadu-** To provide an incentive of Rs 2,500 each to salesmen and Rs. 2,000 each to packers at public distribution system (PDS) shops who have been working overtime and on holidays to ensure supply of essential commodities to 2.02 crore cardholders in the state during the lockdown. They will also give Rs. 1,000 to all ration card holders along with free rice, sugar and other essential commodities.

*For more steps taken by **Government of India**, please refer to **CA- March, 2020**.*

3.4. OTHER REPORTS ON VARIOUS IMPACTS OF COVID-19

3.4.1. SHARED RESPONSIBILITY, GLOBAL SOLIDARITY REPORT

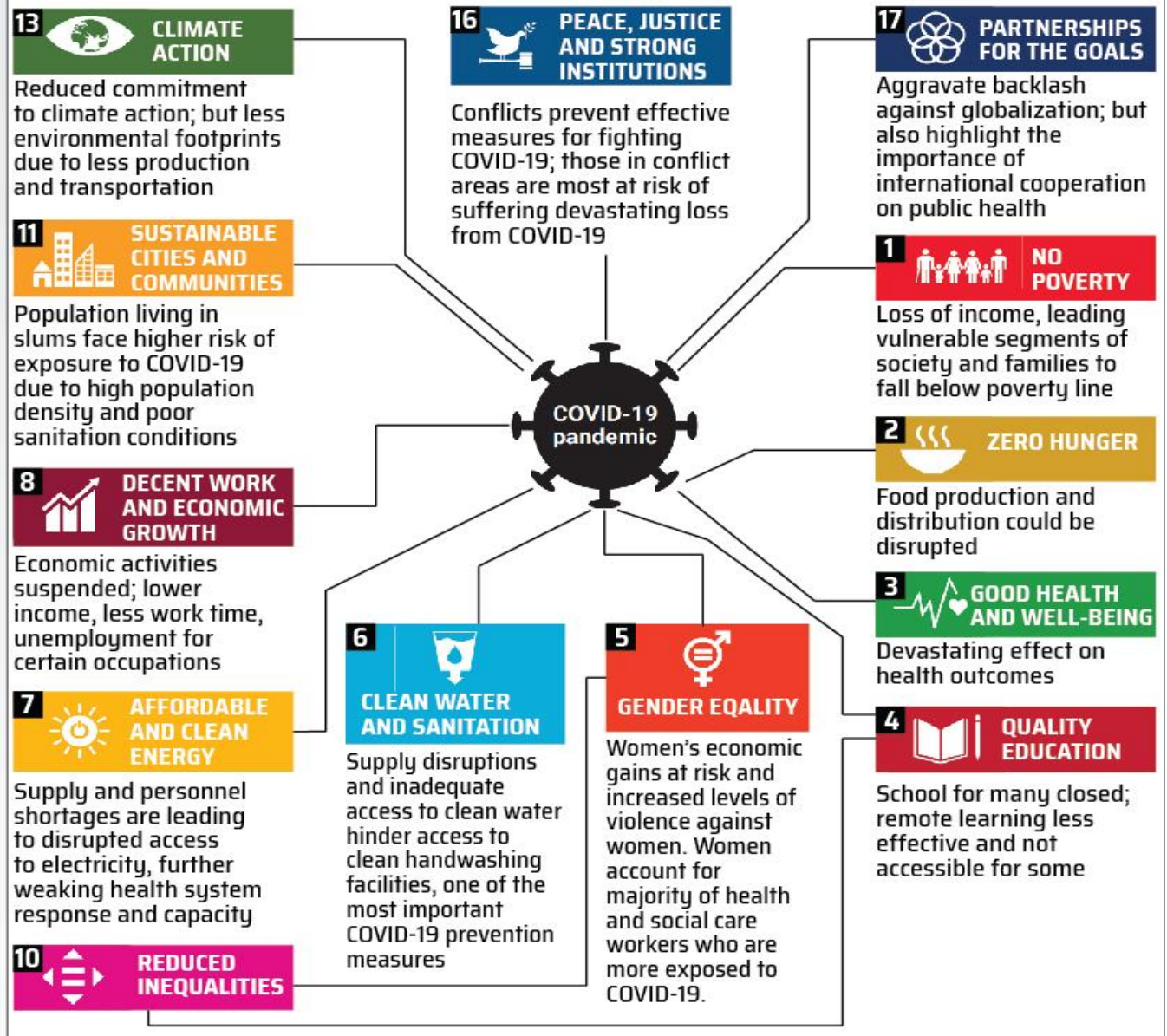
Why in news?

Recently, the United Nations Secretary General, released a report titled **“Shared Responsibility, Global Solidarity: Responding to socio-economic impacts of Covid-19”**, a call to action, for the immediate health response required to tackle the many social and economic dimensions of crisis.

More on news

- Along with the report the United Nations is also establishing a new **Multi-Donor Trust Fund for COVID19** Response and Recovery to support low- and middle-income countries.
- Report includes estimates from a host of UN agencies, with findings such as
 - According to the UN **International Labour Organization (ILO)**, five to 25 million jobs will be eradicated, and the world will lose \$860 billion to \$3.4 trillion in labor income.
 - **UN Conference on Trade and Development (UNCTAD)** projected a 30 to 40 % downward pressure on global foreign direct investment flows while the **World Tourism Organization (UNWTO)** saw a 20–30 per cent decline in international arrivals.
 - The **International Telecommunication Union (ITU)** anticipated that 3.6 billion people will be offline and the UNESCO forecast that 1.5 billion students out of school.

COVID-19 AFFECTING ALL SDGS



About the Multi-Donor Trust Fund

- The Fund will complement the **World Health Organization (WHO)**'s Strategic Preparedness and Response Plan, and the **UN Office for the Coordination of Humanitarian Affairs (OCHA)**'s Consolidated Global Humanitarian Appeal for COVID-19.
- The Fund has **three aims**, with a finance window for each one: stop transmission of the virus, protect the most vulnerable from its socio-economic impacts, and make countries more resilient to future health crises.
 - Window 1, '**Enable governments and communities to tackle the emergency,**' will support countries to fully implement their National Action Plans for Health Security (NAPHS).
 - Window 2, '**Reduce social impact and promote economic response,**' will support immediate social protection measures including cash transfers and food security.
 - Window 3, '**Recover better,**' focuses on national preparedness measures such as maintenance of key services and workforces during crises, and laboratory capacity.
- The Fund's contribution will be monitored, with real-time information on activities made available online.

3.4.2. ILO MONITOR: COVID-19 AND THE WORLD OF WORK

Why in news?

International Labour Organisation (ILO) recently released third edition of the **ILO Monitor: COVID-19 and the world of work**.

Key findings of the report

- The report offers the ILO's assessment concerning the possible impacts of COVID-19 on the world of work and proposes a range of policy options to mitigate these impacts and facilitate strong and fast recovery.
- **Currently 81 per cent of employers and 66 per cent of own-account workers** live and work in countries affected by recommended or required workplace closures.
- **Losses in working hours in the first half of 2020** compared to the pre-crisis situation:
 - **Global working hours declined in the first quarter of 2020:** by an estimated **4.5 per cent** (approximately **130 million full-time jobs**).
 - Lower-middle-income countries are expected to register the highest rate of hours lost.
- **Enterprises at risk:**
 - **Hardest-hit sectors** identified were accommodation and food services, manufacturing, wholesale and retail trade, and real estate and business activities. These sectors account for-
 - more than **30 per cent of national GDP** on average.
 - **436 million enterprises worldwide.**
 - **The number of small businesses in advanced economies is expected to decline:** Reasons being-
 - they often lack access to credit,
 - have fewer assets
 - are the least likely to benefit from fiscal measures in general and from the stimulus packages related to the current crisis.
- **Informal economy:** More than **2 billion people worldwide work in the informal economy.**
 - **Almost 1.6 billion informal economy workers** (76 per cent of informal employment worldwide) are significantly impacted by lockdown measures and/or working in the hardest-hit sectors.
 - **Women are overrepresented in high-risk sectors:** 42 per cent of women workers are working in those sectors, compared to 32 per cent of men.
 - **Close to 1.1 billion informal economy workers live and work in countries in full lockdown:** and an additional 304 million in countries in partial lockdown.
 - **The earnings of informal workers** are estimated to **decline by 60 per cent globally** due to the crisis.
 - **The rate of relative poverty (RP) for informal workers** is expected to **increase by almost 34 percentage points globally.**
 - RP is the proportion of workers with monthly earnings that fall below 50 per cent of the median earnings in the population.

International Labour Organisation (ILO)

- It is a **specialized agency of the United Nations** headquartered in **Geneva, Switzerland.**
- It is the only **tripartite** U.N. agency that brings together **governments, employers and workers** to set labour standards, develop policies and devise programmes promoting decent work for all women and men.
- It has 187 member States including India.
- It was created in 1919, as part of the **Treaty of Versailles.**

Other reports released by the ILO

- World Employment and Social Outlook
- Global Wage Report
- World Social Protection Report

POLICY FRAMEWORK: FOUR KEY PILLARS TO FIGHT COVID-19 BASED ON INTERNATIONAL LABOUR STANDARDS

PILLAR-1 STIMULATING THE ECONOMY & EMPLOYMENT

- Active fiscal policy
- Accommodative monetary policy
- Lending and financial support to specific sectors, including the health sector

PILLAR-2 SUPPORTING ENTERPRISES, JOBS & INCOMES

- Extend social protection for all
- Implement employment retention measures
- Provide financial/tax and other relief for enterprises
- Income support to vulnerable sections

PILLAR-3 PROTECTING WORKERS IN THE WORKPLACE

- Strengthen OSH measures
- Adapt work arrangements (e.g. teleworking)
- Prevent discrimination and exclusion
- Provide health access for all
- Expand access to paid leave

PILLAR-4 RELYING ON SOCIAL DIALOGUE FOR SOLUTIONS

- Strengthen the capacity and resilience of employers' and workers' organizations
- Strengthen the capacity of governments
- Strengthen social dialogue, collective bargaining and labour relations institutions and processes

3.4.3. UPDATE OF UNCTAD'S TRADE AND DEVELOPMENT REPORT

Why in news?

UNCTAD recently released an update on Trade and Development Report, 2019 titled **From the Great Lockdown to the Great Meltdown: Developing Country Debt in the Time of Covid-19.**

Key highlights

- **High and rising developing country indebtedness:** which could lead to **sovereign defaults** across the developing world.
 - In 2020 and 2021 alone, repayments on their public external debt are estimated to be nearly \$3.4 trillion.
 - At end-2018 the total debt stocks of developing countries (external and domestic, private and public) **stood at 191 per cent of their combined GDP** which is the **highest ever recorded**.
 - Private debt accounts for **139 per cent** of their combined GDP at end of 2018.
 - It has increased vulnerability to massive and volatile flows of high risk short-term private credit.
 - Servicing **external long-term public debt** cost developing country governments on average **10.3 per cent of their government revenues in 2018** (compared to 6.5 per cent in 2012).
 - This situation has been exacerbated due to the COVID-19 linked economic crisis in developing countries due to reasons such as:
 - **Negative impact on their commodity and service exports, remittances etc:** which bring in foreign currencies required to meet external debt obligations.
 - **Capital outflows and depreciation of their currencies:** which can cause steep increase in the value of their foreign-currency denominated debt.
- **Global efforts to relieve developing countries' debt burdens:**
 - Support amounting to at least **\$2.5 trillion** will be required for developing countries to deal with the Covid-19 crisis.
 - A few global initiatives in this direction include-
 - **Cancellation of due debt repayments by IMF** for the 25 poorest developing economies (estimated to around \$215 million) for the next six months.
 - **Debt Service Suspension Initiative for Poorest Countries** announced by **G20** leaders.
 - > It is estimated to cover around \$20 billion of public debt owed to official bilateral creditors in the eligible countries in 2020.
 - > Additional \$20 billions of such debt payments might be included, if all private creditors and all multilateral creditors join the initiative.
 - Both the IMF and the World Bank have announced **enhanced lending facilities** for developing country members to help deal with the crisis.
 - **Issues with such initiatives-**
 - They amount to a **relatively small part** of the long term public external debt stocks accumulated by developing countries.
 - They are **temporary measures** and do **not consider wider and long lasting macroeconomic impacts of the Covid-19 crisis** on export revenues, commodity prices, government revenues and reserve holdings, as well as new borrowings done during the crisis.
 - Enhanced lending facilities are **debt-creating financing instruments** and their eligibility still depends on highly restrictive criteria.

United Nations Conference on Trade and Development (UNCTAD)

- UNCTAD is a permanent **intergovernmental body** established by the United Nations General Assembly in 1964 with headquarters in Geneva, Switzerland.
- It has **195 member** countries including **India**.
- UNCTAD is part of the UN Secretariat and is also part of the United Nations Development Group.
- **Trade and Development Report** is issued every year by UNCTAD.
 - It analyses current economic trend and major policy issues of international concern and makes suggestions for addressing these issues at various levels.
- It publishes **reports** such as:
 - World Investment Report
 - Commodities and Development Report
 - Digital Economy Report
 - The Least Developed Countries Report

Suggested Strategy: A new 'Global Debt Deal' for developing countries with following steps-

- **Step 1: Automatic temporary standstills:** such as **immediate and automatic stay on all creditor enforcement actions**, i.e. ability to seize assets or initiate court proceedings against any sovereign creditor that fails to make debt service payments during the pandemic.
 - It would provide macroeconomic "breathing space" for all crisis-stricken developing countries by freeing up resources, normally dedicated to servicing external sovereign debt.

- It would also facilitate an effective response to the COVID-19 shock through **increased health and social expenditure** in the immediate future and allow for **post-crisis economic recovery**.
- **Step 2: Debt relief and restructuring programmes:** to reassess longer-term developing country debt sustainability, on a case-by-case basis.
- **Step 3: Establishment of an “International Developing Country Debt Authority’ (IDCDA):**
 - It could be set up as an **autonomous international organisation** through an **international treaty between concerned states**.
 - It will oversee the implementation of first 2 steps and lay the institutional and regulatory foundations for a **more permanent international framework to guide sovereign debt restructurings** in future.

3.4.4. GLOBAL ENERGY REVIEW 2020

Why in news?

Recently **International Energy Agency (IEA)** released a report called “Global Energy Review 2020: The impacts of the Covid-19 crisis on global energy demand and CO2 emissions.”

Highlights of the report

- About 4.2 billion people or **54% of the global population**, representing almost 60% of global GDP, **were subject to complete or partial lockdowns** as of the 28th of April 2020 and nearly all the global population is affected by some form of containment measures.
- Report provides projections of **energy demand and energy-related emissions** for 2020.
- It also provides an almost real-time view of the Covid-19 pandemic’s extraordinary **impact across all major fuels**.

International Energy Agency

- The IEA is an **autonomous body within the Organization for Economic Co-operation and Development**.
- The IEA is made up of 30 member countries.
- Before becoming a member country of the IEA, a candidate country must meet several criteria. For e.g. It must have crude oil or product reserves equivalent to 90 days of the previous year’s net imports.
- **India is the associate member** of IEA.

Global energy and CO2 emissions in 2020	<ul style="list-style-type: none"> ● Global energy demand declined by 3.8% in the 1st quarter of 2020. India’s energy demand reduced by almost 30%. ● There would be reduction in emission which would be the largest ever, six times larger than the previous record reduction of 0.4 Gt in 2009 due to the financial crisis.
Oil	<ul style="list-style-type: none"> ● Average oil prices fell sharply, with West Texas Intermediate hitting negative prices for the first time in history as excess storage became scarce.
Electricity	<ul style="list-style-type: none"> ● IEA expects global electricity demand to fall by 5% in 2020. This would be the largest decline since the Great Depression in 1930s.

3.5. SPECIAL LIQUIDITY FACILITY FOR MUTUAL FUNDS (SLF-MF)

Why in news?

To ease liquidity pressures on mutual funds, Reserve Bank of India recently announced a special liquidity facility of ₹50,000 crore for mutual funds.

Features of the Special Liquidity Facility for Mutual Funds (SLF-MF)

- The SLF-MF is **on-tap** and **open-ended** and will be available to **all LAF (liquidity adjustment facility) eligible banks**.
 - **On-tap** is a term used to describe a feature where something is available whenever needed as against during a particular period.
 - **Open-ended** implies that there is no restriction on the amounts that banks are allowed to borrow.
 - **LAF eligible banks:** All the Scheduled Commercial Banks are eligible to participate in LAF auctions except the Regional Rural Banks.
- Under it, the RBI shall conduct **repo operations of 90 days tenor** at the fixed repo rate.

Reasons for Liquidity stress in the Mutual Funds (MFs) market

- Heightened volatility in capital markets in reaction to COVID-19.
- Redemption pressures related to closure of some debt MFs. E.g. Franklin Templeton Mutual Fund recently decided to shut several schemes.
- The stress is more pronounced in the mutual schemes with large exposures to higher-yielding, lower-rated credit securities.

- It means that **RBI will lend money to banks** at current repo rate of 4.4%.
- Funds availed under the SLF-MF must be used by banks **exclusively for meeting the liquidity requirements of MFs** by-
 - extending loans to MFs
 - undertaking outright purchase of repos against the **collateral** of investment grade corporate bonds, commercial papers (CPs), debentures and certificates of Deposit (CDs) **held by MFs**.
- **Regulatory benefits offered to the banks under the scheme:**
 - Liquidity support availed would be eligible to be **classified as held to maturity (HTM)** even if total investment in that category over-shoots RBI limits.
 - Held-to-maturity (HTM) securities are purchased to be owned until maturity. A company's management might invest in a bond that they plan to hold to maturity. As a result, there are different accounting treatments for held-to-maturity securities compared to securities that are to be liquidated in the short term.
 - Advantage of HTM segment is that banks do not have to account for mark-to-market losses in case bond values deteriorate further.
 - Exposures under this facility will not be reckoned under the **Large Exposure Framework (LEF)**.
 - The large exposures framework sets prudent limits to large exposures of banks, thus limiting their vulnerability.
 - A large exposure is defined as the sum of all exposures of a bank to a single counterparty that are equal to or above 10% of its Tier 1 capital.
 - The securities acquired under the scheme and kept in the HTM category will not result in an additional priority sector liability.
 - Support extended to MFs under it shall be **exempted from banks' capital market exposure limits**.
- **Benefits**
 - It will ease pressure and help mutual funds to finance the redemption using this facility rather than selling its existing commercial papers at a discount and denting its Net Asset Value.
 - This will stabilize the performance of short-term debt funds and improve investor sentiment about the debt market.

Repo: A repurchase agreement (*repo*) is a form of short-term borrowing for dealers in government securities. In the case of a *repo*, a dealer sells government securities to investors, usually on an overnight basis, and buys them back the following day at a slightly higher price.

Repo rate: It is the **rate** at which the central bank of a country (Reserve Bank of India in case of India) lends money to commercial banks in the event of any shortfall of funds.

Commercial Papers: Short-term unsecured promissory notes issued by companies.

Debentures: A long-term security yielding a fixed rate of interest, issued by a company and secured against assets.

Investment Portfolio of Banks

- The banks are required to classify their entire investment portfolio under three categories viz. **Held to Maturity, Available for Sale** and **Held for Trading**.
- The investments under the **Available for Sale** and **Held for Trading** categories should be **marked to market** periodically.
 - Mark-to-market **refers to the reasonable value of an account** that can vary over a period depending on assets and liabilities. Mark-to-market provides a realistic estimate of a financial situation.
 - The investments under the **Held to Maturity category** need **not be marked to market** as in the case of Permanent securities.

3.6. PUBLIC UTILITY SERVICE

Why in news?

Ministry of Labour and Employment through a notification has declared 'banking industry' as a 'public utility service' for **six months** (till October 21) under **Industrial Disputes Act, 1947 (IDA)**.

About Public Utility Services

- Public Utility Services are those business undertakings engaged in supplying essential goods and/or services of daily necessity for the general public.
- **Section 2 (n) of IDA** empowers Government to declare **any industry specified in first Schedule of IDA** to be a 'public utility service' for a period of six months by issuing a notification, if it satisfies that **public emergency or public interest so requires**.

- **IDA also defines following industries as ‘public utility services’**
 - **Railway service** (or any transport service for carriage of passengers or goods by air);
 - Service in, or in connection with working of, any **major port or dock**;
 - Section of an industrial establishment, on working of **which safety of establishment** or workmen employed therein depends;
 - **Postal, telegraph or telephone** service;
 - Industry which supplies **power, light or water to public**;
 - System of **public conservancy or sanitation**.
- **Impact of declaring banking as public utility service: Section 22(1) of IDA** provides that **no person employed in public utility service shall go on strike** in breach of contract.
 - Without giving to employer notice of strike within six weeks before striking; or
 - Within fourteen days of giving such notice; or
 - Before the expiry of the date of strike specified in any such notice as aforesaid; or
 - During the pendency of any conciliation proceedings before a conciliation officer and seven days after the conclusion of such proceedings.
- Similar conditions apply for **‘lockout’** of public utility services.
- Thus, objective of **declaring banking industry as a public utility service’** is to ensure protection to the customers and to serve them in a better way, amid the economic crisis in COVID-19 pandemic.

Characteristics of Public Utility Services

- **Indispensability:** Public utilities deal with **essential services** to meet **basic needs of community**. Thus, they should be constantly maintained.
- **Monopoly Position-** Public utility enterprises are generally given monopoly in a **particular area to avoid duplication** in providing these services.
- **Large Investments-** Public utility concerns require large investments of capital e.g. railways, electricity and expansion of supply of these services reduces cost per unit.
- **Public Regulations-** Public utility undertakings are generally created by special legislation of Parliament and state legislature with certain special powers and privileges to maintain regular and efficient service.
- **Pricing Policies-** The pricing policy of these services is generally guided by the government. Some margin of profit is allowed to maintain efficiency and expansion of these services.

- **Lockout:** IDA defines it as ‘**the temporary closing of a place of employment**, or the suspension of work, or the refusal by an employer to continue to employ any number of persons employed by him’.
- **Strike:** IDA defines it as ‘**cessation of work by a body of persons employed** in any industry acting in combination or a concerted refusal, or a refusal under a common understanding, of any number of persons who are or have been so employed to continue to work or to accept employment’.

3.7. REPORT ON INDUSTRIAL RELATIONS CODE

Why in news?

Recently, the Parliamentary standing committee on labour has released a report on **‘The Industrial Relations Code, 2019’**

More on news

- The **Industrial Relations Code, 2019** was introduced in the Lok Sabha last year.
- The Code intends to subsume the **Industrial Disputes Act, 1947**, the **Trade Unions Act, 1926** and the **Industrial Employment (Standing Orders) Act, 1946** and consolidate the relevant provisions in them.
 - It will **remove the multiplicity** of definitions and authorities without compromising the available safeguards for the welfare of labour.
- The Code seeks to bring **transparency** and **accountability** in the enforcement of labour laws which would lead to better **industrial relations** and thus **higher productivity**.
 - It would promote **setting up of more enterprises**, thus catalysing the creation of more employment opportunities in the Country.

Key recommendations of report

- **More focus on implementation mechanism-** There should be separate and an exclusive Chapter outlining the **rights of both** the parties and containing the **principles** pertaining to the industrial relations based on the ILO Conventions and the Constitution of India.
- **Changes in definitions-** so as to allow ease in their application, such as in **‘Appropriate Government’**, especially when it is applied in more than one state.

- The ‘domestic services’ should be included in the definition of Industry.
- **Inappropriate artificial differentiation**- in the specified terms ‘Employee’ and ‘Worker’, as every employee is a worker and vice-versa.
 - It referred to their previous reports where such differentiation led to more **confusion** and had asked for **one uniform word** everywhere.
 - Further, other stakeholders like the **Scheme workers, gig workers** and **all the workers engaged** in the **unorganised/informal sector** should be included in the recommended unified definition of ‘Employee/Worker’.
- **Fixed term employment**- There is a need to incorporate protective and pre-emptive **provisions**, mentioning the conditions and areas where the employers can secure FTE from a designated authority.
- **Unorganised sector**- There should be a separate chapter clearly spelling out the applicability of various provisions including grievance redressal mechanisms to such workers.
- **Grievance Redressal Committee**- The prescribed time period of three years should be reduced to maximum six months. Further, it should have equal representation of women to further amicable solutions.
- **Trade Union**- The workers' support for the Trade Union should be verified through **Secret Ballot**.
- **Strikes**- The requirement of notice to go on strike be made applicable **only to public utility** services like water, electricity as well as matters of the disturbance of public tranquillity or breach of public order.
- **Layoff**- When there is a closure of establishment due to natural calamity, the payment of wages to workers should be extended beyond 45 days after mutual agreement between the employer and employee.
- **Re-skilling Fund**- These fees should be transferred to skill training centers and the procedure for skill upgradation/training of the retrenched workers be clearly spelt out.

Salient features of Industrial Relations Code, 2019

- **Definitions**- of ‘worker’, ‘industry’ and ‘strike’ have been amended.
 - Separate definition of **employee and worker** have been provided
 - **Fixed term employment** has been defined and included as a category of employment in classification of workers.
- **Trade Unions**- A Trade Union will be recognized as sole “**Negotiating Union**” if it has support of 75% or more of the workers on the muster roll in an establishment.
 - If it lacks support of 75% workers, then a **negotiating council** will be constituted for negotiation.
 - The **disputes** of the registered trade unions have also been included within the jurisdiction of **Industrial Tribunal**.
 - A Trade Union or a federation of Trade Unions may be recognized as the **Central or State Trade Unions** by the Central or State Governments respectively.
- **Industrial Tribunal**- Instead of multiple bodies, only Industrial Tribunals would work as adjudicating bodies to decide appeals.
- **Notice Period**- Requirement of a notice period of 14 days has been incorporated for strikes and lockouts in any establishment.
- **Threshold of workers for retrenchment**- for establishments in factory, plantation and mines have been retained at 100. But **flexibility** has been provided to reduce or increase the threshold.
 - In States where the threshold has been enhanced from 100 to 300 by State amendments, those amendments have been protected in the Code.
- **Re-skilling Fund**- for training of retrenched employees has been proposed from the contribution from industrial establishments.

3.8. NEGATIVE OIL PRICES

Why in news?

US oil markets created history on 22nd April 2020 when prices of West Texas Intermediate (WTI) crude fell to “minus” \$40.32 a barrel in New York which is lowest crude oil price ever known.

How global oil prices are determined?

- Crude oil prices like any other commodity are **determined by global supply and demand**.
- **Growing economies** are engines which **generate demand for oil** in general and especially for transporting goods and materials from producers to consumers.
- On the other hand, **supply** of crude oil in majorly controlled by a selected countries or groupings such as **OPEC (Organization of the Petroleum Exporting Countries)**.

- Historically, the OPEC (led by Saudi Arabia) used to work as a cartel and fix prices in a favourable band. It could bring down prices by increasing oil production and raise prices by cutting production.
- In the recent past, the OPEC has been working with **10 other countries (including Russia)**, as **OPEC+**, to fix the global prices and supply.
- Thus, the stability of oil prices and its seamless operations depends on-
 - Predictability of the global demand of oil.**
 - The ability of the **oil-producing countries to act in consort** for maintenance of supplies.

Organization of the Petroleum Exporting Countries (OPEC)

- OPEC is a permanent, intergovernmental Organization, created at the **Baghdad Conference** in 1960.
- OPEC has **13 members** including Iran, Iraq and Venezuela.
- OPEC members control **about 82%** of total world proved **oil reserves**.
- In 2018, OPEC members **accounted for 41%** of total world **crude oil production**.
- OPEC and non-OPEC oil producing nations (10 other countries including Russia, Kazakhstan and Mexico) formalized an agreement in 2016 to jointly cut production for stabilization of prices. This grouping is informally known as 'OPEC+' or 'Vienna Group'.

How did oil price go in negative territory?

- The plunge in the negative territory can be attributed to both supply and demand factors:
 - Supply factor:** The **breakdown of the OPEC+ agreement** between Russia and Saudi Arabia meant the production of oil kept increasing unchecked and subsequently lowering prices.
 - Demand factor:** Shutting down of travel routes and **global lockdown due to Covid-19** has drastically decreased the demand for oil which has compounded the problem.
- The continuous supply of oil accompanied with the huge demand slump has created a situation where there is a **worldwide shortage of storage space for oil**. Trains and ships, which were typically used to transport oil, are being used up just for storing oil.
- In the above background, the historic event unfolded in following manner:
 - The fall in prices was triggered by the **expiry of May futures contracts** for US West Texas Intermediate (WTI) crude.
 - Each contract trades for a month and May contract was due to expire on 23rd April 2020.
 - Investors holding May contracts **didn't want to take delivery of the oil** and incur storage costs.
 - Oil producers on the other hand wanted to get rid of their oil even at unbelievably low prices instead of choosing the other option — **shutting production**, which would have been **costlier** to restart when compared to the marginal loss on May sales.
 - Ultimately, for both — the holders of the delivery contract and the oil producers — it was **less costly to pay \$40 a barrel** and get rid of the oil instead of storing it (buyers) or stopping production (producers).

What is a futures contract?

A futures contract is a standard contract to **buy or sell a specific commodity** of standardized quality at a certain **date in the future**.

For example, if oil producers want to sell oil in the future, they can lock in their desired price by selling a futures contract today. Alternatively, if consumers need to buy crude oil in the future, they can guarantee the price they will pay at a future date by buying a futures contract.

India's Crude Oil Profile

- India is the world's **third-largest consumer of oil, fourth-largest oil refiner** and net exporter of refined products.
- Growth rate of India's oil consumption is expected to surpass China in the mid-2020s and India's **energy demand** is set to **double** by 2040.
- India is heavily dependent on crude oil and LNG imports with **greater than 80% import dependence for crude oil** and 45.3% for natural gas/LNG.
- 70 per cent** of India's imported energy needs come from **West Asia** and The **GCC** alone accounts for 34 percent of India's **oil imports**.
- The top 5 crude oil exporters to India (by import bill) are **Iraq, Saudi Arabia, Iran, Nigeria and UAE** in decreasing magnitude of exports.

Crude pricing mechanism in India

- Over a period of time the **APM (administered pricing mechanism)** was established for crude pricing. APM followed a pooled pricing mechanism under which the weighted average of international prices and the domestic cost of production was used to arrive at the administered price.
- Starting from **2002, APM were officially dismantled**.
- With the dismantling of APM, **the price of indigenous crude** has been **linked to international prices**, which implies that the price received by domestic crude oil producers is linked to international prices.
- After dismantling of APM, **Petrol & Diesel prices** were finally **deregulated** by Indian Government in 2010 and 2014 respectively.

- But the international price does not directly reflect in the local prices because the price of fuel at the retail station comprises the additional costs like **central government excise and taxes, State government taxes and operating costs, margin of the retailer and subsidies given by the government.**
- These subsidies are provided to protect consumers from volatility in international prices.
- Government then compensates companies for any loss from selling fuel products at lower rates. These losses are called **under-recoveries.**

3.9. WTO PEACE CLAUSE

Why in news?

India has **invoked the peace clause of WTO** for exceeding the ceiling on support it can offer farmers for rice, marking the first time any country that has used this clause.

More details

- India informed WTO that the value of its rice production was \$43.67 billion in 2018-19 and it gave subsidies worth \$5 billion which is **11.46% of the value of production.**
- However, **the Agreement on Agriculture (AoA) under WTO** has a limit pegged at **10% for developing countries**, which is a **de-minimis level.**

- De minimis level is **minimal amount of domestic support** that is allowed even though they distort trade.

- Hence, **India used peace clause** and reasoned that:

- The government does not undertake exports on a commercial basis from public stockholdings.
- Further, the stocks under the programme are acquired and released in order to meet the domestic food security needs of India's poor and vulnerable population, and not to impede commercial trade or food security of others.

Background

- After Uruguay Rounds of WTO in 1994, the **Agreement on Agriculture came into existence** which provided guidance on domestic support commitments and general disciplines on domestic support.

- **Under the agreement, to limit trade distorting support** measures, members agreed to curb their policies by quantifying and gradually reducing all domestic support measures through the **Aggregate Measurement of Support (AMS) or Amber box .**

- Further, this subsidy should not exceed 10% de minimis level for developing countries and 5% for developed countries.

- Also, an important provision of the AoA was the **Due Restraint or 'Peace Clause' under Article 13**, which temporarily shielded countries providing domestic support measures in accordance with the AoA provisions from being challenged at the WTO.

Types of subsidies under WTO

- **Green Box:** It is domestic support measures that doesn't cause trade distortion or at most causes minimal distortion.
 - Hence they **don't have any reduction commitments** under Agreement on Agriculture (AoA)
 - They are implemented as programmes aimed at income support to farmers without influencing the current level of production and prices.
 - They comprise of two support groups:
 - **Public services programmes:** for example, research, training, marketing, promotion, infrastructure, domestic food aid or public food security stocks etc.
 - **Direct payments to producers:** which are fully decoupled from production such as income guarantee and security programmes, regional development programmes etc.
- **Blue box:** These are subsidies that are tied to programmes that limit production.
 - The Blue box subsidies **aim to limit production** by imposing production quotas or requiring farmers to set aside part of their land.
 - It covers payments directly linked to acreage or animal numbers.
 - The blue box measures **are exempt from reduction commitments.**
- **Aggregate Measurement of Support (AMS) or Amber box :** It represents trade distorting domestic support measures.
 - These supports **are subject to limits: "de minimis"** minimal supports are allowed.
 - It consists of two parts:
 - **Product-specific subsidy:** total level of support provided for each individual agricultural commodity **such as MSP.**
 - **Non-product specific subsidy:** total level of support to the agricultural sector as a whole, i.e., subsidies on inputs such as fertilizers, electricity, irrigation, seeds, credit etc.

- Peace clause was to remain in effect for a period of nine years and it lasted till 2003.
- However, G33 containing developing countries led by India found it hard to fulfill food security commitments and hence **revived the Peace Clause temporarily (interim Peace Clause) for 4 years in Bali Ministerial Conference in 2013.**
- The **Nairobi Ministerial Conference of the WTO held in December 2015 reaffirmed**, with consensus, the Interim Peace Clause would remain in force until a permanent solution is agreed and adopted.

Peace clause

- The **peace clause protects a developing country's** food procurement programmes against action from WTO members in case subsidy ceilings are breached.
- It also provides that **Green Box domestic support measures cannot be the subject of countervailing duty action** or other subsidy action under the WTO Agreement on Subsidies and Countervailing Measures.
 - However, other domestic support measures which are in conformity with the provisions of the Agreement on Agriculture may be the subject of countervailing duty actions.
- Hence, **under the present 'Peace Clause', developing countries can provide WTO-prohibited subsidies to farmers without inviting any dispute under the Agreement on Agriculture.**

3.10. SPECIAL DRAWING RIGHTS

Why in news?

Recently, a proposal for the **International Monetary Fund (IMF)** to issue additional 500 billion **Special Drawing Rights (SDR)** was blocked by India and USA.

More about news

- New SDR allocation would have provided IMF members with **new foreign exchange reserves with no conditions.**
 - The goal is to **help low-income countries boost health and other fiscal spending** as coronavirus spreads. SDR allocation would have led to **increase in spending power** of countries.
- However, US and India blocked this proposal as:
 - **According to US**, as SDRs are distributed in proportion to members' quotas (shares) in the Fund, 70% of the funds created through an SDR allocation would go to G20 countries that did not need it, while **only 3% would go to low-income countries.**
 - **According to India**, in the current context of illiquidity and flights to cash, the efficacy of an SDR allocation is not certain.
 - Such a major liquidity injection could **produce potentially costly side-effects** if countries used the funds for "extraneous" purposes.

How are SDRs used?

- Under the **Articles of Agreement**, when certain conditions are met, the **IMF may allocate SDRs to members in proportion to their quotas (known as a general allocation).**
- Once allocated, **members can hold their SDRs as part of their international reserves** or sell part or all of their SDR allocations.
- Members can **exchange SDRs** for freely usable currencies among themselves and with prescribed holders; such exchange can take place under a voluntary arrangement or under designation by the Fund.
- IMF members can also use SDRs in **operations and transactions involving the IMF**, such as the payment of interest on and repayment of loans, or payment for future quota increases.

About Special Drawing Rights (SDR)

- SDR is an **international reserve asset, created by the IMF in 1969** to supplement its member countries' official reserves.
 - So far SDR 204.2 billion (equivalent to about US\$281 billion) have been allocated to members.
- The value of the SDR is calculated from a **weighted basket of 5 major currencies**, including the **U.S. dollar, the Euro, Japanese yen, Chinese Renminbi, and British pound.**
 - SDR basket is reviewed every five years, or earlier if warranted, to ensure that the basket reflects the relative importance of currencies in the world's trading and financial systems.
- Technically, the SDR is **neither a currency nor a claim on the IMF** itself. Instead, it is a potential claim against the currencies of IMF members.
- SDR **augments international liquidity** by supplementing the standard reserve currencies.

- SDR serves as the **unit of account of the IMF** and some other international organizations like African Development Bank (AfDB), Bank for International Settlements (BIS) etc.
- SDRs **can only be held by IMF member countries** and not by individuals, investment companies, or corporations.
- An SDR allocation is a **low-cost method of adding to member nations' international reserves**, allowing members to reduce their reliance on more expensive domestic or external debt.
- SDRs are **used by the IMF to make emergency loans** and are used by developing nations to shore up their currency reserves without the need to borrow at high-interest rates or run current account surpluses at the detriment of economic growth.

International Monetary Fund (IMF)

- It is an organization of 189 countries, working to **foster global monetary cooperation, secure financial stability, facilitate international trade**, promote high employment and sustainable economic growth, and reduce poverty around the world.
 - IMF's primary purpose is to **ensure the stability of the international monetary system**—the system of exchange rates and international payments that enables countries (and their citizens) to transact with each other.
 - It's mandate was updated in 2012 to include all macroeconomic and financial sector issues that bear on global stability.
- IMF was created in **Bretton Woods Conference** of 1944 and came into operation in 1945.
- **Headquarters:** Washington, D.C.
- It acts as an specialized agency of United nations. (UN specialized agencies are international organizations that coordinate their work with the United Nations through negotiated agreements.)

Other Financing methods used by IMF apart from SDR

- **Rapid Credit Facility (RCF)** provides rapid concessional financial assistance with **limited conditionality to low-income countries (LICs) facing an urgent balance of payments need**.
 - It was created under the **Poverty Reduction and Growth Trust (PRGT)**.
 - It places emphasis on the country's **poverty reduction and growth** objectives.
- **Rapid Financing Instrument (RFI)** provides support to meet a broad range of urgent needs, including those arising from **commodity price shocks, natural disasters, conflict and post-conflict situations, and emergencies resulting from fragility**.
- **Catastrophe Containment and Relief Trust (CCRT)** allows the IMF to provide grants for debt relief for the poorest and most vulnerable countries hit by **catastrophic natural disasters or public health disasters**.
 - It was **established in February 2015 during the Ebola outbreak** and modified in March 2020 in response to the COVID-19 pandemic.

3.11. MINOR FOREST PRODUCE

Why in news?

Recently, Centre **revised the minimum support price (MSP) for minor forest produce**, offering much-needed support to tribal gatherers in view of the "exceptional and very difficult" circumstances prevailing in the country due to the coronavirus pandemic

More about news

- Ministry of Tribal Affairs increased the MSP of 49 products which are collected by tribals from forests.
- This is done under a Centrally Sponsored scheme known as "**Mechanism for marketing of Minor Forest Produce (MFP) through Minimum Support Price (MSP) and development of value chain for MFP**" as a measure of social safety for MFP gatherers.

Tribal Cooperative Marketing Development Federation of India (TRIFED)

- It is a national-level apex organization functioning under the administrative control of Ministry of Tribal Affairs.
- Its objective is **socio-economic development of tribal people** by marketing of their products.
- It came into existence in 1987.

Mechanism for marketing of Minor Forest Produce (MFP) through Minimum Support Price (MSP) and development of value chain for MFP

- Launched in 2014, the scheme is designed as a **social safety net for improvement of livelihood of MFP gatherers** by providing them fair price for the MFPs they collect and ensure sustainable harvesting of MFPs.
- These tribals then sell the MFPs in village marketplaces.
- If the market prices fall below MSP, the state government agencies move in to procure the produce.
- Ministry of Tribal Affairs is the nodal ministry for this scheme.

- **Tribal Cooperative Marketing Development Federation of India (TRIFED)**, the nodal agency for the scheme, had recommended the increase to ensure more disposable income for tribals.
- MSP for MFPs is revised once in every 3 years by Pricing Cell constituted under the Ministry of Tribal Affairs.

What is Minor Forest Produce (MFP)?

- MFP is defined under **The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006**, popularly known as the **Forests Rights Act (FRA)**.
- **Minor Forest Produce (MFP)** includes all non-timber forest produce of plant origin and includes **bamboo, canes, fodder, leaves, gums, waxes, dyes, resins and many forms of food including nuts, wild fruits, Honey, Lac, Tusser** etc.
- The definition of MFP includes bamboo and cane, thereby changing the categorization of bamboo and cane as “trees” under the Indian Forest Act 1927.
- **PESA, 1996 and Recognition of Forest Rights Act, 2006** conferred ownership of MFP to forest dwellers.
- Forest Rights Act also recognizes and vests individual forest-dwellers with forest rights to own and dispose minor forest products from forests where they had traditional access.

Significance of MFP in India

- Around 100 million forest dwellers depend on Minor Forest Produces for food, shelter, medicines and cash income. (**Report of the National Committee on Forest Rights Act, 2011**)
- Tribals derive **20-40% of their annual income from Minor Forest Produce** on which they spend major portion of their time.
- As per the Haque Committee Report, May 2011, the procurement value of 14 major MFPs is estimated Rs 1900 Crores (including tendu & bamboo)
- This activity has strong linkage to **women’s financial empowerment** as most of the Minor Forest Produces are collected and used/sold by women.

3.12. DISTRICT MINERAL FOUNDATION (DMF)

Why in news?

The document, **District Mineral Foundation (DMF): Implementation Status and Emerging Best Practices**, was released by **Centre for Science and Environment (CSE)**, a Delhi-based think tank.

District Mineral Foundation

- It is a trust set up as a **non-profit body by state governments**, in those districts affected by the mining works, to work for the interest and benefit of persons and areas affected by mining related operations.
 - **Directly affected areas** where direct mining-related operations such as excavation, mining, etc. are located.
 - **Indirectly affected areas such as those** areas where local population is adversely affected on account of economic, social and environmental consequences due to mining-related operations.
- It was mandated through the **Mines and Minerals (Development & Regulation) Amendment Act, (MMDRA) 2015** and is funded through the **contributions from miners**.
- DMF funds are **non-lapsable funds** and can be used for both immediate and long term investments. They are treated as extra-budgetary resources for the State Plan.

Findings of the report

- **Total cumulative accrual** in DMFs across the country is close to Rs 36,000 crore as in January 2020.
 - **Non-coal major mineral mining**, such as iron ore, bauxite, manganese, limestone, precious metals, etc. account for the highest share of DMF accruals, **about 48 per cent**.
 - Out of the **top five states in terms of DMF accrual**, three are coal mining states—**Jharkhand, Chhattisgarh, and Telangana**.
 - The contribution of **minor minerals to DMF accrual has also increased** over the years.
- Among the high priority sectors, drinking water is the only sector for which allocation has been made in all states.
 - The investment for income generation, particularly sustainable livelihood, is still at a nascent stage in most districts.

- Districts like Keonjhar which has poor malnutrition indicators are using some of its DMF funds by setting up crèches to address the nutritional needs of children under three years of age.

Issues in effective utilization of DMFs

- **Lack of representation:** Despite being a fund meant for people, **DMFs lack representation** of mining-affected people in decision-making.
 - As per the report the governing body remains dominated by elected representative like members of Parliament, members of Legislative Assembly and district officials.
- **No identification has been done to include displaced people**, people whose livelihoods were affected due to mining, people who might need any special and direct assistance, etc, despite a clear mandate in states' rules and the PMKKKY.
- **Identification of directly-affected areas is arbitrary:** No proper mapping has been done for demarcation and delineation of mining-affected area.
- **Poor planning:** Despite mid- and long-term planning mandates in state rules of Odisha, Chhattisgarh and Madhya Pradesh, no district has made a perspective plan.
- **Auditing:** Apart from a financial audit, no other scrutiny, such as a social or a performance audit of DMFs has been done.
- The **investments were focused mainly on development of physical infrastructure** and less on improving human development indicators.
- **Lack of public disclosure:** DMF trusts have a website providing clearly the composition of DMF bodies, budget, sanction and progress of works etc, but they lie defunct in many states and districts.

Pradhan Mantri Khanij Kshetra Kalyan Yojana (PMKKKY)

- It will be implemented by the District Mineral Foundations (DMFs) of the respective districts using the funds accruing to the DMF.
- The DMFs have been directed to take all major decisions in a participatory mode, in consultation with the gram sabhas of the respective villages.
- **It seeks to**
 - implement various developmental and welfare programs in mining affected areas which will complement existing ongoing schemes of State and Central Government;
 - minimize adverse impacts of mining
 - ensure long - term sustainable livelihoods for the affected people in mining area
- **The guidelines for utilization** of funds include:
 - High priority areas, at least 60% of PMKKKY funds to be utilized, include Drinking water supply, Environment preservation and pollution control measures, Health care, Education, Welfare of Women and Children, Skill development and sanitation.
 - Other priority Areas, up to 40% of the PMKKKY, include Physical infrastructure, Irrigation, Energy and Watershed Development and any other measures for enhancing environmental quality in mining district.
- Activities taken under "polluter pays principle" cannot be included under PMKKKY.

Way forward

- **Gram Sabha:** The DMF decision making body should be inclusive with representation from mining-affected people. For Scheduled areas it must be ensured that at least 50 per cent of the Gram Sabha members represented in the governing council shall be Scheduled Tribes.
- **Use of technology:** Both directly and indirectly mining-affected areas should be delineated on a priority basis. For this purpose, the support of the State Space Application Centre or similar institutions/expert agencies may be sought.
- **Allocation:** It must be ensured that at least 60 per cent of DMF allocations/sanctions are for the 'high priority' issues as stipulated in the state DMF rules, as well as for the 'directly-affected' areas.
- **Grievance Redressal:** Each DMF Trust must also have in place a **strong grievance redressal mechanism**.
- A **dedicated DMF office for planning and co-ordination** must be set-up in every mining district. The PMKKKY guideline already says that 5 per cent of the DMF funds can be used for such expense.
- **Annual reports** should be prepared by each DMF Trust and laid before the State Legislative Assembly.

3.13. DRAFT ELECTRICITY (AMENDMENT) BILL, 2020

Why in news?

Recently, the **Draft Electricity (Amendment) Bill, 2020** was made public for feedback from stakeholders.

Need of the bill

Bill seeks to amend **Electricity Act, 2003** and address following **critical issues in the Electricity Sector & Act:**

- **Poor financial condition of power distribution companies (discoms):** The regulatory Commissions while calculating tariffs often deferred the recovery of revenue for the future. This resulted in weakening of the financial health of the discoms due to under recovery of the prudent cost.
- **Delays in adoption of tariff:** The regulatory commissions adopt the tariff that has been determined through a transparent process of bidding in accordance with the '**tariff policy issued by the Central Government**'. But no time limit has been prescribed for the process.
 - Also, the Act mandates the regulatory Commissions to determine the tariff after receipt of the subsidies. Thus the tariff contains a subsidy component and is not cost reflective.
- **Enforceability of performance of the contracts:**

The 2003 Act recognized the contracts for supply and purchase of electricity but does not specifically deal with the issues related to non-performance of the contract.

 - **Non-performance of the contract** created uncertainty, upset investment decisions and adversely affect ease of doing business.
- **Existence of multiple committees for selection of the posts of Chairpersons and members of related bodies:**

This requires constitution of a different selection committee for every vacancy which causes inordinate delays in appointments.
- **Non Functional State Electricity Regulatory Commissions (SERCS):** due to vacancies and delays in appointments by the states.

About Electricity Act 2003

- It was enacted to **consolidate the laws relating to** generation, transmission, distribution, trading and use of electricity.
- It **contains provisions inter-alia measures conducive to the development of electricity industry** promoting competition therein, protecting interest of consumers and supply of electricity to all areas, rationalization of electricity tariff, ensuring transparent policies.
- It **also constituted bodies** such as Central Electricity Authority, Central and State Electricity Regulatory Commissions and Appellate Tribunal.

Key Provisions of the Draft Electricity (Amendment) Bill, 2020

- **New contract dispute resolution authority to be formed:** An **Electricity Contract Enforcement Authority (ECEA)** will be established as a sole authority having original jurisdiction to adjudicate upon matters regarding contracts related to purchase, sale or transmission of electricity between a generating company and a licensee or between licensees.
 - The appeal against its orders will be heard by the **Appellate Tribunal for Electricity (APTEL)**.
- **Single Selection Committee to be established:** for selection of Chairperson and Members of the APTEL, ECEA, the Central Commission, State Commissions and Joint Commissions.
- **Payment Security Mechanism:** No electricity shall be scheduled or dispatched by the load centres under existing contracts unless adequate security of payment (agreed upon by the parties to the contract) has been provided.
- **Enabling state as well as central power regulators to specify transmission charges under open access.**
 - Open access introduced under 2003 Act allows large users of power — typically having connected load of 1 megawatt (Mw) and above — to buy cheaper power directly from the open market (i.e. from a number of competitive power companies, rather than being forced to buy power from the local utility monopoly.).
- **Cost reflective Tariff and Simplification of Tariff Structure:** The appropriate commissions shall fix tariff for retail sale of electricity without accounting for subsidy.
 - Any **subsidy must be provided by the respective governments directly to the consumer**.
- **Reduction of Cross Subsidy:** The Tariff policy will specify a manner to gradually reduce cross-subsidies. Any surcharge and cross subsidies charged by SERCs shall also be progressively reduced in the manner provided in the Tariff Policy.
- **Distribution sub-licensee (DSL) or Franchisee are not required to obtain separate license from the State Commission:** But the distribution licensee shall continue to remain responsible for distribution of electricity in its area of supply.
 - DSL or Franchisee are persons recognized and authorized by the distribution licensee to distribute electricity on its behalf in a particular area within its area of supply, with the permission of the appropriate State Commission.

- **Cross Border Trade of Electricity:** The **Central Electricity Regulatory Commissions (CERC)** has been empowered to oversee and regulate the cross border trade of electricity as per the rules and guidelines prescribed by the central government.
- **Proposes a National Renewable Energy Policy (NREP):** to be prepared and notified by the **Central Government** in consultation with states. Under it a minimum percentage of purchase of electricity from renewable and hydro sources of energy will also be prescribed.
- **Renewable Purchase Obligations (RPO) to include Hydro energy sources:** The State Commissions are empowered to specify the RPO as per central guidelines.
- **Creation of National Load Dispatch Centre have been specified:** It shall
 - be responsible for optimum scheduling and dispatch of electricity in the country across different regions in accordance with the contracts entered into with the licensees or the generating companies;
 - monitor grid operations;
 - exercise supervision and control over the inter-regional and interstate transmission network;
 - and have overall authority for carrying out real time operations of the national grid.

3.14. OPEN MARKET SALE SCHEME (OMSS)

Why in news?

Amidst CoVID-19 outbreak, **government has directed Food Corporation of India (FCI) to provide Wheat and Rice to NGOs and Charitable Organizations at the Open Market Sale Scheme (OMSS) rates** without going through the e-auction process.

More on news

- NGOs and Charitable Organizations are playing important role in providing cooked food to thousands of poor and needy people during this time of nationwide lockdown.
- **Hitherto only state governments and registered bulk users like Roller Flour Mills were allowed to buy stock from FCI under OMSS rates.**

Food Corporation of India (FCI)

- It was **set up in 1965** (under the Food Corporation Act, 1964) against the backdrop of major shortage of grains, especially wheat, in the country.
- Agricultural Prices Commission was also created in 1965 to recommend remunerative prices to farmers, and FCI was mandated with **three basic objectives**:
 - to provide effective price support to farmers;
 - to procure and supply grains to PDS for distributing subsidized staples to economically vulnerable sections of society; and
 - keep a strategic reserve to stabilize markets for basic foodgrains.

About OMSS

- Open Market Sale Scheme (OMSS) **refers to selling of foodgrains by Government / Government agencies at predetermined prices in the open market** from time to time **to enhance the supply of grains especially during the lean season** and thereby to moderate the general open market prices especially in the deficit regions.
- In addition to maintaining buffer stocks and making a provision for meeting the requirement of the Targeted Public Distribution Scheme and Other Welfare Schemes (OWS), **Food Corporation of India (FCI) on the instructions from the Government, sells wheat and rice in the open market.**
- For transparency in operations, the Corporation has switched over to e- auction for sale under Open Market Sale Scheme (Domestic).
- The **FCI conducts a weekly auction to conduct this scheme** in the open market using the platform of commodity exchange NCDEX (National Commodity and Derivatives Exchange Limited).
- The State Governments/ Union Territory Administrations are also allowed to participate in the e-auction, if they require wheat and rice outside TPDS & OWS.
- The present form of OMSS **comprises 3 schemes** as under:
 - Sale of wheat to bulk consumers/private traders through e-auction.
 - Sale of wheat to bulk consumers/private traders through e-auction by dedicated movement.
 - Sale of Raw Rice Grade 'A' to bulk consumers/private traders through e-auction.

NCDEX (National Commodity and Derivatives Exchange Limited)

- It was established in 2003 as a commodities exchange dealing primarily in agricultural commodities in India with its headquarters in Mumbai.
- Barley, wheat, and soybeans are some of the leading agricultural commodities traded on the NCDEX.

3.15. ATAL INNOVATION MISSION

Why in news?

Recently, Various initiatives were launched under Atal Innovation Mission (AIM) amid COVID-19.

About the new initiatives

'Tinker from Home' campaign	CollabCAD	Game Development module
Launched under Atal Tinkering Labs (ATLs) program amid COVID-19 lockdown, to ensure that the children across the country have access to useful easy-to-learn online resources to keep themselves fruitfully occupied .	It is a collaborative network and computer aided design (CAD) software system providing a total engineering solution from 2D drafting & detailing to 3D product design.	It is an online platform where students can learn to create their own games and also share it with others.
Aim: To harness the creativity and innovativeness of children by encouraging learning through self-initiation.	Aim: to provide a platform to students of ATLs across the country to create and modify 3D designs with free flow of creativity and imagination .	It envisages to make students transition from 'game players' to 'game makers.'
CollabCAD, Game Development module are part of this.	Jointly launched by AIM and National Informatics Centre (NIC).	Launched by AIM in partnership with DELL Technologies and Learning Links Foundation.

Atal Innovation Mission (AIM)

- It is Government of India's (NITI Aayog) flagship initiative to **promote a culture of innovation and entrepreneurship** in the country.
- **Objectives**
 - To develop new **programmes and policies for fostering innovation** in different sectors of the economy,
 - provide **platform and collaboration opportunities** for different stakeholders,
 - create **awareness and an umbrella structure** to oversee innovation ecosystem of the country.
- **Major initiatives under AIM**
 - **Atal Tinkering Labs**-Creating problem-solving mindset across schools in India.
 - **Atal Incubation Centers**- Fostering world class startups and adding a new dimension to the incubator model.
 - **Atal New India Challenges**- Fostering product innovations and aligning them to the needs of various sectors/ministries.
 - **Mentor India Campaign**- A national Mentor network in collaboration with public sector, corporates and institutions, to support all the initiatives of the mission.
 - **Atal Community Innovation Center**- To stimulate community centric innovation and ideas in the unserved /underserved regions of the country including Tier 2 and Tier 3 cities.
 - **Atal Research & Innovation for Small Enterprises (ARISE)** -To stimulate innovation and research in the MSME industry.

Atal Tinkering Labs (ATL)

- ATLs are setup in schools across India with a vision to **'Cultivate one Million children in India as Neoteric Innovators.'**
- ATL is a **work space** where young minds can give shape to their ideas through hands on do-it-yourself mode; and learn innovation skills.
- **Aim:** to foster curiosity, creativity and imagination in young minds; and inculcate skills such as design mindset, computational thinking, adaptive learning, physical computing etc.
- **Financial support:** AIM will provide grant-in-aid of Rs. 20 Lakh to each school that includes a one-time establishment cost of Rs. 10 lakh and operational expenses of Rs. 10 lakhs for a maximum period of 5 years to each ATL.
- **Eligibility-** Schools (minimum Grade VI - X) managed by Government, local body or private trusts/society to set up ATL.

4. SECURITY

4.1. EPIDEMICS AND NATIONAL SECURITY

Why in news?

An epidemic in the form of Covid-19 has caused large scale loss of life and disturbed livelihoods all across the world. The magnitude of damage that it has caused has sparked a debate regarding whether epidemics should be treated as a national security problem.

What is National Security?

National Security, in a more traditional sense, refers to the **preservation of the state, its territorial integrity, political institutions, and national sovereignty** from physical threats. But in the modern times the definitions have broadened to include following facets:

- **Law and order problems:** Problems which do not threaten the national security in traditional terms but create a violent situation which in turn creates breeding ground for a National security situation. These are activities like civil war, ethnic conflict, crime and drugs.
- **Economic threats:** They indirectly threaten the developmental dynamics by disturbing the economic processes.
- **Technology driven threats:** Threats like cyber-terrorism, space warfare etc. have assumed increased importance in recent times.
- **Health Security:** Diseases like Tuberculosis, Malaria and HIV are seen as threats to human security because of the enormous loss of life they cause.

India's National Security Objectives

- Protecting India's national sovereignty.
- Securing the territorial integrity of India.
- Promoting India's rise to its rightful place in international affairs.
- Ensuring a peaceful internal environment within India.
- Creating a climate for our citizens that is just, equitable, prosperous, and shields them from risks to life and livelihood.

How do epidemics threaten National Security?

- **Can trigger a violent conflict:** Epidemics may contribute to societal destabilization and in extreme cases it may accelerate the processes that lead to state failure which threatens national security. Various examples of AIDS triggered violence can be seen in Sub-Saharan Africa.
- **Biological weapons:** Biological agents including epidemic diseases can be weapons of war and thereby directly and immediately threaten security. Combatants may deliberately target public health and spread disease to weaken and demoralize an enemy population.
- **Affect bilateral relations:** Outbreaks may prompt disputes among states over appropriate policy responses in a number of areas, including freedom of movement for people and goods. For example, disputes arising during the MERS outbreak between India and countries in the Middle-east regarding Indian diaspora.
- **Human security:** The idea that human security is part of national security directly makes epidemics a threat to nation by threatening its people. For instance, by this approach tuberculosis is a national security threat to India because it threatens health of citizens of this country.

Historical connect: Epidemic and National Security

Historically, epidemic infections have affected national security in various ways on various instances such as:

- Various scholars argue that **Germany's loss in WWI** was at least partly due to the negative effects of the 1918 influenza epidemic.
- In **WWII**, similarly, **malaria** caused more U.S. casualties in certain areas than did military action.
- More recently, **AIDS outbreak** marked the first time that the **UN Security Council** acknowledged the threat that epidemics pose and consequently recommended to expand the definition of national security.

Advantages of viewing epidemics as National Security threat

- **Higher priority:** Associating health policy commitments with security can elevate the level of priority given to an issue and deliver results. Also, it would **make available more resources** to health emergencies via national security channel.
- **Better institutional organization:** A national security problem is more likely to have a well-defined and streamlined institutional apparatus which in turn could generate a more coordinated and accelerated response.

- **Increased global commitment:** Viewing epidemics as a security issue may encourage a deepening of commitment by countries to international cooperation and preparedness.

Challenges in looking at an epidemic through security lens

- **Risk of mislabelling everything as security threat:** If everything that causes a decline in human well-being is labelled a security threat, the term loses any analytical usefulness.
- **This approach relieves developed states:** Viewing epidemics as part of national security relieves states without major public health threats of any moral obligation to respond to health crises of monumental proportions in the developing world. Currently, this is more seen in the perspective of humanitarian aid.
- **Deter regional cooperation:** Issues of National security see relatively lower level of cooperation among neighbouring countries. This could directly impede much needed cooperation.

Is India treating Covid-19 as a National Security threat?

The national security matters in India are dealt by National Security Act of 1980. But Covid-19 is being legally dealt by two laws namely the **Epidemic Diseases Act, 1897**, and the **Disaster Management Act, 2005**. In that sense, Covid-19 is not being treated as National Security threat in legal terms as of now.

Way forward

In a nutshell, global pandemics threaten state security in three ways – domestically, economically and militarily. Going forward, while there are valid arguments both for and against treating epidemics as a national security issue, following may also be seen as an alternative -

- **Viewing it as foreign policy issue rather than national security concern:** It may be more fruitful to view disease and health issues as concerns for foreign policy deserving of multilateral responses, rather than as security threats requiring bilateral policy responses.
- **Independent institutional mechanism:** Security labels provide health emergencies with resources, the same human and financial resources could be garnered if an independent institutional mechanism for health emergencies can be created.

4.2. ORGANISATION FOR THE PROHIBITION OF CHEMICAL WEAPONS

Why in News?

Organisation for the Prohibition of Chemical Weapons (OPCW) for the first time explicitly blamed Syria for toxic attacks.

More on News

- **OPCW's Investigation and Identification Team (IIT) in its report** said that Syrian Arab Air Force used the nerve gas sarin and chlorine three times in Ltamenah, Syria in 2017.
- IIT was established in 2018 for identifying the perpetrators of the use of chemical weapons in the Syrian Arab Republic.
- Until then **OPCW had only been authorized** to say **whether chemical attacks occurred**, not who perpetrated them.

About Sarin

- Sarin is a **clear, colorless, and tasteless liquid that has no odor in its pure form**. However, sarin can evaporate into a vapor (gas) and spread into the environment.
- It is a **human-made chemical warfare agent** classified as a **nerve agent**.
- **Sarin originally was developed in 1938 in Germany as a pesticide**. It is also known as GB.

About Chlorine gas

- It appears to be **yellow-green in color**. It does **sink and displace breathable air**, so it can asphyxiate people.

About OPCW

- It is the **implementing body for the Chemical Weapons Convention**.
- **Headquarters:** Hague, Netherlands.
- Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (**the Chemical Weapons Convention or CWC**) entered into force on 29 April 1997.
- CWC aims to **eliminate an entire category of weapons of mass destruction by prohibiting the development, production, acquisition, stockpiling, retention, transfer or use of chemical weapons** by States Parties. To achieve the goal of **preventing chemistry from ever again being used for warfare**, CWC has four provisions:
 - **Destroying all existing chemical weapons** under international verification by the OPCW.

- **Monitoring chemical industry** to prevent chemical weapons from re-emerging.
- Providing **assistance and protection to States Parties** against chemical threats.
- Fostering **international cooperation** to strengthen implementation of the Convention and promote the peaceful use of chemistry.
- CWC was signed and ratified by **193 countries, including India**.
 - Israel has **signed but not ratified** the Convention.
 - **Non-signatory states are:** Egypt, North Korea and South Sudan.
- 98% of the global population live under the protection of the Convention. 97% of the chemical weapons stockpiles declared by possessor States have been verifiably destroyed.
- CWC incorporated '**challenge inspection**', whereby any State Party in doubt about another State Party's compliance can request a surprise inspection.
- OPCW was awarded the **Nobel Peace Prize in 2013** for its extensive efforts to eliminate chemical weapons.

How nerve agent works?

- All nerve agents cause their toxic effects by preventing the proper operation of an enzyme that acts as the body's "off switch" for glands and muscles.
- Without an "off switch," the glands and muscles are constantly being stimulated. Exposed people may become tired and no longer be able to keep breathing.

फाउंडेशन कोर्स सामान्य 2021 प्रारंभिक एवं मुख्य परीक्षा | अध्ययन



कार्यक्रम की विशेषताएं:

- इस कार्यक्रम में प्रारंभिक परीक्षा, मुख्य परीक्षा के लिए सामान्य अध्ययन के चारों प्रश्न-पत्रों, सिविल सर्विसेज एप्टीट्यूड टेस्ट (CSAT) और निबन्ध के सभी टॉपिक्स का एक व्यापक कवरेज सम्मिलित है।
- सिविल सेवा परीक्षा (CSE) के लिए PT 365 और Mains 365 की लाइव / ऑनलाइन कक्षाओं तथा न्यूज टुडे (डेली करेंट अफेयर्स इनिशिएटिव) के माध्यम से समसामयिक घटनाओं का व्यापक कवरेज सम्मिलित है।
- 25 अभ्यर्थियों से मिलकर बने प्रत्येक समूह को नियमित सलाह, प्रदर्शन निगरानी, मार्गदर्शन एवं सहायता हेतु एक वरिष्ठ परामर्शदाता (उमदजवत) उपलब्ध कराया जाएगा। इस प्रक्रिया को गूगल हैंगआउट्स एंड ग्रुप्स, ईमेल और टेलीफोनिक कम्युनिकेशन जैसे विभिन्न साधनों के माध्यम से संचालित किया जाएगा।

लाइव/ऑनलाइन कक्षाएं

अपने रूम को बदले क्लासरूम में

प्रारंभ 10 जून | 5 PM

5. ENVIRONMENT

5.1. COVID-19 AND DISASTER MANAGEMENT

Why in news?

The countrywide spread of COVID-19 led to discussions about better ways to tackle similar nature of disasters.

COVID-19 and Disaster Management: A Perspective

- COVID-19 is the **first pan India biological disaster** being handled by the legal and constitutional institutions of the country.
- It is for the **first time** that a **pandemic** has been recognised as a **'notified disaster'** in the country by the Ministry of Home Affairs (MHA).
- Subsequently the **Disaster Management (DM) Act has also been invoked for the first time in India** to effectively manage this crisis. The current lockdown has been imposed under the DM Act, 2005.

Issues with Current Framework of COVID-19 Disaster Management

- In the current use of DM Act in tackling Covid-19, two crucial aspects stand out,
 - **lack of an appropriate legal framework** to manage epidemics
 - **an over-centralisation of powers**
- DM Act was meant to be used in a situation where a state government was unable, on its own, to cope with the result of a natural disaster. It was never meant to be a legal mechanism to **control the otherwise functional state governments.**
- Taking a cue from the central guidelines on lockdown, the State governments and authorities exercised powers under the Epidemic Diseases Act of 1897 to issue further directions. This led to **confusion among the masses**, especially the vulnerable population (migrants, slum dwellers etc.).
- A **top-down approach** seems to have been adopted by the central government. It leaves states with **no manoeuvring space** that could be used to design and enforce lockdowns keeping cultural and social norms in mind.
- Moreover, **mostly the management of a health crisis has become an issue of law and order.** Major notifications and guidelines relating to COVID-19 are being issued by the MHA and not the Ministry of Health and Family Welfare. The **language used is still one of law and order:** "lockdowns," "curfews," "fines" and "surveillance."
- Also, DM Act is **not suitable to deal with fake news/false warning** being spread through social media and internet as it was passed in 2005 and then social media had not been as accessible or as available as it is now.
 - Section 54 in the DM Act makes it a **punishable offence to circulate a false alarm or warning** about a disaster or its severity or magnitude.
- **DM Act imposes criminal liabilities** for violations of lockdown orders. This provision makes it a **poor vehicle for the conduct of economic policy** on a nationwide scale. The DM Act was never intended to be a key economic law.
- Also, there is **considerable discretion with officials**, all across the country, in deciding who to permit and who to ban.
- A **consolidated, pro-active policy approach is absent.** In fact, there has been **ad hoc and reactive rulemaking**, as seen in the way migrant workers have been treated. Migrants issue has also exposed the **lack of co-ordination between the Union and State governments.**

Disaster Management (DM) Act, 2005

- The **National Disaster Management Authority (NDMA)** under the DM Act is the **nodal central body** for coordinating disaster management, with the **Prime Minister as its Chairperson.** The NDMA lays down policies, plans and guidelines for management of disaster.
- Similarly, State, District and Local level Disaster Management Authorities were established, manned by high functionaries. All these agencies are envisaged to work in coordination.
- NDMA so far formulated 30 Guidelines on various disasters including the **'Guidelines on Management of Biological Disasters, 2008'.**
- The **2019 National Disaster Management Plan** issued also deals extensively with Biological Disaster and Health Emergency. This is the broad legal framework within which activities to contain COVID-19 are being carried out by the Union and State governments.

Learnings from present management of COVID-19 disaster

- **Information Management:**
 - As news about the virus and its spread across the world became centre stage, there has been a deluge of information, misinformation, and analysis in the media and, more so, in the social media. This has heightened the anxiety. **Disaster management in the internet age will need to factor in the reality of social media and global connectivity.**
- **Inclusion of 'Restriction' and 'Refrain' in Disaster Management Strategy:**
 - **So far, focus of disaster management** has been primarily on what one must do to abate a crisis. Accordingly, the emphasis has been on the **three 'R's of disaster management- 'Rescue, Relief and Recovery'**.
 - However, there is a need to **give due prominence to what one must not do** to effectively mitigate a calamity. Hence there is need to **incorporate two more R's** in disaster management - 'Restriction' and 'Refrain'.
 - The **inclusion of 'Restriction'** is necessary not only to highlight the importance of the legal prohibitions which exist in the DM Act but also to caution people of possible legal action, which will deter them from spreading fake news.
 - Apart from legal restrictions it is also necessary to **instill a culture of 'Refrain' false warnings at the community level.** Accordingly, aside of imposing regulations to curb fake news, people must be trained to realise the authenticity of the news.
- **Ground Level Implementation and Federalism**
 - Contrary to the centralised structure of DM Act, India's disaster response must be quite decentralised.
 - Varied **capacity of different states** necessitates a lot more **agile and differential approach** of disaster management.
 - Disaster of a national magnitude necessitates a **close administrative and political coordination**, led by Centre and followed by State governments, Disaster Management Authorities, district administration and local self-governments and other stakeholders. In the true spirit of DM Act and federal structure, national and state political and administrative agencies should be more collaborative and consultative.
- **Role of Courts**
 - In times such as these, **constitutional courts must play its role.** There are complaints of discrimination, police excesses, starvation, lack of medical aid etc. from various corners of the country.
 - There is **bar on jurisdiction of courts and there is no grievance redressal mechanism under DM Act.**
 - The constitutional courts must **suo motu register PILs** and closely monitor the implementation of DM Act, ensure rule of law and protection of human rights as guaranteed under the Constitution even during the disasters.

Conclusion

COVID-19 has provided an opportunity to look into the loopholes of our disaster management strategy and relevant provisions under the DM Act. The knee jerk and haphazard responses to current disaster are further compounded by local level conflicts between different departments of the same State which end up hampering relief measures. Such issues need to be avoided and learnt from to make the disaster management policy work.

5.2. GREEN BONDS

Why in news?

State Bank of India has listed **Green Bonds worth \$100 million** on **India INX's Global Securities Market Platform (GSM)**

What are Green Bonds?

- Green bonds are **debt instruments** issued by financial, non-financial or public entities where the proceeds are '**ear-marked**' for use towards **financing 'green' projects.**
- As per official 'green bonds requirements for Indian issuers' published (in 2016) by **Securities and Exchange Board of India (SEBI)**, debt security shall be considered as '**Green**' or '**Green Debt Securities**', if funds raised are to be utilized for assets falling under any of the following broad categories:
 - Renewable and sustainable energy (wind, solar etc.)

- Clean transportation (mass transportation)
- Sustainable water management
- Climate change adaptation
- Energy efficiency (efficient and green buildings)
- Sustainable waste management (recycling, waste to energy etc.)
- Sustainable land use (including sustainable forestry and agriculture, afforestation etc.)
- Biodiversity conservation

Advantages of Green bonds

- **Brings investment in renewable energy:** According to Economic Survey, India **needs to invest \$4.5 trillion** over the **next ten years** to meet targets for **renewable energy and urban sustainability** (around \$450 billion a year). Green bonds can be tapped for this.
- **Source of alternate green finance:** Presently, most green projects are financed through banks, non-bank financial Companies (NBFCs) and company's balance sheet.
 - With, **rising non-performing loans, liquidity crisis** facing NBFCs suggests the necessity of **alternative** sources of green finance to **help India transition** to a low-carbon economy.
- **Attracts environmentally-conscious investors:** There is **strong demand for green bonds**, with **previous issuances being oversubscribed** by two-three times. Also, there is **Global momentum** building around mobilising green finance with growing Interest of foreign equity investors in India's green economy.
- **Meeting Climate Change Objectives:** E.g. **Renewable Energy & Energy Efficiency and Clean Transportation** made up 66% of all Green Bond commitments by World Bank. (As per '**Green Bond Impact Report 2019**' by **World Bank**).
- Companies and government entities can **enhance their reputation by branding** themselves as innovative and sustainable.
- Green bonds can play a positive role in **raising awareness** and building expertise among investors on **climate issues**.

Challenges to Green bond market in India

- **Structural barriers and constraints to scale:** Managing **foreign exchange risk** in a cost-effective way in international financial transactions. Small size of certain projects makes it difficult to raise required capital.
- **Lack of consistent green standards and monitoring mechanisms** to help investors identify eligible projects.
- **Poor knowledge of green bond market and nascent technical capacity:** Lack of information, policy clarity, lack of historical performance data and a limited understanding of the risks at various stages of the investment cycle, makes issuers and investors hesitant about green bonds.

India INX

- India International Exchange Limited (India INX) is India's first international exchange located at the Gujarat International Finance-Tech City (**GIFT City**).
- Operating on an advanced technology platform of **EUREX T7**, Exchange is **fastest in the world** with a turn-around time of 4 micro seconds.
- Launched in 2017, it is a **subsidiary of BSE Limited**.
- It is **Asia's first Stock Exchange**. It was established in **1875**.

India INX's Global Securities Market (GSM)

- It is India's **first international primary market** platform that connects global investors with Indian and foreign issuers.
- This provides global investors an opportunity to invest in Indian securities **without assuming any currency risk** and in a regulatory regime comparable with any other leading jurisdiction.

Green bonds scenario in India

- India's **First Green Bond** was issued by Yes Bank Ltd in 2015.
- In 2016, **India became second country** (after China) to provide **national level guidelines for Green bonds**, issued by SEBI.
- According to the **2019-20 Economic Survey**, India has the **second largest green bond market** among emerging economies after China. India has issued **\$10.2 billion of green bonds** in the first half of 2019.
- **India's first listed Green Bond** on 'India INX' issued by Indian Railway Finance Corporation.
- FICCI and Climate Bonds Initiative (CBI) established the **Indian Green Bonds Council** in 2016 having representation from banking, finance, insurance, public and private sector etc. to **propose solutions towards the development of a green bonds market** in India.
 - CBI is an international organisation working to mobilise bond market for climate change solutions.

- **Minimal policy and regulatory incentives to adopt green bonds:** At present, there are **limited incentives** for borrowers to certify their projects as green and raise finance.
- **Corporate bond market** in India is **underdeveloped**. India's corporate bond market is a mere 16% of GDP — compared with 46% in Malaysia, and 73% in South Korea.
- **Off-taker risk** for investors in renewable energy because of **delays or non-payment for power purchased** by the primary off-takers, usually state-owned distribution companies (DISCOM).

Way forward

- **Boost investor confidence-** by drawing on **international best practices** to increase transparency and standards. Implementation of TCFD (Task force on Climate related financial disclosures) guidelines.
 - TCFD was set up in 2015 by the Financial Stability Board to develop **voluntary, consistent climate-related financial risk disclosures** for use by companies, banks, and investors in providing information to stakeholders
- **Build domestic support for green bond market and increase technical capacity to further green investment.** E.g. Sharing technical expertise among regulators, developing case studies etc.
- **Targeted policy reforms and incentives:** E.g. Setting up a **Credit Guarantee Enhancement Corporation Fund** (proposed in Union budget 2019-20), to provide **guarantee to bonds** issued by completed projects.
 - In August 2019, Government introduced a **Payment Security Mechanism** to insulate generation companies from non- payment of dues by DISCOMS.
- **Shrink structural barriers for investment** like development of masala bonds and foreign exchange hedging markets and collaborating with development finance institutions to de-risk transactions.

5.3. SUPREME COURT RELAXES BS-IV DEADLINE

Why in news?

Supreme Court (SC) extended the **March 31, 2020 deadline for the sale and registration of BS-IV emission norm-compliant vehicles.**

Evolution of emission norms

- The **first stage of mass emission norms** came into force for petrol vehicles in **1991** and in **1992** for diesel vehicles.
- In 2000, passenger cars and commercial vehicles were met Euro I equivalent **India 2000 norms**.
- By 2001 Bharat stage II norms (based on Euro 2 emission norms) were brought into force.
 - **Bharat Stage Norms** are the **standards set up by Central Pollution Control Board (CPCB)** under Ministry of Environment Forests and Climate Change, to regulate the output of air pollutants from internal combustion engines including motor vehicles.
 - **The exhaust gases now covered under the norms are:** Carbon monoxide, Hydrocarbons, oxides of nitrogen (NOx) and Particulate matter.
 - These norms are based on the European standards.
- The **first Auto Fuel Policy (2003)** laid down for further adoption of Bharat stage III norms.
- Later, Bharat Stage IV were implemented April 2010 onwards.
- The roadmap in the proposed draft Auto Fuel Policy 2025 envisaged implementation of BS IV norms across the country by April 2017 in a phased manner and BS V emission norms in 2020/2021 and BS VI from 2024.
 - However due to drastic rise in air pollution specially in Delhi and other parts of North India, the Centre in 2016 announced that **India would skip the BS-V norms altogether and adopt BS-VI norms by 2020** shifting from BS IV norms.
- Further in 2018, SC had ruled that **no BS-IV vehicle would be sold or registered in India from April 1, 2020.**
 - It ruled that any extension of time in introducing new emission norms would adversely impact the health of citizens as the pollution has reached an "alarming and critical" level.
- However, recently SC extended the deadline because of the "**extraordinary**" situation arising out of lockdown due to the COVID-19 pandemic.
- SC allowed sale of 10% of the unsold stock of BS IV vehicles within few days after the end of the lockdown due to COVID-19, **except in Delhi and the National Capital Region.**

- BS VI requires **both automobile manufacturers as well as oil marketing companies** to tweak their respective products.
 - For optimal results, BS VI-compliant engines will have to run on BS VI fuel, as new-generation engines running on lower quality fuel will emit a quantum of toxic gases comparable to that generated by BS IV engines.

Major standards under BS VI

- **Nitrogen oxide** level for BS VI-grade diesel engines and petrol engines will be brought down by 70% and 25%, respectively.
- BS VI also reduces the **particulate Matter (PM) limit by 80% from BS IV for diesel vehicles** and also introduces PM limit for petrol vehicles.
- In addition to emission standards for new vehicles, the regulations provide specifications for reference and commercial fuels.
 - **The sulphur traces** in BS VI fuel is five times lower (10 ppm) as compared to sulphur traces in BS IV fuel (50 ppm), which is a **reduction of 80%**.
- **Diesel Particulate Filter (DPF)** and **Selective Catalytic Reduction (SCR)** are being introduced with the roll-out of BS VI norms, which were not a part of BS IV.
- **Real Driving Emission (RDE)** will be introduced in India for the first time with the implementation of Bharat Stage VI emission norms.
 - It will measure a vehicle's emission in real-time conditions against laboratory conditions.
- **Onboard Diagnostics (OD)** has been made mandatory for all vehicles which will give the vehicle owner or repair technician access to the status of the various vehicle sub-systems.

Challenges in implementing BS VI norms

- **Increased cost:** Following the norms will add on to the cost of cars which will reduce the demand exacerbating the low growth of automobile industry.
- **High investment:** To produce BS VI compliant fuels, the **refineries need to upgrade their technology** with high investments.
- **Future disruption:** The next round of revision is due in 2023 and this might provide a small window for the producers to produce BS VI compliant vehicles and might bring a disruption after the revision.
- **Not the best standards:** It can be observed that, although the country is looking to meet the best European standards, **Europe stands as the third best standard across the globe.**
 - China has gone ahead of Europe by combining the key parameters from the US and Korea to frame its own regulations.

Way forward

- **Strong compliance system:** The government should introduce a strong system of compliance, penalty, emissions warranty and **Recall programme**. Emissions warranty and extended emissions warranty to cover the in-service life of vehicles is an important step.
- **Amend Central Motor Vehicles Act** to enable implementation of remote sensing monitoring for on-road surveillance as well as more effective integration of OBD.
- The states should define and issue the **check list for inspection** of emissions control systems in vehicles and prevent tampering
- **Awareness:** The local bodies should fasten up the enthusiasm in cities for BS VI, also to inform and influence next round of revision of regulations of BS-VI in 2023 for stronger real-world emissions and in-service compliance requirements for vehicle sold.

5.4. PETCOKE

Why in news?

Directorate General of Foreign Trade (DGFT) (under Ministry of Commerce and Industry) has laid out a procedure for **allocation of quota for import of calcined pet coke (CPC)** for Aluminium industry and **raw petcoke** for CPC manufacturing industry for the financial year 2020-21.

Background

- In **2017, Environment Pollution Control Authority (EPCA)** had recommended that the distribution, sale and use of furnace oil and petcoke be strictly banned in National Capital Region **because of high sulphur content.**
 - Following this, Supreme Court (SC) banned use of petcoke in New Delhi and neighbouring states of Haryana, Uttar Pradesh and Rajasthan, after the air pollution level in the national capital reached hazardous level.
- In **2018, petcoke was banned for use as fuel nationwide** following SC Judgement in M. C. Mehta Vs Union of India.
 - Its import was allowed for only cement, lime kiln, calcium carbide and gasification industries, **when used as the feedstock or in manufacturing process.**
 - However, later Government permitted imports of a certain quantity of pet coke, **used for fuel purpose, for anode making by aluminium industry.**
 - Before its import ban, India was world largest consumer of pet coke.
- **Presently, SC has fixed the import limit** for raw petroleum coke at 0.5 metric tonne per annum (mtpa) and calcined petroleum coke at 1.4 mtpa.

About 'Petcoke'

- It is a by-product (carbonaceous solid) of the oil refinery process mainly "**the bottom of the barrel.**"
- It is characterised as a **high grade fuel with high calorific value** of more than 8,000 Kcal per kg, having low ash content and low volatile matter **but high sulphur content**, up to 7%.

Types:

- In its raw form, it is also called "**green coke**" or **green petroleum coke or raw petcoke.** It comes from several sources, all from the petroleum refinery industry.

- About 80% of worldwide petcoke production is "**fuel-grade**" petcoke (green coke), used for **electricity generation and in cement kilns.**

- **Calcined pet coke (CPC)** is obtained by processing of raw pet coke by calcining in a rotary kiln that removes residual volatile hydrocarbons. **Calcined petcoke** has the following industrial uses:

- **smelting of Aluminium** and is the only commercially viable method to do so.

- **production of titanium dioxide.**

- As partial **replacement for coal as a feedstock** in blast furnaces **for making steel** from iron ore.

- **brick and glass manufacturing**

- **production of ammonia and urea ammonium nitrate.**

Environmental Impacts of Petcoke

- **Releases greenhouse gases (GHG):** Due to its high carbon content it releases up to 10% more CO₂ than normal coal which makes petcoke a huge contributor of GHG.
- **High sulphur content:** Low grade Petcoke contains high amounts of sulphur which results in release of sulphur oxides (SO_x) during combustion. SO_x is a nasal irritant, causes air pollution and even acid rain.
- **Heavy metals:** Petcoke also contains heavy metals such as Nickel and Vanadium which can deteriorate quality of environment and cause toxicity.
- **Particulate matter:** Significant quantities of Particulate Matter from petcoke storage and handling operations lead to inflammation in lungs especially in urban/industrial areas.

Issues in dealing with Petcoke

- **Absence of data about petcoke production** and consumption leads to regulation challenges.
- Due to excess cess levied on coal, **market distortion has occurred in favour of petcoke.**
 - It is the preferred raw material of choice for many industries as it is **cheaper than coal and has a very high calorific value.**
- Oil refineries in USA that are unable to sell petcoke (dirty fuel waste product) at home export vast quantities of it to India instead. This has led to **India being treated like a dumping ground** for waste generated by others.

Conclusion

Alongwith improving the statistical data on petcoke and real time monitoring, focus should be also on improving the pricing of coal to reduce use of pet coke as an alternative. The promotion of cleaner technologies, such as **Fluidized Bed Boilers** and **emissions treatment systems**, is another way to reduce sulphur dioxide emissions from petcoke combustion. **Adding excess hydrogen** to convert otherwise solid oil residues into more diesel, asphalt, wax, or other fuel oils—through a process called - **residue fuel hydrogenation**—is an attractive option for new refineries.

5.5. URANIUM CONTAMINATION

Why in news?

A new study conducted by the University of Manchester, UK and Mahavir Cancer Institute and Research Centre, Phulwarisharif in Patna has found **uranium contaminating the groundwater in 10 districts of Bihar.**

More about news

- This is the first time that uranium content has been detected in groundwater in Bihar.
- Uranium concentrations are elevated mostly in the North West-South East band along and to the east of Gandak river and running south of the Ganga river towards Jharkhand.
- The maximum uranium content was in Supaul district of Bihar, 80 microgram of uranium per litre of water.

Uranium contamination in India

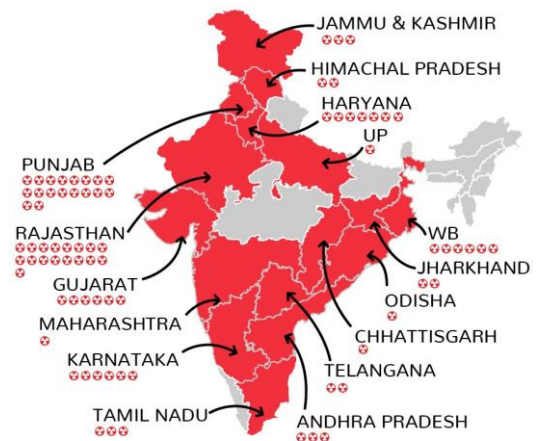
- The permissible limit according to the **World Health Organization (WHO)** is **30 microgram per litre.**
- However, unlike the limits for arsenic and other toxic or heavy metals specified in the under Bureau of Indian Standards' Drinking Water Specifications, there is **no limit maintained for uranium.**
- Earlier, a report brought by Central Ground Water Board noted widespread uranium contamination in groundwater from aquifers across 16 states in India including **Punjab, Rajasthan, Andhra Pradesh, Chhattisgarh, Gujarat, Haryana, etc.**
- Uranium can cause serious ailments such as:
 - If uranium-laced water, more than permissible level, is consumed for long, it can cause **thyroid cancer, blood cancer, depression** and other serious ailments.
 - Some studies have also linked the excessive ingestion of uranium to **chronic kidneys disease.**
- The source of uranium is **naturally occurring**, but human activities like over pumping enhance the uranium problem.
 - In many parts of India, **aquifers** are composed of **sediment carried down** from the Himalayas by streams or from **uranium-rich granitic rocks.**
 - **Overuse of these aquifers for human use reduces the water level** and creates oxidising conditions, which enhance the uranium's solubility in water.
 - Interaction of the uranium with other chemicals in the groundwater, such as bicarbonate, can further enhance its solubility.
 - Similarly, Nitrate pollution due to overuse of nitrogenous fertilizers is also thought to enhance uranium mobilisation.

Way forward

- **Ex situ Treatment** of radioactive contaminants in ground water such as:
 - **Adsorption or ion exchange:** The water soluble contaminants are captured by sorption onto a solid support that can be natural or synthetic material.
 - **Precipitation:** This is mostly practiced above ground and involves addition of alkali to raise the pH & precipitate the oxide or hydroxide.
- Remedial strategies based on **in-situ chemical stabilization** such as:
 - **Redox Technologies:** These technologies attempt to manipulate oxidation-reduction conditions of the subsurface to reduce uranium to uranous (uranium IV) forms.
 - **Flushing Technologies:** This group of remediation technologies uses a variety of leaching solutions to dissolve solid-phase uranium and hydraulic extraction techniques to remove the solubilized uranium.
- The central and state governments should collaborate with technical institutions such as **Bhabha Atomic Research centre (BARC)** to comprehensively address the issue of radioactive contamination.

HIGH on URANIUM

Studies in 2018 have found uranium traces in the groundwater of 79 districts in 16 states.



5.6. ARCTIC OZONE HOLE

Why in news?

A rare hole that had opened up in the ozone layer above the Arctic got closed recently.

More on news

- Scientists using data from the **Copernicus Sentinel-5P satellite** have noticed a strong reduction of ozone concentrations over the Arctic.
- An analysis of satellite observations show that ozone levels reached their **lowest point on March 12 at 205 Dobson units**. In comparison, the lowest March ozone value observed in the Arctic is usually around 240 Dobson units.
- Rare hole covered an area about **three times the size of Greenland**.
- While **such low levels are rare**, they are not unprecedented. Similar low ozone levels occurred in the upper atmosphere, or stratosphere, in 1997 and 2011.
- Later on, **Polar Vortex split** due to rising temperature with onset of summer, allowing ozone-rich air into the Arctic led to healing of the ozone hole.

- **Dobson Unit** is the most common unit for measuring ozone concentration. One Dobson Unit is the number of molecules of ozone that would be required to create a layer of pure ozone 0.01 millimeters thick at a temperature of 0 degrees Celsius and a pressure of 1 atmosphere.
- Over the Earth's surface, the **ozone layer's average thickness is about 300 Dobson Units** or a layer that is 3 millimeters thick.

Why did the Arctic ozone hole form this year?

- A major reason for the 2020 Arctic ozone hole is that **polar vortex** during winter was "**incredibly strong and persistent**" this year.
 - The polar vortex is a **large area of low pressure and cold air** surrounding both of the Earth's poles. It always exists near the poles but **weakens in summer** and **strengthens in winter**.
 - The term "vortex" refers to the counter-clockwise flow of air that helps keep the colder air near the Poles.
- This led to **frigid Arctic air** staying mostly locked in the Arctic, rather than wobbling around and spilling extremely cold air into places like the U.S.
- This stable, profoundly cold air (below -78°C) allowed lofty clouds to form high up in the atmosphere where ozone lives, in the stratosphere. These are called **Polar Stratospheric clouds (PSCs)**.
- These clouds create an ideal environment for the human-made chemical chlorofluorocarbons (CFCs) to react with sunlight, which then makes chlorine, the chemical that ultimately destroys ozone.
- Moreover, this robust polar vortex **prevented ozone-rich air from other regions from washing into the Arctic**, which kept ozone levels depleted.
- Reason for such unusually strong polar vortex and why it lasted so long this year is yet to be known.

Why Arctic Ozone hole is rare compared to Antarctic Ozone Hole?

- While ozone holes developing over the Antarctic every year are common during Southern Hemisphere spring, the conditions needed for such strong ozone depletion are not normally found in the Northern Hemisphere.
- The Arctic stratosphere is usually **less isolated than its Antarctic counterpart** because the presence of nearby land masses and mountain ranges disturbs the weather patterns more than in the Southern Hemisphere.
- This explains why the **polar vortex in the Northern Hemisphere is usually weaker** and **more perturbed** than in the Southern Hemisphere, and temperatures do not fall so low.
- Arctic ozone hole is thus unusual in that we only have events like this **about once per decade**. **On the contrary, the Antarctic ozone hole is being recorded** annually over the last 35 years.
- NASA researchers prefer the term "depletion" over the Arctic, since despite the ozone layer's record low this year, the ozone loss is still much less than the annual ozone "hole" that occurs over Antarctica in September and October. For comparison, ozone levels over Antarctica typically drop to about **120 Dobson units**.

5.7. PETERSBERG CLIMATE DIALOGUE

Why in the news?

11th session of Petersberg Climate Dialogue was held via **video conferences** for the **first time** due to COVID-19 pandemic.

About Petersberg Climate Dialogue

- It was **launched in 2010 by Germany** after failed climate negotiations at the 2009 Copenhagen Summit.
- It is an **informal annual meeting** of the high-level ministers and representatives of various countries that enables them to have constructive exchanges on the issues of **international climate actions**.
- The **co-chair of the Climate Dialogue** is the country presiding over the next conference of **United Nations Framework Convention on Climate Change (UNFCCC)**.

Highlights of 11th edition of Petersberg climate dialogue

- This edition saw the participation of around **30 countries along with India**.
- It was **co-chaired by Germany and United Kingdom (UK)**. UK is the incoming **Presidency** of 26th Conference of Parties to **UNFCCC (COP 26)**.
- **Dialogue underlined following broad themes-**
 - Economic recovery plans post COVID-19 need to be aligned with **Paris Agreement** and the **Sustainable development goals**.
 - Stressed for multilateralism, **International cooperation and support for developing countries** for fulfilment of the **100 billion USD climate finance mobilisation goal by 2020**.
 - Development of **enhanced nationally determined contributions** and **long-term strategies** under the Paris agreement should not be postponed.
 - India stressed the need for having **Climate Technology as open source** and at an affordable cost in a similar manner as the world is unitedly engaged in finding a vaccine for COVID-19.

UNFCCC

- Adopted in **1992**, **UNFCCC** acts as a framework for international cooperation to combat climate change by **limiting average global temperature** increases and the resulting climate change and coping with impacts.
- Its **secretariat is in Bonn, Germany**.
- **Conference of the Parties (COP)** is the supreme decision-making body of the Convention.
- All States that are Parties to Convention are represented at COP.
- It meets **every year**, unless the Parties decide otherwise.

COP26

- It was scheduled to be held in **Glasgow, Scotland** in November 2020, now **postponed to 2021**, due to COVID-19 pandemic.
- This conference was set to have been the **first "global stocktake"** that was outlined in the Paris Agreement.
 - **'Global stocktake'** refers to a proposed review of the impact of countries' climate change actions.

5.8. NAMING OF TROPICAL CYCLONES

Why in the news?

India Meteorological Department (IMD) released a **list of 169 new names** for tropical cyclones in the north Indian Ocean region.

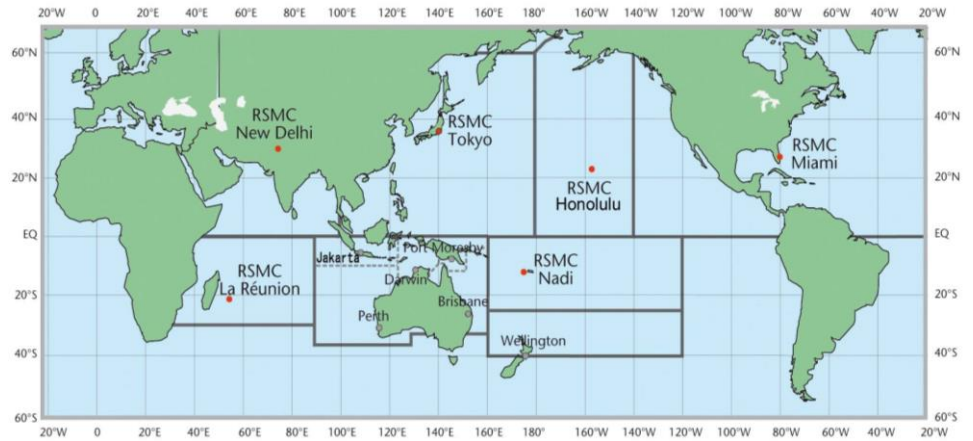
Naming of tropical cyclones

- Worldwide there are six regional specialised meteorological centres (RSMCs) and five regional Tropical Cyclone Warning Centres (TCWCs) mandated for **issuing advisories and naming of tropical cyclones**.
- **India Meteorological Department is one of the six RSMCs**, and is responsible to name the Tropical Cyclones developing over the **north Indian Ocean** including the Bay of Bengal and the Arabian Sea.
- The new names were contributed by **13 member countries WMO/ESCAP panel on tropical cyclones (PTC)** (see box).

About WMO/ESCAP Panel on Tropical Cyclones

- It is an **inter-governmental regional body** jointly established by the World Meteorological Organisation (WMO) and the United Nations Economic and Social Commission for Asia-Pacific (ESCAP) in **1972**.
- It is associated with the Tropical Cyclone Programme of WMO that aims at assisting Members in monitoring and forecasting tropical cyclones to reduce disaster-related losses of life and infrastructure.
- **Objective:**
 - to promote **measures to improve tropical cyclone warning** systems in the Bay of Bengal and the Arabian Sea
 - **dissemination of technical information** on tropical cyclone research and forecasting operations.
- **Member countries:** **India**, Bangladesh, Maldives, Myanmar, Oman, Pakistan, Sri Lanka, Thailand, Iran, Qatar, Saudi Arabia, United Arab Emirates and Yemen.

- **Names of cyclones provided by India** are Gati, Tej, Murasu, Aag, Vyom, Jhar, Probaho, Neer, Prabhanjan, Ghurni, Ambud, Jaladhi and Vega.
- Naming for tropical cyclones over **north Indian Ocean commenced from September 2004.**
- Naming of cyclone in North Indian Ocean takes place whenever a tropical storm in the north Indian Ocean region **surpasses a wind speed of 62 km/hr.**



5.9. ANTARCTICA EXPERIENCES FIRST KNOWN HEAT WAVE

Why in news?

Scientists have recorded Antarctica's first documented heat wave.

More on news

- The heat wave event was recorded in East Antarctica during the 2019-2020 southern hemisphere summer.
- Between January 23 and 26, 2020, minimum temperatures were higher than zero degrees Celsius while the maximums peaked above 7.5 degrees.
 - **Heatwaves are classified as three consecutive days** with both extreme maximum and minimum temperatures.

What caused the heatwave?

- East Antarctica has witnessed an ozone hole in spring since the late 1970s.
- Ozone depletion and related lack of heating cool the stratosphere. This cooling increases the **north-south temperature gradient** between the southern mid-latitudes and the Antarctic, which strengthened the stratospheric westerly winds in the Southern Hemisphere.
 - It promotes a generally more **“positive” state of the Southern Annular Mode** in summer. This means the Southern Ocean’s westerly wind belt has tended to stay close to Antarctica creating a **seasonal “shield”**, reducing the transfer of warm air from the temperate regions to Antarctica.
- But during the spring of 2019 a strong warming of the stratosphere over Antarctica significantly reduced the size of the ozone hole. This helped to support a more **“negative” state of the Southern Annular Mode** and weakened the shield.
- **Other factors in late 2019 may have also helped** to warm Antarctica.
 - The **Indian Ocean Dipole** was in a strong “positive” state due to a late retreat of the Indian monsoon. This meant that water in the western Indian Ocean was warmer than normal.
 - Air rising from this and **other warm ocean patches in the Pacific Ocean** provided energy sources that altered the path of weather systems and helped to disturb and warm the stratosphere.

The **Southern Annular Mode (SAM)**, also known as the Antarctic Oscillation (AAO), refers to the (non-seasonal) north-south movement of the strong westerly winds that blow almost continuously in the mid- to high-latitudes of the southern hemisphere.

Why is it significant?

- Antarctica may be isolated from the rest of the continents by the Southern Ocean but has **worldwide impacts**. It drives **the global ocean conveyor belt**, a constant system of deep-ocean circulation which transfers oceanic heat around the planet, and its melting ice sheet adds to global sea level rise.
- Based on experiences from previous anomalous hot summers in Antarctica, a multitude of biological impacts can be expected to be reported in coming years, illustrating how **climate change is impacting even the most remote areas of the planet.**

6. SOCIAL ISSUES

6.1. URBANISATION OF PANDEMICS

Why in news?

COVID-19 almost over the entire world is very urban-centric.

Introduction

- The WHO has identified urbanisation as one of the key challenges for public health in the 21st century. In recent decades, many emerging infectious diseases have been occurring at an increasing scale and frequency.
 - For example, Ebola virus disease, severe acute respiratory syndrome (SARS), avian and pandemic influenza, Middle East respiratory syndrome (MERS), and the recently emerged COVID-19.
- With an **ever-larger shift of populations to urban areas** in conjunction with a shift of a very large percentage of national economies to large urban centres, the concentration of a succession of epidemics and pandemics in cities has become stronger.
- The countries such as Spain, Italy, France, UK, Germany, Iran, and US that have suffered the highest number of COVID-19 cases are among the **very highly urbanised countries**.
- In India, as of 26 April, in general, the more urbanised states are among the top ten states impacted by corona. These include Maharashtra (45% urbanisation), Gujarat (43%), Delhi (98%), Tamil Nadu (48%) etc.
 - The urban nature of the pandemic becomes clearer when we consider the megacities and the large Indian cities. As on 20 April, **ten cities of India had over half the coronavirus cases**. These cities comprised Mumbai, Delhi, Ahmedabad, Indore, Pune, Jaipur, Hyderabad, Chennai, Surat and Agra.

Challenges of Managing the growing urbanisation of Pandemics

Reasons for growing urbanisation of Pandemics	Challenges associated
High population density and high volume of public transportation	A larger population to be managed; ease of disease spread between humans in congested areas; difficulties in contact tracing, especially causal contact in public areas; inequalities resulting in poor housing environments that might hinder outbreak prevention and control efforts; closer encounters with wildlife via food markets or because of expansion into previously untouched ecosystems
Interface between animals and humans	Areas of poor sanitation with rodents and other animal vectors; live domestic and wild animal markets; animals raised in backyard farms or industrial agricultural facilities in close proximity to humans
Governance by local authorities	Competing interests within a finite local budget ; insufficient authority to institute response measures promptly; insufficient epidemic preparedness capabilities or capacities at a subnational and local level; difficulties in accessing national capacities
Heterogeneous subpopulations	A wide range of cultural factors, including modes of social interactions and acceptable control measures; some subpopulations might be difficult to reach
High connectivity to other urban centres (domestic and international)	High likelihood of multiple importation events; risk of rapid export of disease to other parts of the country or to other countries; fear might lead to restrictions on travel and trade
Centres of commerce	Greater disruption to economic activity, stability, and growth
Unconventional communications and interactions	Multiple information sources leading to misinformation; false information might spread quickly

Post pandemic City Planning

With social distancing likely to be the norm over the near future, we need to analyse how a city's design impacts health, social mobility and disease control, among other things. Basic aspects of City Planning as needed to combat future pandemics is discussed below.

- **Urban Design**
 - **City data:** Good urban design has always been a necessity, but it **needs data and feedback loops**. For most Indian cities, the data is not really structured for planning and research.
 - **Wider footpaths and walkable streets** needed so that people don't crowd together on narrow footpaths.
 - An **upgrade to health facilities**

- **Sanitation facilities and safety information** at bus and metro stops, rail stations, inside buses and trains, in public toilets, other public spaces.
- **Housing**
 - In order to ensure **liveability and comfort** in homes across income classes, projects will have to consider several factors: building typology, resource efficiency, common services related to water, energy, and waste, locational aspects, connectivity, urban greenery, etc.
 - **Locations** should be **earmarked in master plans** to improve area advantages, transport connectivity of affordable housing and self-constructed settlements. This will reduce economic and social costs of living.
 - Professional architects and planners have come together to provide design support and training to the self-constructed settlements of Dharavi and Shivaji Nagar in Mumbai, and Mangolpuri in New Delhi. This initiative must be taken forward in other cities.
- **Mobility**
 - In all Indian cities, formal and informal public transport — including rail, bus, and auto-rickshaws — are the backbone of mobility.
 - Cities across the world are radically **re-imagining the allocation of street space** to promote **sustainable mobility** that is resilient to future shocks and equitable. For example,
 - To ensure physical distancing in shopping districts, **London and Dublin are widening sidewalks** with temporary cones.
 - **Milan plans to encourage walking and cycling** with low-cost temporary cycle lanes, new widened sidewalks, reducing speed limits to 30 kph, etc.
 - **Melbourne** is testing such neighbourhoods where **most daily needs are within a 20-minute** walk, bike ride or public transport commute.
 - Cities like Chennai and Pune have created over 100 km of pedestrian-friendly streets since 2014. Further, Chennai is quadrupling its efforts this year through the **Mega Streets programme**, inspired by which the State has expanded the programme to 10 more cities.
- **Spatial Planning**
 - As in every disaster or crisis — whether floods, cyclones or this pandemic — areas with dense concentrations of the urban poor are impacted far more than the rest of the city. These are places where infrastructure and amenities are poor even in normal times.
 - The pandemic has highlighted again the need for building spaces that are not ghettos, but **non-segregated mixed-class, mixed-use neighbourhoods** that allow people to support each other.
 - Such mixing would ensure that **neglect and poverty is not locked into pockets**, that vulnerable populations have access to the city centre and its resources, and they're not neglected during a crisis.

Fundamental Questions to look into in post COVID-19 Urban Planning

- How dense should a city be? (**Aggregation vs disaggregation**)
- How should people travel? (**Public Transport vs private transport**)
- How should people work? (**Workplace vs work from home**)
- How should people shop? (**Retail outlets vs online shopping**)
- How should people consult doctors? (**Visit to doctor vs telemedicine**)
- How should people socialize? (**Bonding vs distancing**)
- How much of the city should be unbuilt? (**Built city vs Public Open spaces**)
- How should the city plan for its poor? (**Slums vs housing**)
- How much digital Infrastructure should a city go for? (**Digital vs manual**)

Conclusion

The ongoing pandemic of COVID-19 is a strong reminder that urbanisation has changed the way that people and communities live, work, and interact, and the need to strengthen systems and local capacities to prevent the spread of infectious diseases is urgent. As a global community, we must collectively invest in and build strong preparedness systems that are better adapted to increasingly urbanised settings.

6.2. GENDER VIOLENCE AND COVID-19

Why in News?

Recently, **UN Women** has urged member-states to include prevention of violence against women in their action plans on COVID-19, calling the rise in gender-based violence a “**shadow pandemic**”.

In addition, U.N. Secretary General, appealed for a ‘ceasefire’ on domestic violence after “a horrifying global surge in domestic violence”.

More in News

- UN agency for sexual and reproductive health (UNFPA) has estimated that there would be 31 million more cases of domestic violence worldwide if lockdowns continue for another six months.
- In India, since March 23 to April 1, **the National Commission for Women (NCW)** has received 69 online complaints of domestic violence from across the country, many of these cases were from **North India**, particularly **Punjab**. **State commissions** have also reported an increase in the number of domestic abuse cases.
- However, even before the global spread of the new coronavirus, statistics showed that **a third of women around the world experienced some form of violence in their lives**

How COVID-2019, is deepening the domestic violence scenario?

- As the lockdowns **impose stricter control** on one's mobility, they put women in abusive relationships at extremely high risk of damage from **physical, sexual and emotional abuse**.
 - **This is fuelled** by mandatory stay-at-home rules, physical distancing, economic uncertainties, and anxieties caused by the pandemic.
- The **World Health Organization (WHO)** says disasters "disrupt the physical and social environments" that would normally keep the violence contained — such as shelter, a stable routine, and violence prevention systems.
- Healthcare providers and police are overwhelmed and understaffed, local support groups are paralyzed or short of funds and **domestic violence shelters are also closed**; as well as full.
- These limitations "**fuel impunity for the perpetrators**", as in many countries the law is not on women's side; one in four countries have no laws specifically protecting women from domestic violence.

General Reasons/Issues Involved:

- **Orthodox & Patriarchal mindset**- male domination and control over women, male privilege and women's subordinate status, infertility or desire for male child. Women are also more likely to experience intimate partner violence if they have low education, exposure to mothers being abused by a partner, abuse during childhood, and attitudes accepting violence, male privilege and women's subordinate status
- **Changing socio- economic relations** particularly in urban areas such as more income of a working woman than her partner, abusing and neglecting in-laws, dowry demands etc.
- **Violence against young widows especially in rural areas**: most often they are cursed for their husband's death and are deprived of proper food and clothing without often being given the opportunity for remarriage in most of the homes. Also there are cases of molestation and rape attempts by other family members in joint families.

Recent measures taken by the Government

- **Channelizing One Stop Centres**: MoW&CD, has instructed to ensure that One Stop Centres, which provide legal and psycho-social help with NIMHANS, to survivors of gender-based violence, and link with local medical teams, police and the National Legal Services Authority (NALSA) so that their services are not impacted due to restrictions on movement.
 - Nearly 1,000 people joined the video conference live, including the staff members of One Stop Centres, as well as shelter homes for women in distress (**Swadhar Greh, Ujjwala homes**) and Working Women Hostels.
- The **National Commission for Women** has also recently launched a WhatsApp number making it easier for women to ask for help, alongside a helpline and email option.
- **State's Initiatives**:
 - The Uttar Pradesh police launched an initiative in March, "**Suppress corona, not your voice**" asking battered women to call a helpline number to enable women police officers to reach them following a complaint.
 - A **community radio program** in Uttar Pradesh, helped raise awareness about violence against women, how to recognize domestic violence, and ways to address the issue. Callers were encouraged to call in and share their experiences.
 - Another campaign, "**Bell Bajao!**" (**Ring the Bell**), calls on men and boys to take a stand against domestic violence.
 - "**Mpower 1on1**" is a newly launched helpline in Mumbai to report domestic abuse, which has tied up with the Government of Maharashtra and Brihanmumbai Municipal Corporation (BMC) to launch a toll-free helpline number.

- **NGOs and Civil Society:** NGOs working in the field of domestic violence, are ensuring that every individual member call at least 10 women every day so that “women know that they are not alone”.
 - NGOs like **Stree Mukti Sanghatan** are helping women via free counselling and use the online facility for reporting the crime.
- **Judicial interventions: The courts have taken cognisance of this issue**
 - **Jammu & Kashmir high court** passed an order taking Suo moto cognizance of domestic violence cases during the lockdown, and offered a slew of directions including **creating a special fund and designating informal safe spaces for women like grocery stores and pharmacies, where they could report domestic violence/abuse without alerting the perpetrators.**
 - **Delhi high court** recently directed the state and Centre to take measures to protect women from domestic violence.

UN recommendation against Domestic Violence

- The UN urged all governments to make the prevention and redress of violence against women a key part of their national response plans for COVID-19, and outlined several actions that can be taken to improve the situation
 - Increase investment in online services and civil society organizations,
 - Make sure judicial systems continue to prosecute abusers to ensure that incidents of violence against women and girls are given **high priority with no impunity for perpetrators.**,
 - Set up emergency warning systems in pharmacies and groceries,
 - Declare shelters as essential services,
 - Create safe ways for women to seek support, without alerting their abusers,
 - Avoid releasing prisoners convicted of violence against women in any form,
 - Scale up public awareness campaigns, particularly those targeted at men and boys.

There are mainly three laws in India that deal directly with domestic violence:

The Protection of Women from Domestic Violence Act, 2005:

- The Act **expanded the definition of domestic violence** to include not just physical, but also verbal, emotional, sexual and economic violence.
- The law is **broad in its definition**— “domestic relationship” includes married women, mothers, daughters and sisters.
- This law not only protects women who are married but **also protects women in live-in relationships**, as well as family members including mothers, grandmothers, etc.
 - The Supreme Court has upheld that the Domestic Violence Act **will apply even after divorce.**
 - It has also **struck down the words “adult male”** from the pertinent provision in the DV Act to lay down that a woman can also file a complaint against another woman, accusing her of domestic violence
- Under this law, **women can seek protection against domestic violence**, financial compensation and they can get maintenance from their abuser in case they are living apart.
- It provides **the Right to Secure Housing** i.e. right to reside in the matrimonial or shared household, whether or not she has any title or rights in the household. This right is secured by a residence order, which is passed by a court.
- A magistrate can pass a protection order under the Act to ensure the abuser doesn't contact or get close to the survivor.
- It provides for breach of protection order or interim protection order by the respondent as **a cognisable and non-bailable offence punishable** with imprisonment which may extend to one year or with fine which may extend to Rs. 20,000 or with both.
- It provides for appointment of protection officers and NGOs to provide assistance to the woman for medical examination, legal aid and safe Shelter.
- Punishment of one year maximum imprisonment and Rs. 20,000 each or both to the offenders is mentioned.
- PWDVA enshrines principles of the **Convention on the Elimination of All forms of Discrimination Against Women (CEDAW), which India ratified in 1993.**

The Dowry Prohibition Act: This is a criminal law that punishes the taking and giving of dowry. Under this law, if someone takes, gives or even demands dowry, they can be imprisoned for six months or they can be fined up to Rs 5,000.

Section 498A of the Indian Penal Code: This is a criminal law, which applies to husbands or relatives of husbands who are cruel to women.

6.3. GLOBAL REPORT ON INTERNAL DISPLACEMENT

Why in news?

The Internal Displacement Monitoring Centre (IDMC) recently published the **Global Report on Internal Displacement, 2020** (GRID, 2020).

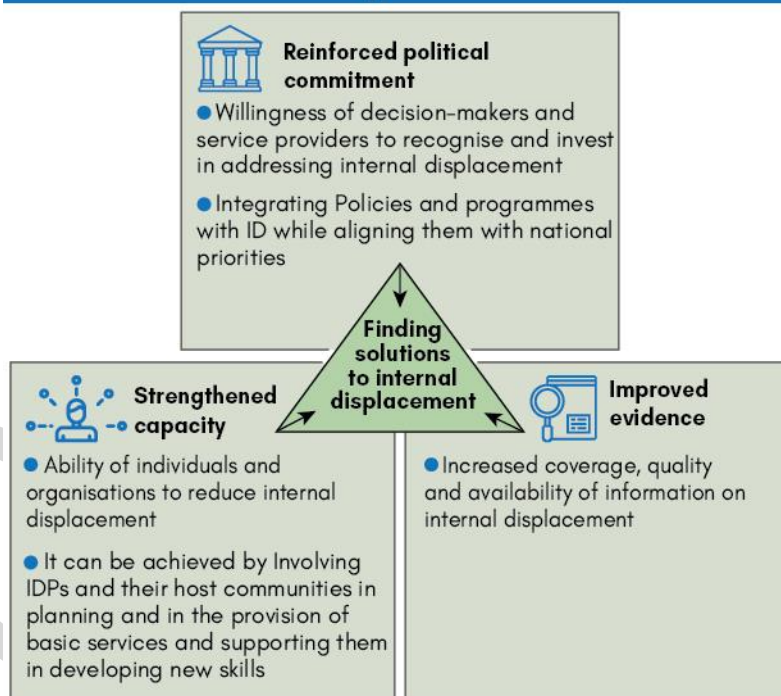
Key Findings

- **Globally, 33.4 million new displacements** took place in 2019 which is the **highest figure since 2012**.
 - South Asia region has the highest share of new displacements.
- **Total number of internally displaced people (IDPs) reached 50.8 million**.
 - 18.3 million IDPs are children under 15 and 3.7 million are over 60.
- **Displacements triggered by Conflict and violence-**
 - An all-time high **45.7 million** people were displaced as a result of conflict and violence.
 - Three-quarters of these were in just 10 countries like Syria, Colombia, Yemen, Afghanistan etc.
- India had the **highest number of new disaster displacements** (five million) in the world in 2019.
 - These were the result of a combination of increasing hazard intensity, high population exposure, conflicts and high levels of social and economic vulnerability.
 - 590,000 people live in **internal displacement as a result of disasters in India**. New disaster displacements were a result of various cyclones like Fani, Vayu, Bulbul etc along with south west monsoon and droughts in various parts.
- IDPs are different from refugees in that, having not crossed a border, they are not typically covered by international refugee protections. They remain subjected to national laws, and as such are afforded less protection.

The Internal Displacement Monitoring Centre (IDMC)

- It was established in 1998 as part of the Norwegian Refugee Council (non-governmental organisation that protects the rights of people affected by displacement).
- It seeks to provide high-quality data, analysis and expertise on internal displacement with the aim of informing policy and operational decisions.

Three areas for action needed to end displacement and reduce displacement risk



6.4. GLOBAL EDUCATION COALITION

Why in the news?

United Nations Educational, Scientific and Cultural Organisation (**UNESCO**) has launched the **Global Education Coalition**.

About Global Education Coalition (GEC)

- **Global Education Coalition** is a **multi-sector partnership** involving the United Nations agencies, international organisations, private sector, civil society representatives, philanthropic and non-government organisations etc.
- It seeks to **facilitate inclusive learning opportunities** for children and youth during the period of **educational disruption** due to COVID 19 pandemic.

About UNESCO

- UNESCO is the **specialised agency** of the United Nations that seeks to **build peace** through international cooperation in **Education, the Sciences and Culture**.
- It was **established** on **16 November, 1945**.
- **Headquarters-** Paris, France.
- It has **193 Members and 11 Associate Members**.

- **Aims of GEC**
 - Help countries in **mobilising resources** and implementing **innovative and context-appropriate solutions** to provide education remotely, leveraging hi-tech, low-tech and no-tech approaches
 - Seek **equitable** solutions and **universal access**
 - Ensure **coordinated** responses and **avoid overlapping** efforts
 - **Facilitate the return** of students to school when they reopen to **avoid** an upsurge in **dropout** rates

Adverse consequences of school closures as per UNESCO

- **Interrupted learning** as children and youth are **deprived** of opportunities for **growth and development**, especially the **under-privileged** who have fewer educational opportunities beyond school.
 - **191 countries** have closed all their schools, affecting **over 1.5 billion students** from pre-primary to tertiary education. (**9 out of 10 students worldwide**).
- **Poor nutrition** as many children and youth rely on **free or discounted meals provided at schools** for food and healthy nutrition.
- **Confusion and stress for teachers** as they are often unsure of their obligations and how to maintain connections with students to support learning.
- **Parents unprepared for distance and home schooling** especially those with limited education and resources.
- **Challenges in creating, maintaining, and improving distance learning** as demand overwhelms existing portals to remote education.
- **Rise in dropout rates** due to protracted closures and when economic shocks place pressure on children to work and generate income for financially distressed families.
- **Social isolation** as schools are hubs of social activity and human interaction that is essential to learning and development.
- **Challenges in measuring and validating learning** as strategies to administer examinations at a distance raise serious concerns about fairness, especially when access to learning becomes variable.

Guidelines for safe reopening of schools

UNESCO, UNICEF, World Food Programme and World Bank issued guidelines on the safe reopening of schools amidst COVID-19 pandemic and related risks. Guidelines include:

- **Policy reform** with clear policies for **school opening and closure during public health emergencies**, to **expand equitable access** for marginalised and out of school children and strengthen & **standardize remote learning** practices.
- **Addressing financing requirements** by **investing in strengthening education systems** for recovery and resilience.
- Ensure **conditions that reduce disease transmission**, safeguard essential services and supplies and promote **healthy behaviour (hand washing, social distancing etc.)**
- Focus on **practices that compensate for lost instructional time**, strengthen pedagogy and **build on hybrid learning models** such as integrating approaches in remote and distance education.
- Adapt school opening policies and practices **to expand access to marginalised groups** such as previously out-of-school children, migrant children etc. **Diversify critical communications** and outreach by making them available in relevant languages and in accessible formats.

6.5. VIDYADAAN 2.0

Why in news?

Ministry of Human Resource Development (MHRD) e-launched **VidyaDaan 2.0** program for inviting e-learning content contributions.

VidyaDaan

- **VidyaDaan is national program, in which individuals** (teachers, educationists, subject experts etc.) & **organizations** (schools etc.) **can contribute to e-learning** in the education domain.
- These **contributions can be of different types** such as teaching videos, practice questions, competency-based items, lesson plans etc. for grade from 1 to 12 and subject specified by the states/UTs under their respective projects.
- It can also include **sharing life changing experiences, consultation, stress relieving sessions**, sessions on mental or physical health, sessions on grooming and personality development.

About VidyaDaan 2.0

- VidyaDaan 2.0 was launched due to the **increasing requirement for e-learning content for students** (both school and higher education) in the backdrop of COVID-19 and due to urgent need to **integrate digital education with schooling** to augment learning.
- Content will be monitored by a panel of academic experts and **released for use on the DIKSHA app** to children across country continue learning anytime and anywhere.
- States and Union Territories can initiate their own program as part of VidyaDaan 2.0.

About DIKSHA (Digital Infrastructure Knowledge Sharing)

- Diksha platform was launched in 2017, by MHRD to provide **supplementary learning material for students and for upgrading the skills of teachers**.
- The **high-quality e-learning material** both for students and teachers are available on this portal.
- Thus, Diksha will serve as **National Digital Infrastructure for Teachers** and will **aid teachers to learn and train themselves** for which assessment resources will be available.
- States, government bodies and private organizations, **can integrate DIKSHA** into their respective teacher initiatives.
- Currently, **DIKSHA supports 10 languages viz.** Hindi, English, Gujarati, Bengali, Assamese, Marathi, Odia, Kannada, Tamil and Telugu, both for creating and viewing content.



फाउंडेशन कोर्स सामान्य अध्ययन प्रारंभिक एवं मुख्य परीक्षा 2021

इनोवेटिव क्लासरूम प्रोग्राम

- प्रारंभिक परीक्षा, मुख्य परीक्षा और निबंध के लिए महत्वपूर्ण सभी टॉपिक का विस्तृत कवरेज
- मौलिक अवधारणाओं की समझ के विकास एवं विश्लेषणात्मक क्षमता निर्माण पर विशेष ध्यान
- एनीमेशन, पॉवर प्वाइंट, वीडियो जैसी तकनीकी सुविधाओं का प्रयोग
- अंतर - विषयक समझ विकसित करने का प्रयास
- योजनाबद्ध तैयारी हेतु करेंट ओरिएंटेड अप्रोच
- नियमित क्लास टेस्ट एवं व्यक्तिगत मूल्यांकन
- सीसेट कक्षाएं
- PT 365 कक्षाएं
- MAINS 365 कक्षाएं
- PT टेस्ट सीरीज
- मुख्य परीक्षा टेस्ट सीरीज
- निबंध टेस्ट सीरीज
- सीसेट टेस्ट सीरीज
- निबंध लेखन - शैली की कक्षाएं
- करेंट अफेयर्स मैगजीन

Scan the QR CODE to download VISION IAS app



10 JUNE | 5 PM **DELHI** **18 FEB | 9 AM** **16 JUNE | 1:30 PM**
लाइव / ऑनलाइन बैच **LUCKNOW** **9 JULY | 9 AM** **JAIPUR** **17 JUNE | 9 AM**

लाइव / ऑनलाइन कक्षाएं भी उपलब्ध

7. SCIENCE AND TECHNOLOGY

7.1. BCG VACCINE AND COVID-19

Why in news?

Researchers across the world are testing the Bacillus Calmette-Guerin (BCG) vaccine against the novel coronavirus disease (COVID-19).

More on news

- Epidemiological data on coronavirus found that countries that do not routinely immunise children against TB have more COVID-19 cases. These countries include the US, the Netherlands Italy and Spain.
- The study however is yet to be peer reviewed and there does not appear to be a direct evidence that a vaccine against a bacterial disease will work against viral infections.
- The World Health Organization (WHO) also does not recommend the BCG vaccination for prevention of Covid-19.

About BCG vaccine

- The BCG vaccine was developed in 1921 in France to be **used against Tuberculosis**.
- It is composed of a live, weakened strain of the bacterium Mycobacterium bovis (causative agent of tuberculosis in cattle) which related to mycobacterium tuberculosis, the bacteria which causes tuberculosis in humans.
- The vaccine provokes the body to develop antibodies to attack TB bacteria thus creating an **adaptive immune response like other vaccines**.
- However, unlike other vaccines, the **BCG vaccine may also boost the innate immune system** i.e. first-line defence that keep a variety of pathogens from entering the body or from establishing an infection.
- The **efficiency rate of the vaccine is around 60 per cent** and the results also vary between countries.
- Globally, the **practice is to administer it to children below one year of age** as most children acquire natural clinical/ sub-clinical tuberculosis infection by the age of one year. This too protects against severe forms of childhood tuberculosis e.g. TB meningitis and military disease.
- **In India, BCG vaccine was first introduced in 1948** and was then made a part of universal immunisation programme and administered to millions of children at birth or soon after it.
- BCG vaccine has proved quite **effective against the SARS infection also**.
- Recent studies showed that it is **effective in controlling blood sugar** in people with diabetes type 1 and maintained better sugar levels for the next five years. It has also been found **effective as bladder cancer therapy and increasing survival of low birth weight children**.

Universal Immunisation Programme

- **Immunization Programme** in India was introduced in 1978 as 'Expanded Programme of Immunization' (EPI) by the Ministry of Health and Family Welfare, Government of India.
- In 1985, the programme was modified as 'Universal Immunization Programme' (UIP) to be implemented in phased manner to cover all districts in the country by 1989-90 with the one of largest health programme in the world.
- Under UIP, **free vaccines are provided to infants, children and pregnant women against 12 life threatening diseases** - Tuberculosis, Diphtheria, Pertussis, Tetanus, Polio, Hepatitis B, Pneumonia and Meningitis due to Haemophilus Influenzae type b (Hib), Measles, Rubella, Japanese Encephalitis (JE) and Rotavirus diarrhoea. (Rubella, JE and Rotavirus vaccine in select states and districts)

Immunisation and Types of Immunity

- **Immunity to a disease is achieved through the presence of antibodies** to that disease in a person's system.
 - **Antibodies are proteins produced by the body** to neutralize or destroy toxins or disease-carrying organisms. Antibodies are disease-specific. For example, measles antibody will protect a person who is exposed to measles disease, but will have no effect if he or she is exposed to mumps.
- **Immunization is the process whereby a person is made immune or resistant to an infectious disease**, typically by the administration of a vaccine.
 - **Immunization introduces antigens or weakened pathogens** to a person in such a way that the individual does not become sick but still produces antibodies. Because the body saves copies of the antibodies, it is protected if the threat should reappear later in life.

- There are **mainly two types of immunity in humans**
 - **Natural or Innate immunity:**
 - Innate immunity is something **already present in the body and refers to nonspecific defense mechanisms** that come into play immediately or within hours of an antigen's appearance in the body.
 - These mechanisms **include physical barriers** such as skin, chemicals in the blood, and immune system cells that attack foreign cells in the body.
 - **Acquired or Adaptive immunity:** It is of two types:

Active Immunity	Passive immunity
<ul style="list-style-type: none"> • Immunity acquired by exposure to disease or by vaccination. Either way, if an immune person comes into contact with that disease in the future, their immune system will recognize it and immediately produce the antibodies needed to fight it. • Active immunity takes time (usually several weeks) to develop but is long-lasting. 	<ul style="list-style-type: none"> • Immunity acquired when a person is given antibodies to a disease rather than producing them through his or her own immune system. • A new born baby acquires passive immunity from its mother through the placenta. A person can also get passive immunity through antibody-containing blood products such as immune globulin or plasma, which may be given when immediate protection from a specific disease is needed. • The major advantage of passive immunity is that protection is immediate but it lasts only for a few weeks or months. • The Convalescent Plasma Therapy currently identified as a potential treatment for CoVID-19 is a way of developing passive immunity in covid patients.

7.2. UPDATES ON VARIOUS ASPECTS OF COVID-19

7.2.1. TRANSMISSION, TESTING AND PREVENTION METHODS

Vertically Transmitted Infection	<ul style="list-style-type: none"> • Emerging evidences suggests of vertical transmission is probable in CoVID-19. • Vertical transmission refers to the transmission of an infection from a pregnant woman to her child. It can be antenatal (before birth), perinatal (weeks immediately prior to or after birth) or postnatal (after birth). • Transmission might occur across the placenta, in the breast milk, or through direct contact during or after birth. • Among infections of which vertical transmission has been known to happen are HIV, Zika, rubella and the herpes virus. • ICMR has issued a Guidance for Management of Pregnant Women in COVID-19 Pandemic.
Pool Testing	<ul style="list-style-type: none"> • Indian Council of Medical Research (ICMR) issued an advisory for using pooled samples for testing of COVID-19. • In a pooled testing algorithm, samples of multiple individuals are put together in a tube and screened through the RT-PCR test. <ul style="list-style-type: none"> ○ In case the pooled test turns out to be positive, individual samples are tested, which is referred to as pool de-convolution. ○ If there's no positive result, all individual samples in the pool are regarded as negative. • ICMR has advised that while more than two samples can be pooled together, the number should not exceed five samples to avoid sample dilution. • This method can be used in areas where the prevalence of COVID-19 is low, which means a positivity rate of less than two percent. In areas with a positivity rate between two to five percent, sample pooling of PCR screening may be considered in a community survey of surveillance among asymptomatic individuals.
Feluda Test	<ul style="list-style-type: none"> • It is a paper-based test strip developed by CSIR scientists to detect the new coronavirus within an hour. • The test uses the cutting-edge gene-editing tool- Crispr-Cas9 to target and identify the genomic sequences of the novel coronavirus in the samples of suspected individuals.
Chitra GeneLAMP-N	<ul style="list-style-type: none"> • It is a diagnostic test kit that can confirm COVID-19 in 2 hours at low cost. • It has been developed by Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum under the Department of Science and Technology (DST). • It detects the N Gene of SARS- COV2 using reverse transcriptase loop-mediated amplification of viral nucleic acid (RT-LAMP) technology, and can detect two regions of the gene, which will ensure that the test does not fail even if one region of the viral gene undergoes mutation during its current spread.

nCoVSENSES	<ul style="list-style-type: none"> Department of Science & Technology has funded “Module Innovations”, a Pune based healthcare start-up to develop rapid antibody test device for detecting COVID 19 with a 10 to 15 minute test. It is aimed at detecting the IgG and IgM antibodies generated in the human body upon the onset of viral infection and is targeted against the Spike proteins making it specific for COVID 19.
COVID Sample Collection Kiosk (COVSACK)	<ul style="list-style-type: none"> The unit has been developed by Defence Research & Development Laboratory (DRDL) in consultation with the doctors of Employees' State Insurance Corporation (ESIC), Hyderabad. The COVSACK is a kiosk for use by healthcare workers for taking COVID-19 samples from suspected infected patients. The Kiosk is automatically disinfected without the need for human involvement, making the process free of infection spread. The shielding screen of kiosk cabin protects the health care worker from the aerosols/droplet transmission while taking the sample. This reduces the requirements of Personal Protection Equipment (PPE) change by health care workers.
AcryloSorb	<ul style="list-style-type: none"> It is a highly efficient superabsorbent material for liquid respiratory and other body fluid solidification and disinfection for the safe management of infected respiratory secretions. It is designed and developed by Scientists at Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST) an autonomous institute under the Department of Science and Technology (DST). It can absorb liquids at least 20 times more than its dry weight and also contains a decontaminant for in situ disinfection. This technology reduces the risk for the hospital staff, the need for personnel for disinfecting and cleaning the bottles and canisters for reusing them and makes the disposal safer and easier.
KARMI Bot	<ul style="list-style-type: none"> It is a robot deployed by a government hospital in Ernakulam, Kerala to serve food and medicines to coronavirus patients with an aim to reduce risk of infections for doctors and health workers. The robot is developed by ASIMOV robotics, a company working under maker village of Kerala start-up mission.

7.2.2. VACCINES AND OTHER TREATMENT METHODS

High-level task force for vaccine and drug testing	<ul style="list-style-type: none"> The government has formed a high-level task force for vaccine and drug testing for coronavirus disease (Covid-19) The objective of the task force is to speed up national and international efforts towards vaccine development to treat Covid-19. Department of biotechnology would act as a nodal agency to identify the pathway for vaccine development, monitor progress of efforts at both national and international level in this area, and provide government facilitation.
CoroFlu Vaccine	<ul style="list-style-type: none"> It is being developed by Bharat Biotech Ltd in partnership with University of Wisconsin-Madison and US-based company FluGen and will be in human trials by Sept 2020. It will be based on FluGen's flu vaccine candidate M2SR in which gene sequences from the coronavirus SARS-CoV2 will be inserted into the vaccine candidate to provide additional immunity against covid-19. CoroFlu, like M2SR, will be administered intranasally mimicking the natural route of infection by coronavirus and influenza and activates several modes of the immune system.
PRANA-VAYU	<ul style="list-style-type: none"> It is the closed-loop ventilator, developed by IIT-Roorkee in collaboration with AIIMS, Rishikesh, and is equipped with state-of-the-art features. The ventilator will be useful for a wide degree of congestions in the respiratory tract and is applicable for all age group patients, especially the elderly. Additionally, it does not require compressed air for functioning and can be especially useful in cases when hospital wards or open areas are converted into ICUs. Some additional features are remote monitoring by health professionals, touch screen control of all operating parameters, moisture, and temperature control for inhaled air.
Ruhdaar	<ul style="list-style-type: none"> It is a low-cost ventilator prototype using locally available materials developed by IIT Bombay, NIT Srinagar and Islamic University of Science & Technology (IUST), Pulwama, Jammu and Kashmir. It can provide adequate breathing support necessary to save the life of a critically ill COVID-19 patient.

VITAL (Ventilator Intervention Technology Accessible Locally)	<ul style="list-style-type: none"> It is a new high-pressure ventilator developed by NASA engineers and specially tailored to treat coronavirus (COVID-19) patients VITAL can be built faster and maintained more easily than a traditional ventilator, and is composed of far fewer parts, many of which are currently available to potential manufacturers through existing supply chains.
---	---

7.2.3. TRACKING AND SURVEILLANCE

COVID Quarantine Alert System	<ul style="list-style-type: none"> Department of Telecommunication and C-DOT in coordination with Telecom Service Providers have developed this application which automatically triggers an email or SMS if any identified corona positive person moves away from their quarantine location. The system collates phone data, including the device's location, on a common secured platform and alert the local agencies in case of a violation by COVID-19 patients under watch or in isolation. It is based on Kerala's Geo-fencing app being used to track COVID-19 cases.
National Analytical Platform for Dealing with Intelligent Tracing, Tracking and Containment (NAADI)	<ul style="list-style-type: none"> Developed by Centre for Development of Advanced Computing (C-DAC) as a data science-based tool to make easy the task of tracking the movements of Covid-19 patients or quarantined people across the country. The tool will also facilitate culling out the correct information from the confirmed or suspected patients, who might have genuinely forgotten the places they had visited during the two-three weeks before being diagnosed with the infection or quarantined.
Saiyam App	<ul style="list-style-type: none"> In order to effectively track the home-quarantines citizens and ensure they are actually staying in the home, a mobile application named Saiyam has been developed by the Pune Municipal Corporation under Smart Cities Mission (SCM). The Mobile Application has GPS tracking so that whenever quarantined citizens leave their homes, City Administration gets alerted and the local ward or the local police station gets informed, who then visit the family.
Supercomputer using Artificial Intelligence, Machine Learning, Healthcare Analytics based Research, Covid-19 (SAMHAR)	<ul style="list-style-type: none"> It was announced by Centre for Development of Advanced Computing (C-DAC) under the aegis of the National Supercomputing Mission (NSM), a Ministry of Electronics & Information Technology (MeitY) and Department of Science & Technology (DST) initiative, in association with NVIDIA & OpenACC. The hackathon is open to Researchers, Academicians, MSMEs, Startups and Industries with an objective to bring out Innovative and Implementable Ideas for Prediction, Forecasting and Building Healthcare Models that could revolutionize the way we interpret science of pandemic outbreaks using AI technology on Supercomputers.

7.2.4. AWARENESS GENERATION AND GRIEVANCE REDRESSAL

CovidGyan Website	<ul style="list-style-type: none"> It aims to fight misinformation around coronavirus disease and will provide factual aspects of this pandemic outbreak on to the public domain. The initiative is started by Tata Institute of Fundamental Research (TIFR), Indian Institute of Science (IISc), and Tata Memorial Centre (TMC).
PRACRITI- Prediction And Assessment Of Corona Infections And Transmission In India	<ul style="list-style-type: none"> It is a web-based dashboard developed by IIT Delhi researchers for predicting the spread of COVID-19 in India. It gives detailed state-wise and district-wise predictions of COVID-19 cases in India based on the R0 values of each district and state available from multiple sources. <ul style="list-style-type: none"> R0 refers to the number of people to whom the disease spreads from a single infected person. The distinguishing feature of the model developed by the IIT Delhi researchers is the inclusion of the effect of movement of population across district/state borders in the spread of COVID-19.
National Monitoring Dashboard on COVID 19 Grievances	<ul style="list-style-type: none"> It is developed by Department of Administrative Reforms and Public Grievances (DARPG) in pursuance of the recommendations of the Empowered Group of Officers constituted under the Disaster Management Act 2005 on Public Grievances and Suggestions to ensure timely implementation of COVID 19 Response Activities. It aimed at addressing grievances of Central government and State governments/Union territories.

	<ul style="list-style-type: none"> The nature of grievances are related to quarantine facilities, lockdown not being adhered to, essential supplies, examination, rescheduling of interest repayments on loans, evacuation requests from foreign countries.
COVID INDIA SEVA	<ul style="list-style-type: none"> Launched by Ministry of Health and Family Welfare for providing real time solutions to Covid-19 related queries. People can post their queries to the COVID INDIA SEVA twitter handle for getting swift replies from the team of trained experts. This initiative is aimed at enabling transparent e-governance delivery at large scales especially in crisis situations like the ongoing COVID-19 pandemic.
Student Helpline Portal	<ul style="list-style-type: none"> It has been launched by All India Council for Technical Education (AICTE) to help students facing problems from lockdown and covid-19 pandemic. It connects help-seeking students with education institutions, who are willing to support them and will play a major role in addressing the challenges faced by students such as hostel accommodation, online classes, examinations, scholarships, health etc.
YUKTI Portal	<ul style="list-style-type: none"> Young India Combating COVID with Knowledge, Technology and Innovation (YUKTI) Portal is a unique portal and dashboard to monitor and record the efforts and initiatives of MoHRD. The portal helps in critical issues related to student promotion policies, placements related challenges and physical and mental well-being of students in these challenging times.
Lockdown Learners	<ul style="list-style-type: none"> Launched by United Nations Office of Drugs and Crime (UNODC), it is a series of online dialogues with students and educators in India on COVID-19 and its impact on SDGs, peace and the rule of law. Developed under the Education for Justice Initiative (E4J, a component of the Global Programme for the Implementation of the Doha Declaration), these dialogues aim to sensitize students on concerns of vulnerable groups and issues such as cybercrime, misinformation, gender-based violence, discrimination, and corruption, among others. <ul style="list-style-type: none"> The Education for Justice (E4J) initiative seeks to prevent crime and promote a culture of lawfulness through education activities designed for primary, secondary and tertiary levels. The Lockdown Learners series also provide a platform for students to receive mentorship and knowledge support through activity-based learning, and to use their talents and skills to promote awareness and share ideas and solutions to address some of these problems.
KISAN RATH Mobile App	<ul style="list-style-type: none"> It has been launched by Union Minister of Agriculture & Farmers' Welfare and developed by the National Informatics Centre (NIC). It will facilitate farmers & traders in searching transport vehicles for Primary and Secondary transportation for movement of Agriculture & Horticulture produce. Primary transportation would include movement from Farm to Mandis, FPO Collection Centre and Warehouses etc. Secondary Transportation would include movement from Mandis to Intra-state & Inter-state mandis, Processing units, Railway station, Warehouses and Wholesalers etc. This App also facilitates traders in transportation of perishable commodities by Reefer (Refrigerated) vehicles.

7.2.5. CAPACITY BUILDING AND PROMOTING INNOVATION

Integrated Govt. Online training' (iGOT) portal	<ul style="list-style-type: none"> Launched on Ministry of HRD's DIKSHA platform for the capacity building of frontline workers to handle the pandemic efficiently. Courses on iGOT have been launched for Doctors, Nurses, Paramedics, Hygiene Workers, Technicians, Auxiliary Nursing Midwives (ANMs), State Government Officers, Civil Defence Officers, Various Police Organisations, National Cadet Corps(NCC), NehruYuva Kendra Sangathan (NYKS), National Service Scheme, Indian Red Cross Society, Bharat Scouts and Guides and other volunteers at the stage.
Integrated Geospatial Platform and SAHYOG App	<ul style="list-style-type: none"> The Department of Science and Technology (DST), Government of India, has created an Integrated Geospatial Platform out of available geospatial datasets, standards-based services, and analytic tools to help decision making during the current COVID-19 outbreak and aid devising area-specific strategies to handle the socio-economic impact in the recovery phase. The mobile application SAHYOG, as well as the web portal prepared & managed by the Survey of India (Sol), has been customized to collect COVID-19 specific geospatial datasets through community engagement to augment the response activities by Government of India to the pandemic and will complement the Aarogya Setu App.

	<ul style="list-style-type: none"> This integrated geospatial platform will strengthen the Nation's health emergency management due to the COVID-19 outbreak and support the socio-economic recovery process through the seamless provision of spatial data, information, and linkage between human, medical, technological, infrastructural and natural resources.
Hack the Crisis – India	<ul style="list-style-type: none"> It is an Online Hackathon launched to discover non-medical solutions to stop the spread of Covid 19. This hackathon is part of a global initiative and is being organised by 'Hack A Cause – India' and 'Ficci Ladies Organization Pune' and supported by Ministry of Electronics & Information Technology, Government of India (MEITY).
Challenge Covid-19 Competition (C3).	<ul style="list-style-type: none"> It is launched by National Innovation Foundation – India (NIF), an autonomous institute under the Department of Science and Technology The aim is to invite creative ideas and innovations which can supplement the efforts of the government in slowing or eliminating the spread further. Ideas are also invited for gainful engagement of people at home, healthy food for nutrition and boosting immunity specially at the time of lockdown, (Personal Protective Equipment) PPE's, varying needs of the different segment of the population during COVID-19 etc.

7.3. INDIAN INITIATIVE ON EARTH BIOGENOME SEQUENCING (IIEBS)

Why in the news?

Jawaharlal Nehru Tropical Botanic Garden and Research Institute (JNTBGRI) is selected to take part in **Indian Initiative on Earth BioGenome Sequencing (IIEBS).**

More on news

- JNTBGRI is selected as one of the **Biological Knowledge and Resource Centres** for the IIEBS.
- Department of Biotechnology** has allotted ₹143.89 lakh for JNTBGRI to take up the project.

About Indian Initiative on Earth BioGenome Sequencing (IIEBS)

- This project aims to **decode the genetic information of all known species of plants and animals** in the country.
- The National Institute of Plant Genome Research, New Delhi** is the coordinating centre involving a total of 24 institutes.
- The whole genome sequencing of **1,000 species** of plants and animals will be taken up in the **initial phase of IIEBS** to be completed over a **period of five years** at an estimated cost of ₹440 crore.
- The project is **part of the Earth BioGenome Project.**

Significance of the project

- The project will enable **collection and preservation** of endangered and economically important species.
- The decoded genetic information will also be a useful tool to **prevent biopiracy.**
 - Biopiracy is **exploitative use of genetic code of plants or animals**, without compensating the countries from which the material or relevant knowledge is obtained.
- India's participation in the EBP would provide a **boost for the field of genomics and bioinformatics** within the country.

About Earth BioGenome project

- It is a global effort launched in 2018, **involving scientific partners and funders** from around the globe.
- It aims to **sequence, catalogue and characterise genomes** of all of Earth's **eukaryotic biodiversity** over a **period of ten years.**
- Vision-** Create a new foundation for biology to drive solutions for **preserving biodiversity and sustaining human societies.**

About JNTBGRI

- It is an **autonomous R & D organisation** set up in 1979 in Thiruvananthapuram, Kerala.
- It is recognised as a **'National Centre of Excellence** in ex situ conservation and sustainable utilisation of tropical plants diversity'.

About Genome Sequencing

- A genome is an **organism's complete set of deoxyribonucleic acid (DNA).**
- Sequencing a genome means** deciphering the **exact order of base pairs** in an organism.
- The way **these base pairs are arranged**, or variations and mutations in their pattern, can provide clues about the individual's health or ill health, inherited or acquired.

Related Information

- Eukaryotic organisms** are those whose **cells contain a nucleus and organelles**, and are enclosed by a plasma membrane.
- It includes protozoa, fungi, plants and animals.
- Prokaryotic cells** are **cells** that do not have a true nucleus or membrane-bound organelles. E.g. Bacteria

8. CULTURE

8.1. NATIONAL LIST FOR INTANGIBLE CULTURAL HERITAGE (ICH)

Why in news?

Ministry of Culture launched the National List of Intangible Cultural Heritage in New Delhi.

About National List of Intangible Cultural Heritage

- It is an attempt to **recognize the diversity of Indian culture** embedded in its intangible heritage.
- It aims to raise **awareness about the various intangible cultural heritage elements** from different states of India at national and international level and ensure their protection.
 - **Intangible Cultural Heritage** refers to the **practices, representations, expressions, knowledge**, transmitted from generation to generation within communities, created and transformed continuously by them, depending on the environment and their interaction with nature and history.
 - It is also vital for maintaining cultural diversity in the face of globalization.
- This initiative is also a part of the **Vision 2024** of the Ministry of Culture.
 - Vision 2024 has fixed timeline for completing work of enlisting, preserving and showcasing deep and
 - invaluable heritage and culture of country's monuments and traditions.
- Following **UNESCO's 2003 Convention for Safeguarding of Intangible Cultural Heritage**, this list has been classified into five broad domains in which intangible cultural heritage is manifested:
 - Oral traditions and expressions, including language as a vehicle of the intangible cultural heritage
 - Performing arts
 - Social practices, rituals and festive events
 - Knowledge and practices concerning nature and the universe
 - Traditional craftsmanship
- The items in the list have been collated from the projects sanctioned under the scheme for '**Safeguarding the Intangible Cultural Heritage and Diverse Cultural Traditions of India**' formulated by the Ministry of Culture (MoC) in 2013.
- As of now the list has more than 100 elements, it also includes the **13 elements of India** that have already been inscribed on the **UNESCO Representative List of the Intangible Cultural Heritage of Humanity**.

Safeguarding the Intangible Cultural Heritage and Diverse Cultural Traditions of India

- It was launched with objective of reinvigorating and revitalizing various institutions, groups, individuals, identified non-MoC institutions, non-government organisations, researchers and scholars so that they may engage in activities/ projects for strengthening, protecting, preserving and promoting the rich intangible cultural heritage of India.
- The Scheme cover all recognized domains of ICH such as oral traditions and expressions, including language as a vehicle of the intangible cultural heritage, Performing arts, Social practices, rituals and festive events, Knowledge and practices concerning nature and the universe, traditional craftsmanship etc.

UNESCO's Convention for the Safeguarding of the Intangible Cultural Heritage

- Adopted in 2003, the Convention is the international community's **first binding multilateral instrument** intended to safeguard and raise the profile of heritage.
- Its goal is to incite countries to care about and look after the ICH present on their territories.
- **Elements of India in UNESCO Representative List of the Intangible Cultural Heritage of Humanity**
 - Kutiyattam (Sanskrit Theatre of Kerala)
 - Traditional Vedic Chanting
 - Ramlila
 - Ramman (Religious festival of Uttarakhand)
 - Chhau Dance (West Bengal)
 - Mudiyettu (Ritual theatre and dance drama of Kerala)
 - Kalbelia (Folk dance of Rajasthan)
 - Buddhist chanting of Ladakh: recitation of sacred Buddhist texts in the trans-Himalayan Ladakh region, Jammu and Kashmir
 - Sankirtana (ritual singing, drumming and dancing of Manipur)
 - Traditional brass and copper craft of utensil making among the Thatheras of Jandiala Guru, Punjab
 - Nawrouz
 - Yoga
 - Kumbh Mela

8.2. QISSA KHWANI BAZAAR MASSACRE

Why in news?

Qissa Khwani Bazaar massacre in Peshawar has completed 90 years.

More on massacre

- **Khan Abdul Gaffar Khan** was arrested during protests arising out of the Salt Satyagraha in 1930s. A crowd of Khudai Khidmatgars gathered in Peshawar's Qissa Khwani (Storytellers) Bazaar.
- **In order to bring the situation under control**, the British troops opened fire on the unarmed crowd, killing **over 400 people**.

Khan Abdul Ghaffar Khan and his contributions

- He was born in 1890 and was nicknamed **Fakhr-e-Afghan** ("pride of Pashtuns"), **Badshah Khan**, or **Bacha Khan**, ("king of chiefs").
- He was the leader of the Pashtuns (or Pathans; a Muslim ethnic group of Pakistan and Afghanistan), and became a **follower of Mahatma Gandhi**.
- Ghaffar Khan **entered politics in 1919** during agitation over the Rowlatt Act, later joined the Khilafat movement, and in 1921 he was elected president of a district Khilafat committee in his native North-West Frontier Province.
- He **founded the Red Shirt movement** (Khudai Khidmatgar or Servants of God) among the Pashtuns.
 - It was initially a **social reform organization** focusing on education and the elimination of blood feuds from Afghan society but **turned more political** later.
 - It **espoused nonviolent nationalist agitation** in support of Indian independence and sought to awaken the Pashtuns' political consciousness.
- He earned himself the nickname **Frontier Gandhi** by his close associate Amir Chand Bombwal for his devotion to non-violent resistance.
- He **strongly opposed the proposal for the partition of India**, siding with the Indian National Congress and All India Azad Muslim Conference.
- In June 1947, Khan and other Khudai Khidmatgars declared the **Bannu Resolution**, demanding that the Pashtuns be given a choice to have an independent state of Pashtunistan, composing all Pashtun territories of British India.
 - Later, a plebiscite resulted in the Frontier Province becoming part of the newly independent Pakistan.
- He founded the Pashto language monthly political journal **'Pashtun'** in 1928. His autobiography ***My Life and Struggle***, was made public in 1969.
- In **1987 he was awarded the Bharat Ratna Prize**, and was the **first non-Indian to receive this honour**.
 - Another non-Indian to receive Bharat Ratna is **Nelson Mandela (1990)**.

9. ETHICS

9.1. SOCIAL STIGMA: COVID-19

Why in news?

Across the world, COVID-19 has sparked unwarranted behaviour towards health workers, infected persons and their families, certain ethnicities, and anyone having a connection to the disease.

What is Social Stigma and who are affected?

- Social stigma in the context of health is the **negative association** between a **person or group** of people who share certain characteristics and a **specific disease**.
- From the **early days of the HIV epidemic** to the current coronavirus crisis, a major challenge around infectious diseases has been dealing with the deep-seated stigma around affected populations.
 - For example, LGBT population was stigmatized in the past in connection with HIV outbreak.
- In the context of COVID-19, broadly three sets of people are being stigmatized:
 - **People in quarantine** (whether tested positive or not) are being socially discriminated.
 - **Health and sanitary workers:** From doctors down to the frontline workers are facing stigma and discrimination including violence at work.
 - **Already vulnerable sections:** Those who traditionally face discrimination like migrant workers, people from the northeast, victims of religious or other persecution are being associated with the disease and are facing undue stigmatization.

Why such stigmatization happens?

- **Fear and anxiety:** It is a disease that's new and for which there are still many unknowns. Lack of knowledge about the disease tends to create fear and anxiety around it. It is easy for the mind to associate that fear with 'others', resulting in stigmatization of 'others'.
- **Fake news and false information:** Stigma can also be the result of people's poor knowledge about COVID-19 and how it spreads. This is compounded by the large amount of fake news and false information being generated.
 - For example, certain communities and areas are being labelled as infected purely based on false reports floating in social media and elsewhere.
 - The proliferation of fake news can indirectly reinforce the stereotypes and prejudices prevalent in our mind. For example, only people from certain community are contracting the disease.
- **Labelling and association:** Stigma arises when the virus and the person with the virus are conflated; when we change the question from what's to blame to who's to blame.
 - **Calling COVID-19 "the Chinese virus" associates COVID-19 to Chinese people** even though not everyone of that descent or from that region is specifically at risk for the disease.
 - Stigma can also occur after a person has been released from COVID-19 quarantine even though they are not considered a risk for spreading the virus to others. This happens because s/he has been labelled as infected.

Stigmatization does not benefit anybody

- **People who are infected/quarantined**
 - **Disturbs their social life:** Not only they are stigmatized but families and friends of identified patients may also be stigmatized by extension. Stigma also affects the emotional or mental health of stigmatized groups and the communities they live in.
 - **Can incite violence and self-harm:** Instances have come to the fore where a suspected person has committed suicide for the fear of being harassed.
 - **Indirect social ostracisation:** Stigmatized groups may be subjected to social avoidance or rejection, denials of healthcare, education, housing or employment.
 - **Increased Mortality:** Due to stigma many patients who have Covid-19 or flu-like symptoms don't come to health care facilities. This could result in a situation where because of our delay in treatment we have higher mortality.

- **Overall community**

- **Stigma disrupts communication/discussion:** People who test positive often become fearful of seeking help or even discussing symptoms. By doing this, they put themselves and others at risk, and increasing the rate of transmission.
- **Damaging societal fabric:** Stigma hurts everyone by creating fear or anger towards other people.
- **Encouraging undesirable behaviour:** Stigma can drive people to **hide their illness** to avoid discrimination and may even discourage them from adopting healthy behaviours.

DOs and DON'Ts suggested by Min. of Health and Family Welfare to counter stigmatization

Dos	DON'Ts
<ul style="list-style-type: none"> • Appreciate efforts of people providing essential services and be supportive towards them and their families. • Share only the authentic information available on the website of Ministry of Health and Family Welfare, Govt. of India or the World Health Organisation. • Cross check any information related to COVID-19 from reliable sources before forwarding any messages on social media. • Share positive stories of those who have recovered from COVID-19. 	<ul style="list-style-type: none"> • Never spread names or identity of those affected or under quarantine. • Avoid spreading fear and panic. • Do not target healthcare and sanitary workers or police. They are there to help you. • Do not label any community or area for spread of COVID-19. • Avoid addressing those under treatment as COVID victims. Address them as “people recovering from COVID”.

What further can be done?

- **Encouraging Empathy:** Showing empathy with those affected will help build the societal trust in which health service providers can operate fearlessly and effectively.
- **Training against prejudice:** First responders could be trained to cope with stigma, as dealing with negative attitudes can be detrimental for their mental health while carrying out their duties.
- **Continuing the campaign:** The anti-stigma campaign must continue after the pandemic ends. In an atmosphere of fear and confusion, stigma becomes a lasting stain on people associated with the illness.

ALL INDIA TEST SERIES

Get the Benefit of Innovative Assessment System from the leader in the Test Series Program

PRELIMS

- **General Studies** (हिन्दी माध्यम में भी उपलब्ध)
- **CSAT** (हिन्दी माध्यम में भी उपलब्ध)

<ul style="list-style-type: none"> ➤ VISION IAS Post Test Analysis™ ➤ Flexible Timings ➤ ONLINE Student Account to write tests and Performance Analysis 	<ul style="list-style-type: none"> ➤ All India Ranking ➤ Expert support - Email/Telephonic Interaction ➤ Monthly Current Affairs
--	---

Start: 26 April

for **PRELIMS 2021** starting from **7 June**

प्रारंभिक 2021 के लिए **21 जून**

MAINS

- **General Studies** (हिन्दी माध्यम में भी उपलब्ध)
- **Essay** (हिन्दी माध्यम में भी उपलब्ध)
- **Philosophy**

Start: 15 March

for **MAINS 2021** starting from **10 May**

मुख्य 2021 के लिए **24 मई**

Scan the QR CODE to download **VISION IAS** app

10. NEWS IN SHORT

10.1. ISSUE OF NOMINATION OF MAHARASHTRA CHIEF MINISTER

- Chief Minister of Maharashtra was elected unopposed to Maharashtra Legislative Council.
- CM took oath on November 28, 2019 and he had to become a member of State legislature before May 28 or resign and again take oath as CM's current term in office approaches its end.
 - As per Article 164(4) 'a Minister who for any period of six consecutive months is not a member of Legislature of the State shall at expiration of that period cease to be a Minister.
- **Earlier**, Maharashtra Cabinet recommended to Governor that Chief Minister should be nominated to one of the seats reserved for the Governor's nominee in the state Legislative Council (SLC) as **polls were deferred due to the spread of coronavirus**.
- To end the uncertainty in the State, Governor made the request to Election Commission (EC) to fill the seats that have been lying vacant in SLC.
- **On taking oath again:** In 2001, SC in **n.S. R. Chaudhari v. State of Punjab**, had ruled that it would be **subverting Constitution** to allow an individual to be appointed a Minister repeatedly for a term of 'six consecutive months', without him getting himself elected.
- **On nomination to Legislative Council (LC):** It has been recommended **under Article 171(5):**
 - **As per Article 171(5)**, Governor can nominate "persons having special knowledge or practical experience in respect of literature, science, art, co-operative movement and social service" to LC.
 - Terms of two vacancies in LC ends on June 6. While **RPA 1951** prohibits filling of a vacancy if remainder of the term is less than one year, this bar does not apply for nomination.

10.2. BODOLAND TERRITORIAL AREA DISTRICTS (BTAD)

- Assam's Bodoland Territorial Area Districts (BTAD) governed by Bodoland Territorial Council (BTC) came under Governor's Rule after the expiry of five-year term of BTC.
- The elections to the council, were deferred because of the COVID-19 pandemic and guidelines for maintaining social distancing.
- The governor decided to assume control of BTAD in exercise of powers vested in him under **Sixth Schedule** of the Constitution.

About Bodoland Territorial Council (BTC)

- It was created within the framework of **Sixth Schedule** and Governor is constitutional head here.
- First Bodo accord, signed with All Bodo Students Union in 1993, led to creation of a Bodoland Autonomous Council with limited political powers. BTC was created in 2003 with some more financial and other powers.
- BTC has been empowered with legislative, executive and financial powers and functions over 40 subjects.
- BTC consists of 46 members, 40 members are elected and 6 to be nominated by Governor of Assam from the unrepresented communities from the BTC area of which at least two should be women.
 - This is an exception to Sixth Schedule which allows for a maximum of 30 members whereas Legislative Assembly has 46 members.
- The Council aims at bringing about accelerated progress with special focus on the development of the Bodo people in the field of education, preservation of land rights, linguistic aspiration, culture and its ethnic identity.



10.3. PRESS FREEDOM INDEX

- India has **dropped to rank 142**, two points below its 2019 rank, in the 2020 World Press Freedom Index.
- It is released by a non-profit Paris-based organization named **Reporters Without Borders (RSF)**.
- The Index ranks 180 countries and regions according to the level of freedom available to journalists.
- The criteria used in the rankings are pluralism, media independence, media environment and self-censorship, legislative framework, transparency, and the quality of the infrastructure that supports the production of news and information.

10.4. INDIA REMAINS ON U.S. PRIORITY WATCH LIST

- Office of USTR released its annual **Special 301 Report** on adequacy and effectiveness of trading partners' protection of **intellectual property (IP) rights**.
- Trading partners that currently present the most significant concerns regarding IP rights are placed on the Priority Watch List.
- **India continues to be on the 'Priority Watch List'** for lack of adequate IP rights protection.
- It highlighted concerns regarding restrictions in pharmaceutical sector, high custom duties on medical devices, absence of centralised IP enforcement agency etc.

10.5. CERTIFICATE OF ORIGIN

- Recently, Ministry of Commerce and Industry has designed **an online platform** for issuance of 'certificate of origin' (CO), to facilitate shipments during the COVID-19 crisis.
- A CO is an important **international trade document** that certifies that goods in a particular export shipment are wholly obtained, produced, manufactured or processed in a particular country.
 - They declare the **'nationality' and 'content' of the product** and also serve as a **declaration by the exporter to satisfy customs or trade requirements**.
 - The document is important to claim duty concessions under free-trade agreements (FTAs).
- An exporter has to submit a CO at the landing port of the importing country.
- There are two types of COs:
 - **Non-Preferential COs** which certify that the goods are subject to no preferential treatment. They are also known as "Normal COs".
 - **Preferential COs**, which certify that goods are subject to reduced tariffs or exemptions when they are exported to countries extending these privileges.
- The Rules of Origin chapter in trade agreements sets guidelines for how to issue a legitimate CO (Preferential COs).

10.6. BANK OF SCHEMES, IDEAS, INNOVATION & RESEARCH PORTAL

- Ministry of Micro, Small and Medium Enterprises (MSME) has launched Bank of Schemes, Ideas, Innovation & Research Portal on MSMEs.
- Portal gives **access to all Schemes of Union, State/ union territories** for MSMEs.
- It has provision for **uploading Ideas, Innovations & Researches in the sector** by users.

- It has features of **crowd sourcing of Ideas, evaluation** and rating the ideas by crowd sourcing, which will help in decision making.
- It facilitates **venture capital to connect with user** having idea, innovation and research and also options are available for adding Banks, Government Labs, Incubators, Accelerators, Foreign collaboration in future.
- This will help in the **research activities in rural tribal knowledge, skills**.

10.7. TRENDS IN WORLD MILITARY EXPENDITURE, 2019 REPORT BY SIPRI

- **Key Findings:**
 - **Total military spending** was \$1917 billion accounting for **2.2% of global gross domestic product (GDP)** in 2019.
 - Annual growth in 2019 (over 2018) was largest in military expenditure since 2010.
 - World **military burden followed a declining trend** in 2010–19, decreasing every year except for 2015 and 2019.
 - **Military expenditure as a share of GDP** is known as military burden.
 - **Among the biggest spenders** in 2019 India ranked third while USA was the first.
 - **India had highest military spending in South Asia**. It grew by 259 % (1990–2019) and by 37 % (2010–19). However, its **military burden fell** from 2.7 % of GDP in 2010 to 2.4 % in 2019.
 - **India's tensions and rivalry with China and Pakistan** are among **major drivers** for its increased military spending.
- **Stockholm International Peace Research Institute (SIPRI)** is an independent international institute dedicated to research into conflict, armaments, arms control and disarmament.

10.8. GLOBAL TERRORISM INDEX

- Recently, Niti Ayog questioned the terror ranking of India in **Global Terrorism Index**.
- The index is **issued annually** by the Australian based **Institute for Economics and Peace (IEP)** and is based primarily on the **Global Terrorism Database (GTD)** collated by the National Consortium for the Study of Terrorism and Responses to Terrorism (START) at the University of Maryland.
- It aims to comprehensively analyse the impact of terrorism on 163 countries, covering 99.7% of the world population. **The GTI accounts for terrorist attacks over five prior years**.
- India has been ranked as **seventh worst terrorism affected country in the annual Global Terrorism Index (GTI), 2019**.

- **Niti Ayog report questioned methodology and opaque funding of the IEP to rank India ahead of the conflict-ridden countries** such as the South Sudan, Sudan, Burkina Faso, Palestine etc..
- The **large diversity in definitions of terrorism** amongst countries, and **lack of a universally accepted definition of terrorism**, including in the Comprehensive Convention on International Terrorism pending in the UN General Assembly since 2014 has **lead to ambiguity in calculating GTI index**.

10.9. UN75

- UN75 Initiative released Findings from first three months of Global Dialogue titled '**Resolved to Combine Our Efforts**'.
- The responses show that **people believe climate and environment** will affect humanity's future the most, conflict and violence at second and health risks at third.

About the initiative

- To mark its 75th anniversary in 2020, United Nations has launched large and inclusive **global conversation** on the role of **global cooperation in building the future** we want, named **UN75**.
- Through UN75, United Nations will **encourage people** to put their heads together to define how enhanced international cooperation can help realize a better world by 2045, UN's 100th anniversary.
- **Anyone can join the conversation** in all 193 UN Member states, online and offline or in formal and informal dialogues.
- UN75 dwells on **three big questions**:
 - What kind of future do we want to create?
 - Are we on track?
 - What action is needed to bridge the gap?
- It has **following three components**:
 - **Connecting people**, by bringing together diverse groups, especially those not often heard, to shape a new global dialogue.
 - **Amplify their voices** by creating open channels for people to talk and be heard.
 - **Inspire action** by providing feedback, sharing and advocating solutions.
- The results will be presented official commemoration of the UN's 75th anniversary in September 2020 and final report in January 2021 on how best to take the results forward.

10.10. EIA NOTIFICATION AMENDED FOR PRODUCTION OF BULK DRUGS

- To address unprecedented situation arising from global outbreak of Novel Corona Virus (COVID-19),

and **to ramp up availability or production of various drugs**, Ministry of Environment, Forest and Climate Change has made an amendment to EIA Notification 2006.

- All projects or activities in respect of bulk drugs and intermediates, manufactured for addressing various ailments, have been re-categorized from the existing **Category 'A' to 'B2' category**.
- **Under EIA 2006 notification, projects are divided into following groups**
 - **Category A** projects include all physical infrastructure whose size and cost is greater than certain minimum levels as defined in the Schedule. **Environmental Clearances for these projects are granted at the Central level**.
 - **Category B projects** (with potentially less significant impacts) are evaluated and given a clearance by state level authorities
 - Moreover, projects under Category B1 also require an EIA and public consultation, but those falling under **B2 are exempted from requirements of both EIA and public consultation**.
- Now, with the re-categorization of such proposals has been done to **facilitate decentralization of appraisal to State Level** so as to fast track the process.
 - It is with a view to help in increasing the availability of the important medicines/ drugs in the country within short span of time.
- This amendment is applicable to all proposals received up to 30th September 2020.

10.11. GLOBAL GROUNDWATER MAPS

- **NASA and the University of Nebraska-Lincoln** developed new satellite-based, weekly global maps of soil moisture and groundwater wetness conditions.
- Data from **Gravity Recovery and Climate Experiment Follow On (GRACE-FO)** satellites was used to derive these global maps.
 - GRACE-FO is a mission of **NASA and German Research Centre for Geosciences** launched in 2018, **to track Earth's water movement** to monitor changes in underground water storage, amount of water in large lakes and rivers, soil moisture, ice sheets and glaciers, and sea level caused by the addition of water to the ocean.
 - It is a successor to the original GRACE mission, which orbited Earth from 2002-2017.
- It produced **time-varying maps of distribution of water at three depths**: Surface soil moisture, root zone soil moisture (roughly top 3 feet of soil) and shallow groundwater.

- The global maps are freely available to users.
- Possible benefits of the map:
 - **Managing agricultural crops and predicting their yields**, based on soil moisture and ground water data.
 - **Predicting drought conditions.**
 - To make same **consistent product available in all parts of world.**
 - Helps to address **impacts of population growth, climate change etc.**

10.12. RARE SNOW LEOPARDS SPOTTED IN UTTARAKHAND

- A pair of snow leopards has been sighted in Nanda Devi National Park in Uttarakhand.

About Snow Leopards ((Panthera uncia)

- It is classified as **Vulnerable** by IUCN and is **under Schedule I** of the Indian Wildlife (Protection) Act 1972.
- They are listed in **Appendix I of the Convention on International Trade in Endangered Species (CITES)** and the **Convention on Migratory Species (CMS).**
- In India, Snow Leopards are found in the Himalayan and trans-Himalayan landscape at an elevation between **3,000 meters and 5,400 m**, spanning over 100,000 square km across **Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh.**
- **Threats:** Habitat Fragmentation, Illegal killing, poaching for fur, bones, claws etc., Retaliatory attacks by locals, Climate change
- **Snow leopard inhabits parts of 12 countries:** Afghanistan, Bhutan, China, India, Kazakhstan, Kyrgyz Republic, Mongolia, Nepal, Pakistan, Russia, Tajikistan, and Uzbekistan..

Nanda Devi National Park

- It is situated around the **peak of Nanda Devi, (7,816 m)** in Uttarakhand.
- Along with the adjoining **Valley of Flowers National Park** to the northwest, it was inscribed a **World Heritage Site by UNESCO** in 1988.
- Nanda Devi National Park together with Valley of Flowers National Park is encompassed in the **Nanda Devi Biosphere Reserve.** This Reserve is part of the **UNESCO World Network of Biosphere Reserves** since 2004.
- This richly diverse area is also home to rare and endangered animals, including the Asiatic black bear, snow leopard, brown bear and blue sheep.
- Park is drained by river **Rishi Ganga.**

10.13. GREAT BARRIER REEF'S MASS BLEACHING

- A massive bleaching occurred in 2020 in all three sections of the Great Barrier reef – northern,

central and southern – the first time this has happened since mass bleaching was first seen in 1998.

- The Great Barrier Reef, the **world's largest coral reef ecosystem located in Australia**, recently experienced its third major bleaching event in five years.
 - The Great Barrier Reef contains the world's largest collection of coral reefs, with 400 types of coral, 1,500 species of fish and 4,000 types of molluscs.
 - No other World Heritage property contains such biodiversity.
- It is considered to be the most widespread coral bleaching event on record, **owing to the rise in temperatures due to climate change.**
- The Great Barrier Reef has experienced five mass bleaching events – 1998, 2002, 2016, 2017 and 2020 – all caused by rising ocean temperatures driven by global heating.
 - Another concern is the shrinking gap between one mass bleaching and the next as Corals can generally recover from mild bleaching.



10.14. DAPORIJO BRIDGE OVER SUBANSIRI RIVER

- It is **strategic bridge in Arunachal Pradesh**, as it will allow the speedier movement of men and logistics material towards the Line of Actual Control (LAC) with China.
 - **Subansiri river** is a right bank tributary of Brahmaputra river.
- It was constructed by Border Roads Organisation (BRO), amid Covid-19 lockdown following social distancing norms.
 - **BRO**, under Ministry of Defence develops and maintains road networks in India border areas and friendly neighbouring countries.

10.15. ANAK KRAKATAU

- It is a **volcanic island** in the **Sunda Strait** between the Java and Sumatra islands in **Indonesia**.
- Anak Krakatau, meaning **child of Krakatau**, is the offspring of the famous Krakatau volcano, whose eruption in 1883 triggered a massive **tsunami** and a period of **global cooling**.
- Recently, it witnessed a volcanic eruption.

10.16. NEW MODEL TO PREDICT IONOSPHERIC ELECTRON DENSITY

- Researchers from **Indian Institute of Geomagnetism (IIG)**, an autonomous institute of Department of Science & Technology, have developed an **Artificial Neural Networks based global Ionospheric Model (ANNIM)**.
- ANNIM **predicts variability** in ionospheric electron density.
- Ionospheric **electron density is influenced by** both solar originated processes and Earth atmosphere processes.
- **Tracking variability** of Ionosphere is important for **communication & navigation** and has potential applications in calculating **Global Navigation Satellite System positioning errors**.
- **Artificial Neural Network** is a computational model that **replicates processes in the human brain** (or biological neurons) to solve problems such as pattern recognition, classification, clustering, generalization, linear and nonlinear data fitting, and time series prediction.

About Ionosphere

- It is a **layer of charged particles** in Earth's atmosphere that extends **from about 80 to 550 kilometer** above the surface of Earth.
- Ionosphere is **where many Earth-orbiting satellites revolve**, including the International Space Station.

10.17. BHARAT PADHE ONLINE

- Recently, **Ministry of Human Resource Development, MHRD**, launched a week-long 'Bharat Padhe Online' campaign for Crowd sourcing of Ideas for Improving Online Education ecosystem of India.
- It aimed to invite all the best brains in the country to share suggestions and solutions directly with HRD Ministry to overcome any constraints found in the online education system.
 - The educators and teachers across the country can also come forward to contribute with their expertise and experience in their field through this platform.
- The Campaign **involved issues** such as ideal online education ecosystem, the limitations of the current

online education scenario in India, challenges faced in traditional classrooms that can be addressed through online education.

- Currently due to the COVID19 Lockdown imposed many schools and colleges have opted online platforms for education imparting.

10.18. UGC GUIDELINES ON EXAMINATIONS AND ACADEMIC CALENDAR FOR THE UNIVERSITIES

- Guidelines are advisory in nature and Universities may chart out own plan of action while considering COVID – 19 Pandemic.
- **Key recommendations**
 - Universities may adopt alternative simplified methods of examination to complete process in shorter duration.
 - COVID-19 cell in every university to solve issues regarding academic calendar and a
 - COVID-19 cell in UGC for faster decision making.
 - Develop virtual classroom and video conferencing facility and train all teaching staff regarding use of technology.
 - Period of lockdown may be treated as 'deemed to be attended' by all the students/ research scholars.

10.19. HOSPITAL EMPANELMENT MODULE (HEM) LITE

- National Health Authority (NHA) launched **Hospital Empanelment Module (HEM) Lite** to bring a large number of private hospitals under **Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY)**.
- Due to COVID -19 outbreak, **many hospitals** which were otherwise treating bulk of AB PM-JAY patients **are being converted as dedicated COVID-19 facilities** in states.
 - This is being done as **testing and treatment of COVID-19** has been brought under AB PM-JAY scheme.
- **To ensure that patients suffering from serious illnesses**, such as cancer, cardiac issues and diabetes that require continuous treatment continue to get **inpatient services HEM Lite was launched**.
- **HEM Lite** allows hospitals to
 - **empanel themselves under PM JAY** to provide regular treatment for serious illnesses (like cancer etc.) or
 - convert themselves into **COVID-19 only hospitals**
- Empanelment under HEM Lite is **only for a temporary period of three months**.

- Empanelment will be done by **State Health Agency (SHA)**, which is apex body of state governments responsible for the implementation of AB PM-JAY in states.

10.20. CHINA TO LAUNCH COMMUNICATION SATELLITES NAMED AFTER WUHAN

- China will launch the two communications satellites named **Xingyun-2 01 and 02** for its **space-based Internet-of-Things project**.
- **Xingyun-2 01** has been named "**Wuhan**" where it was designed and developed by the Xingyun Satellite Company.
- The satellites will work for a **Chinese low-orbit constellation** consisting of **80 satellites** for Internet-of-Things (IoT) communications and be tested in **industries related to marine, forestry and engineering machinery**.
- **Internet of Things (IoT)** is the concept of **connecting any device to the Internet and to other connected devices all of which collect and share data** about the way they are used and about the environment around them.

10.21. TIANWEN-1

- **Tianwen-1** is China's first Mars exploration mission to be launched later this year.
- Mission includes an **orbiting spacecraft, landing craft and a detachable rover** to roam the Martian surface.
- **China's earlier attempted** an exploratory probe to Mars called **Yinghuo-1**, in a Russian spacecraft in 2011.
 - This has failed as it was declared lost and later burnt during re-entry.
- **US, Russia, EU and India** have so far succeeded in sending missions to Mars.
- India is also **first country** to have entered the **Martian orbit in its first attempt**.

10.22. SUNRISE MISSION

- Recently, National Aeronautics and Space Administration (NASA) announced SunRISE Mission.
- The **Sun Radio Interferometer Space Experiment (SunRISE)** will **explore how Sun generates and releases the giant weather storms, known as the solar particle storms**, into space.
- **Solar storms** are a variety of **eruptions of mass and energy from the solar surface** such as flares, coronal mass ejections etc.
- They all involve **sudden releases of stored magnetic energy**, which accelerates the hot gases near the surface or in the corona of the Sun.

- Sometimes these particles make it all the way to the Earth and beyond by flowing along the Sun's magnetic field into interplanetary space.
- When the material collides with the Earth's magnetic field and trapped radiation belts, it can dump particles into our upper atmosphere to **cause the Aurora**.
- The same 'charged' particles can produce their own magnetic fields which **can modify the Earth's magnetic field and affect compass readings**.
- The changing magnetic fields can also 'induce' electricity in long pipelines, or **produce electrical surges in our power grids** leading to brown outs and black outs.

10.23. DEMO-2 MISSION

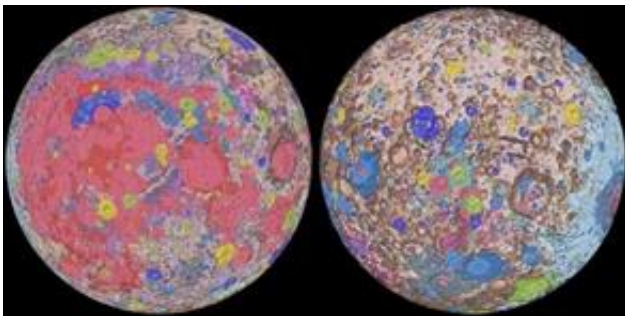
- It is a NASA's mission **to send astronauts to International Space Station (ISS)** on SpaceX's Crew Dragon spacecraft.
- It will mark NASA's first crew launch since the agency's Space Shuttle fleet retired in 2011. Since 2011, Russian Soyuz spacecraft has been the sole means of human transport to the ISS, delivering mostly long-term crew.
- It **will use a Falcon 9 rocket** (also built by SpaceX). SpaceX in its **DEMO-1 mission** launched its **first un-crewed test flight** to the International Space Station in 2019.
- **SpaceX is one of two commercial companies tapped by NASA** to fly astronauts to and from the International Space Station. The other company is Boeing.
- The **International Space Station (ISS)** is a modular space station (habitable artificial satellite) in low Earth orbit.
- The ISS programme is a **multi-national collaborative project between five participating space agencies**: NASA (United States), Roscosmos (Russia), JAXA (Japan), ESA (Europe), and CSA (Canada). The ownership and use of the space station is established by intergovernmental treaties and agreements.
- It serves as a microgravity and space environment research laboratory in which scientific experiments are conducted in astrobology, astronomy, meteorology, physics, and other fields.

10.24. DIGITAL GEOLOGICAL MAP OF MOON

- Recently, United States Geological Survey (USGS) released **Unified Geologic Map of the Moon**.

About Unified Geologic Map of the Moon

- It is **first ever** digital, unified, global, geological map of the moon shows the moon's geology in incredible detail (1:5,000,000 scale).
- It is developed by USGS in collaboration with **National Aeronautics and Space Administration (NASA) and Lunar Planetary Institute**.
- In this the **entire lunar surface** has been mapped and classified into 43 geologic units, based on characteristics like materials of craters, basins, terra, plains and volcanic units.
- It can help in **planning for future lunar missions**.
- **Map is based on data from sources like:**
 - Apollo missions of NASA
 - **SELENE** (Selenological and Engineering Explorer) mission of Japan Aerospace Exploration Agency.
 - **Lunar Orbiter Laser Altimeter** of NASA etc.



About Lunar Surface

- Lunar surface can be divided into **two main regions, Highlands (83% of lunar surface) and Maria**.
- **Highlands are old, mountainous regions**. They are **light** in contrast to the moon's maria.
- **Maria are the moon's dark regions**. Maria is Latin for seas. However, maria do not contain water. They are the **remnants of lava flows**.
- There **countless craters** on moon, produced by meteor impacts on lunar surface.

10.25. LITHIUM RICH GIANT STARS

- Recently, Researchers at the **Indian Institute of Astrophysics (IIA)**, under the Department of Science and Technology, have **discovered hundreds of Lithium (Li) rich giant stars**.
- Lithium is one of the three primordial elements, apart from Hydrogen and Helium (He) produced in the Big Bang Nucleosynthesis.
- The discovery of **Li rich giant stars** indicate that Li is being produced in the stars and is abundant in the interstellar medium.
- IIA team has also associated such Li enhancement with **central Helium-burning stars**, known as **Red clump giants**, thereby opening up new vistas in the **evolution of the Red giant stars (a dying star in the last stages of stellar evolution)**.

Big Bang Nucleosynthesis Theory

- In the early Universe, the temperature was so great that all matter was fully ionized and dissociated.
- Roughly three minutes after the Big Bang itself, the temperature of the Universe rapidly cooled from 10^{32} Kelvin to approximately 10^9 Kelvin.
- At this temperature, nucleosynthesis, or the production of light elements, could take place. In a short time interval, protons and neutrons collided to produce deuterium (one proton bound to one neutron).
- Most of the deuterium then collided with other protons and neutrons to produce helium and a small amount of tritium (one proton and two neutrons).

10.26. FOMALHAUT B

- Recently, **researchers have confirmed that the earlier discovered exoplanet Fomalhaut b is not an exoplanet but** a giant cloud of dust left over from the collision of two planetesimals that dispersed over time.
- **Fomalhaut b**, located 25 light-years from Earth was one of the **first exoplanets ever discovered** in visible light by **NASA's Hubble Space Telescope in 2004**.
- **Initially it appeared as a bright, cool dot moving briskly across the sky** but ten years later, that dot disappeared.
- **Exoplanets are the planets that orbit around stars other than the Sun**. They are very hard to see directly with telescopes as they are hidden by the bright glare of the stars they orbit.

10.27. KEPLER-1649C

- It is **Earth-size exoplanet** 300 light-years away which was discovered from data of **NASA's Kepler space telescope** (retired in 2018).
- It revolves around its star in the habitable zone—the area around a star where a rocky planet could support liquid water.
- It is only **1.06 times larger than Earth** and a year on Kepler-1649c is equivalent to only 19.5 Earth days.
- Unlike Earth, the Kepler-1649c **orbits a red dwarf**, which are known for stellar flare-ups that may make a planet's environment challenging for any potential life.

10.28. JUNE ALMEIDA

- June Almeida was a virologist who **visualised the first human coronavirus**.
- The **first human coronavirus named B814**, was discovered in 1965 by scientists DJ Tyrell and ML Bynoe, years after the disease was found in animals. They isolated a virus from the nasal washings of a male child who had symptoms and signs of a common cold.

- In 1967, Almeida collected the samples and attempted to visualise them using a microscope, through a technique called **electron microscopy**.
 - An electron microscope blasts a specimen with a beam of electrons and then records the particles' interactions with the specimen's surface. Since electrons have much shorter wavelengths than light, this shows scientists an image with much finer, smaller detail.
 - She was able to visualize the virus by **introducing it to antibodies**. The virus latched itself on to the antibodies, and its structure could then be seen using **negative staining**—where the background is strained, leaving the specimen untouched and, therefore, visible.
- Cytokines are **small proteins** released by many different cells in the body, including those of the immune system to coordinate the body's **response against infection and trigger inflammation**.
- Inflammation has an important **protective function**. The release of inflammatory mediators increases the blood flow to the area, which allows larger numbers of immune system cells to be carried to the injured tissue, thereby aiding the repairing process.
- When this inflammation is not regulated, **Cytokine storm** can be triggered. It is characterised by the **overproduction of immune cells and the cytokines**.
- In this case **immune cells spread beyond infected body parts and start attacking healthy tissues** leading to lung inflammation and fluid build-up, and respiratory distress.
- CSS is seen as **major cause of mortality in 1918-20 Spanish Flu, H1N1 (swine flu) and H5N1 (bird flu)** outbreaks in recent years.
- Steroids are used to dampen the immune system, in case of Cytokine storm. But in the case of COVID-19, it's not yet clear if steroids are beneficial or harmful.

10.29. SODIUM HYPOCHLORITE

- Recently, the spraying of **Sodium Hypochlorite solution in Disinfectant tunnel to prevent the spread of coronavirus (COVID-19) was found to be harmful on people**.
- Sodium hypochlorite, commonly known as **bleach**, is most frequently used as a disinfecting agent.
- It is a **broad-spectrum disinfectant** that is effective for the disinfection of viruses, bacteria, fungi, and mycobacterium.
- A **0.5% solution of Sodium hypochlorite**, which is known as '**Dakin solution**', is used for disinfecting areas contaminated with bodily fluids, including large blood spills.
- However, the solution of sodium hypochlorite is **unstable and quickly breaks down to release Chlorine** and this can have several harmful effects.
- **Spraying** of chlorine on individuals can **lead to irritation of eyes and skin** and potentially **gastrointestinal effects such as nausea and vomiting**.
- **Inhalation** of sodium hypochlorite can lead to **irritation of mucous membranes to the nose, throat, and respiratory tract and may also cause bronchospasm**.
- Exposure to stronger concentration (10-15%) of hypochlorite can cause serious damage to multiple organs.
- According to **World Health Organisation (WHO)**, disinfectants will work on surfaces, but not on the human body, and can harm people.

10.30. CYTOKINE STORMS

- Cases of Cytokine storm syndrome are seen in some cases of COVID-19 leading to higher mortality.

About Cytokine storm syndrome (CSS)

- The name '**cytokine**' is derived from the Greek for cell (cyto) and movement (kinos).

10.31. ANTHURIUM

- Recently, **National Innovation Foundation (NIF)-India** has facilitated mass multiplication and large-scale production of **four varieties of Anthurium** through tissue culture technique.
- Anthurium is **domestic flowering plant** known for **purifying surrounding air and remove harmful airborne chemicals** like formaldehyde, ammonia, toluene, xylene, and allergens.
- Anthurium has **economic importance** because of its eye-catching and beautiful **inflorescence** (process of flowering).
- NASA has also placed it in the list of **air purifier plants**.
- **NIF India is autonomous body of Department of Science and Technology**, set up in 2000.
- NIF is national initiative to **strengthen grassroots technological innovations and outstanding traditional knowledge**.

10.32. SELF-SERVICE BLOCKCHAIN TRACK AND TRACE PLATFORM FOR BUSINESSES

- Recently, a **Self-Service Blockchain Track and Trace Platform for Businesses** was Launched
- This pilot platform is capable of **visualising blockchain-based supply chain data from multiple companies and sources**.

- It is first public blockchain-based platform built for accelerating transparency and sustainability across manufacturing ecosystems.
- This platform is created by Everledger, International Trade Centre (ITC) and Lenzing Group, in collaboration with the World Economic Forum.
- It is being hosted on the ITC's neutral site.

10.33. MAZE RANSOMWARE

- Recently, IT services provider Cognizant had faced Maze ransomware attack.
- A ransomware attack infects computers in a network and encrypts files on these computers and then demands a ransom to recover the files.
- Maze ransomware transfers the data onto its server and holds until a ransom is paid to recover it. If the ransom is not paid, the attackers publish the data online.
- In 2019, Global cybersecurity firm Kaspersky Security identified three prominent ransomwares- Ryuk, Purga and Stop. India was attacked by all three groups of ransomwares.

10.34. EXERCISE NCC YOGDAN

- Under Exercise NCC Yogdan, National Cadet Corps (NCC) is extending the services of cadets to help civilian authorities in fight against COVID-19.
- For this, NCC has issued guidelines for temporary employment of its cadets.
 - Tasks envisaged for NCC cadets: Manning of call centers; distribution of relief materials/medicines/food/essential commodities; community assistance; data management and queue & traffic management.
 - Cadets should not be employed in handling of law and order situation or for active military duties or at hot spots.
 - Only Senior Division volunteer cadets above 18 years of age will be employed.

About NCC

- NCC is a voluntary organization which recruits cadets from high schools, colleges and Universities all over India. It is the largest uniformed youth organization of the country.
- It came into existence in 1948 under National Cadets Corps Act and is headquartered at New Delhi.
- It is headed by a Director General, an Army Officer of the rank of Lieutenant General. It operates under Ministry of Defence.
- Motto: Unity and Discipline (Ekta aur Anushasan).
- Cadets have no liability for active military service once they complete their course but are given preference over normal candidates during selections.

10.35. STRANDED IN INDIA PORTAL

- The Ministry of Tourism has come up with a portal titled 'Stranded in India'.
- It aims to disseminate information regarding the services that can be availed by foreign tourists who are stuck far away from their home land.
- It will also act as a support network for foreign tourists stuck in various parts of the country.
- The portal consists comprehensive information around COVID-19 helpline numbers that the foreign tourists can reach out to for help, Information around state-based/regional tourism support infrastructure etc.

10.36. FESTIVALS IN NEWS

Name of the festival	Details
Rongali Bihu	<ul style="list-style-type: none"> • It is celebrated in Assam. It is also called Bohag Bihu. • It marks the beginning of Assamese New Year. • Assamese celebrate Bihu thrice a year, which signify the distinct cycles of farming - Bhogali/Magh Bihu (January), Bohag/Rongali Bihu (April), and Kongali Bihu (October).
Baisakhi	<ul style="list-style-type: none"> • It is a harvest festival celebrated in Punjab. • It also has historical significance for the Sikhs as in 1699, Guru Gobind Singh (10th spiritual guru of Sikhs) chose the festival as the moment to establish Khalsa.
Naba Barsha	<ul style="list-style-type: none"> • It is celebrated in West Bengal. It is also called Poila Baisakh. • People decorate their houses with rangoli in their courtyards made with a paste of rice and water called Alpona.
Puthandu (Puthuvarsham/Pirappu)	<ul style="list-style-type: none"> • It is celebrated in Tamil Nadu. It is also mentioned in Sangam literature.
Vishu	<ul style="list-style-type: none"> • It is celebrated in Kerala. This festival involves worship of Lord Vishnu and Lord Krishna by the devotees.
Maha Vishuva Sankranti	<ul style="list-style-type: none"> • It is start of Odia New Year. Special pujas are conducted at Sri Jagannath Temple, Puri.
Jude Sheetal	<ul style="list-style-type: none"> • It is celebrated in Bihar. It is also called Maithili New Year. In this festival people donate earthen pitcher containing water to temple priests.
Meru Jatra	<ul style="list-style-type: none"> • It is celebrated in South Odisha (specially in Ganjam district). It marks the end of a 21-day long festival named 'Danda Nata'.

Chaitra Jatra	<ul style="list-style-type: none"> It is celebrated at Tara Tarini hill shrine in Odisha. The shrine is located at a hilltop on banks of Rushikulya river.
Ambubachi mela	<ul style="list-style-type: none"> It is a festival marking the annual menstruation of the presiding Goddess at Guwahati's Kamakhya temple. It is also called 'Mahakumbh of the East' It is closely associated with Tantric Shakti cult prevalent in eastern parts of India and also known as Ameti or Tantric fertility festival. The Kamakhya temple is atop the Nilachal Hills, facing Brahmaputra River. <ul style="list-style-type: none"> It is one of 51 shaktipeeths and temple's sanctum sanctorum houses the yoni – female genital – symbolized by a rock. Shaktipeeths are holy sites for the followers of the Shakti cult, each representing a body part of the Sati, Lord Shiva's companion. A similar custom is followed at the Chengannur Mahadeva Temple (also called Bhagavathy Temple) in Alleppey district of Kerala.

10.37. NIHANGS

- Nihang is an order of Sikh warriors, characterised by blue robes, arms such as swords and spears, and decorated turbans surmounted by steel quoits.
- The Nihangs can be **traced back to the creation of the Khalsa by Guru Gobind Singh in 1699**. Many claim the sect to be **"guru di laadli fauj"** (the guru's favourite army).
- Nihangs had a major role in defending the Sikh panth after the fall of the **first Sikh rule (1710-15)**, and during the onslaught of Afghan invader **Ahmed Shah Durrani (1748-65)**.
- Nihangs today constitute a small community and **observe the Khalsa code of conduct** in its strictest sense. **They do not profess any allegiance to an earthly master and** instead of saffron (like other Sikhs and sikh warriors) **they hoist a Blue Nishan Sahib (flag) atop their shrines**.

10.38. DEKHO APNA DESH

- Recently, in the backdrop of COVID-19, the **Ministry of Tourism** has launched **"Dekho Apna Desh"** webinar series.
- The webinar will showcase the diverse and remarkable heritage and culture of India including its **monuments, cuisine, arts, dance forms, natural landscapes, festivals and other aspects of the rich Indian civilization** thus offering a virtual travel to travellers.



**One Year
CURRENT AFFAIRS
FOR PRELIMS 2020 IN 60 HOURS**

LIVE / ONLINE CLASSES AVAILABLE

ENGLISH MEDIUM
2 April | 5 PM

हिन्दी माध्यम
7 April | 5 PM

- Specific targeted content: oriented towards Prelims exam
- Extra classes to cover rest of the current affairs of March and April 2020
- Doubt Clearing sessions and mentoring
- Complete coverage of The Hindu, Indian Express, PIB, Economic Times, Yojana, Economic Survey, Budget, India Year Book, RSTV, etc from May 2019 to April 2020



11. GOVERNMENT SCHEMES IN NEWS

11.1. PM-CARES FUND

- Supreme Court dismissed a petition challenging the legality and the functioning of the Prime Minister's Citizen Assistance and Relief in Emergency Situations (PM-CARES) Fund.
- Although there is already the Prime Minister's National Relief Fund (PMNRF) where people can make donations, union government decided to set up a specific fund for Covid-19, due to the gravity of the situation posed by it.
- Controversy soon followed as sections of the media and political opponents latched onto provisions that suggested that the PM-CARES fund was not to be audited by the CAG and was answerable only to the PM.

Parameter	PMNRF	PM-CARES Fund
Formation	formed by Jawaharlal Nehru in January 1948.	Formed in 2020 amidst CoVID-19 outbreak.
Objective	<ul style="list-style-type: none"> • created to assist displaced persons from Pakistan. • now provides assistance to persons affected by calamities such as floods, earthquakes and to the victims of riots and accidents. • Assistance also rendered to partially defray expenses for medical treatment like heart surgeries, kidney transplantation, acid attack etc. • The PMNRF also has a list of empanelled hospitals, that includes all central and state government hospitals, and a list of private hospitals that it offers support to. 	<ul style="list-style-type: none"> • undertaking and supporting relief or assistance of any kind relating to a public health emergency or any other kind of emergency, calamity or distress either man-made or natural • creation or upgradation of healthcare or pharmaceutical facilities, other necessary infrastructure, funding relevant research or any other type of support. • will also render financial assistance, provide grants of payments of money or take any such other steps deemed necessary by the Board of Trustees to the affected population.
Administrative mechanism	Recognized as a Trust under the Income Tax Act with Prime Minister as the Chairman and is assisted by Officers/ Staff on honorary basis.	<ul style="list-style-type: none"> • Prime Minister is the ex-officio Chairman of the PM CARES Fund and Minister of Defence, Minister of Home Affairs and Minister of Finance, Government of India are ex-officio Trustees of the Fund. • The Chairperson of the Board of Trustees (Prime Minister) shall have the power to nominate three trustees to the Board of Trustees who shall be eminent persons in the field of research, health, science, social work, law, public administration and philanthropy. • Any person appointed a Trustee shall act in a pro bono capacity.
Contributions to the fund:	<ul style="list-style-type: none"> • accepts only voluntary donations by individuals and institutions. • Contributions flowing out of budgetary sources of Government or from the balance sheets of the public sector undertakings are not accepted. • exemption under the FCRA so has also received foreign contributions as a public trust since 2011. 	<ul style="list-style-type: none"> • consists entirely of voluntary contributions from individuals/organizations and does not get any budgetary support. • exemption under the FCRA so it can accept donations and contributions from individuals and organizations based in foreign countries.
Disbursement of the fund	subject to the discretion of the Prime Minister.	subject to the criterion/rules laid down by the trustees.
Donations to Fund	<ul style="list-style-type: none"> • qualify for 80G benefits for 100% exemption under the Income Tax Act, 1961. • also qualify to be counted as Corporate Social Responsibility (CSR) expenditure under the Companies Act, 2013 	<ul style="list-style-type: none"> • qualify for 80G benefits for 100% exemption under the Income Tax Act, 1961. • will also qualify to be counted as Corporate Social Responsibility (CSR) expenditure under the Companies Act, 2013.
Audit	Audited by an independent auditor outside the Government. At present, Sarc & Associates, Chartered Accountants are the auditors.	Will be audited by independent auditors who will be appointed by the trustees.

11.2. INTENSIFICATION OF RESEARCH IN HIGH PRIORITY AREAS (IRHPA)

Recently, **proposals have been invited** under this scheme to ramp up national R&D efforts for new antivirals, vaccines, and affordable diagnostics for **Covid-19** and related respiratory viral infections.

Objective	Features
To supports proposals in high priority areas where multidisciplinary / multi-institutional expertise is required which will put our nation in international science map in that particular discipline.	<ul style="list-style-type: none"> • Science and Engineering Research Board (SERB) an autonomous institution of the DST identifies the priority areas and makes a national call for seeking proposals. • The necessary facilities required for implementing the identified high priority areas are supported through this scheme. • The duration of the project is normally for a period of 5 years (3 years for COVID-19). • The project is set up around established research groups led by a Principal Investigator (PI) with at least two co-PIs of complementary expertise from different departments / institutes to transform the program truly interdisciplinary and multi institutional. • Scientists from Universities, their affiliated Colleges, IITs, IISERs, IISc., and other Autonomous Research Institutions along with scientists working in the industrial R&D sector in India can submit a proposal under this scheme. • Earlier, R&D proposals were invited for 3-D bioprinting, Emergent properties of Nanoscale Matter and Drug discovery for neglected diseases.

11.3. E-NAM PLATFORM

Recently, Union Agriculture Minister launched **new features of e-NAM platform**.

Objectives	Features
<ul style="list-style-type: none"> • Integrate markets across States and Country through a common online market platform, to facilitate pan - India trade in agricultural commodities • Streamline marketing/transaction procedures and make them uniform across all markets to promote efficient functioning of the markets; • Promote better marketing opportunities for farmers through online access to buyers, removal of information asymmetry between farmer and trader, real-time price discovery based on actual demand and supply of agri-commodities, transparency in auction process, prices commensurate with quality of produce, online payment etc. that contribute to marketing efficiency; • Establish quality assaying systems for quality assurance to promote informed bidding by buyers; and • Promote stable prices and availability of quality produce to consumers. 	<ul style="list-style-type: none"> • It was launched in 2015 as a pan India electronic trade portal linking APMCs across the country. • Small Farmers Agribusiness Consortium is the lead agency to implement it. • Central government will provide the software free of cost to the states and in addition, a grant of up to Rs. 30 lakhs per mandi or market or private mandis will be given for related equipment and infrastructure requirements. • Now, 982 wholesale regulated markets/ APMC Markets have been so far integrated with e-NAM platform. • For the local trader in the mandi / market, e-NAM offers the opportunity to access a larger national market for secondary trading. • Bulk buyers, processors, exporters etc. benefit from being able to participate directly in trading at the local mandi / market level, thereby reducing their intermediation costs. • Fund Allocation – It is being funded through Agri-Tech Infrastructure Fund (AITF). <p>New modules launched in e-NAM:</p> <ul style="list-style-type: none"> • Negotiable Warehouse Receipt (e-NWRs) module: to enable small & marginal famers to directly trade their stored produce from selected Warehousing Development and Regulatory Authority (WDRA) registered warehouses <ul style="list-style-type: none"> ○ It could save the Logistics expenses and provide a better income to farmers. • FPO trading module: to enable FPOs to upload their produce from their premise/collection centres for bidding. <ul style="list-style-type: none"> ○ This would help in decongesting the mandis and reducing transaction costs • Logistic Module : linking large logistic aggregator platforms, which will provide choices to users. <ul style="list-style-type: none"> ○ This will help in seamless transportation of agri produce and will promote inter-State trade under e-NAM by providing online transport facilities for distant buyers.

Copyright © by Vision IAS

All rights are reserved. No part of this document may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior permission of Vision IAS.