



drishti

Current Affairs (CONSOLIDATION)

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Polity and Governance

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- Healthcare Institutions Face Cyber Threats

Supreme Court Upholds Right to Discuss Covid-19

Why in News

Recently, the Central government appealed in the Supreme Court that media outlets, in the **"larger interest of justice"**, should only publish or telecast anything on **Covid-19** after ascertaining the factual position from the government.

Key Points

- According to the government, **"any deliberate or inaccurate"** reporting by the media, particularly web portals, in the midst of an unprecedented situation can have a **"serious and inevitable potential of causing panic in a larger section of the society"**.
 - The government blamed **"fake and misleading"** messages on social media for creating widespread panic, which led to mass **"barefoot"** journeys of

migrant workers from cities to their native villages in rural India.

Related Constitutional Provisions

- **Article 19(1)(a)** of the Constitution of India states that, **"all citizens shall have the right to freedom of speech and expression"**.
 - The philosophy behind this Article lies in the Preamble of the Constitution, where a solemn resolve is made to secure to all its citizens, liberty of thought and expression.
- The exercise of this right is, however, subject to **"reasonable restrictions"** for certain purposes being imposed under **Article 19(2)** of the Constitution of India.
 - These reasonable restrictions are imposed in the interests of the **sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency or morality or in relation to contempt of court, defamation or incitement to an offence.**

Note:



- The mass migration of the poor would defeat the preventive measures taken by the Central government to contain pandemic.
- The Supreme court took a view **balancing free press** and the **need to avoid panic** in society during an unprecedented crisis.
 - The Court upheld the **right to free discussion about Covid-19**, and directed the media to refer to and publish the official version of the developments in order to avoid inaccuracies and large-scale panic.
 - It **ordered the government to start a daily bulletin on Covid-19 developments** through all media avenues in the next 24 hours.

Supreme Court on Free Testing of Covid-19

Why in News

The Supreme Court modified its April 8, 2020 order to clarify on free testing for Covid-19.

Key Points

- Private labs would continue to **charge the Indian Council of Medical Research (ICMR) rates of up to ₹4,500** for tests from people who can afford to pay.
- **Free testing for Covid-19** shall continue to be made available to the poor eligible under the **Ayushman Bharat Pradhan Mantri Jan Arogya Yojana**.
- Free testing would also be made available to any other category of **economically weaker sections of society as notified by the government from time to time**.
- The Supreme Court directed the Ministry of Health & Family Welfare to identify beneficiaries among the weaker sections of society.
 - This includes workers belonging to low income groups in the informal sectors and beneficiaries of **Direct Benefit Transfer** who can be made eligible for free testing.
- It also directed the Ministry to issue **appropriate guidelines** in this regard within a week.

Ayushman Bharat Pradhan Mantri Jan Arogya

- PM-JAY offers a sum insured of **Rs.5 lakh per family** for secondary care (which doesn't involve a super specialist) as well as tertiary care (which involves a super specialist).

- It is an entitlement-based scheme that targets the beneficiaries as identified by latest **Socio-Economic Caste Census (SECC) data**.
 - Once identified by the database, the beneficiary is considered insured and can walk into any empanelled hospital.
- The **funding** for the scheme is shared – **60:40 for all states and UTs** with their own legislature, **90:10 in Northeast states and Jammu and Kashmir, Himachal and Uttarakhand** and **100% Central funding for UTs without legislature**.
- Packaged rates (Rates that include everything so that each product or service is not charged for separately):
 - They also mention the number of average days of hospitalization for a medical procedure and supporting documents that are needed.
 - They are flexible, but hospitals can't charge the beneficiary once the rates are fixed.
- **The National Health Agency** has been constituted as an autonomous entity under the Society Registration Act, 1860 for effective implementation of PM-JAY in alliance with state governments.
- **The State Health Agency (SHA)** is the apex body of the State Government responsible for the implementation of AB PM-JAY in the State.

Floor Test is Governor's Discretion: SC

Why in News

Recently, the **Supreme Court of India** has held that a **Governor** can call for a **floor test** any time he/she objectively feels a government in power has **lost the confidence of the House** and is on shaky ground.

Key Highlights

- The S.C. held that a **Governor can call for a trust vote (confidence motion)** if he/she has arrived at a prima facie opinion, based on objective material, that the incumbent State government has lost its majority in the Assembly.
 - However, while **directing a trust vote**, the **Governor should not favour a particular political party**.

Note:

- Timing of a trust vote may tilt the balance towards the party possessing a majority at the time the trust vote is directed.
- Governor's power to call for a floor test is **not restricted only before the inception of a State government** immediately after elections, but **continues throughout its term**.
- The SC has clarified that the **Governor's power of trust vote does not hamper any disqualification proceedings pending before the Speaker**.
 - A **Governor need not wait for the Speaker's decision** on the resignation of rebel Members of Legislative Assembly (MLAs) before calling for a trust vote.

Trust Vote

- A **confidence motion** or a **vote of confidence** or a **trust vote**, is sought by the government in power on the floor of the House.
- It **enables the elected representatives to determine if the Council of Ministers commanded the confidence** of the House.
- The idea underlying the trust vote is to **uphold the political accountability of the elected government to the State legislature**.
- **No-confidence motion:**
 - A **no-confidence motion**, or **vote of no-confidence**, or a **no-trust vote**, can be **sought by any House member to express that they no longer have confidence in the government**.

Floor Test

- It is a **term used for the test of the majority**. If there are **doubts against the Chief Minister (CM)** of a State, he/she can be **asked to prove the majority in the House**.
 - In case of a **coalition government**, the **CM** may be **asked to move a vote of confidence and win a majority**.
- In the **absence of a clear majority**, when there is more than one individual staking claim to form the government, the **Governor may call for a special session** to see who has the majority to form the government.
 - Some legislators may be absent or choose not to vote. The numbers are then considered based only on those MLAs who were present to vote.

Constitutional Provisions Related to Governor

- **Article 163:** It talks about the discretionary power of the governor.
- **Article 256:** The executive power of the Union shall extend to the giving of such directions to a State as may appear to the Government of India to be necessary for that purpose.
- **Article 257:** The executive power of the Union shall also extend to the giving of directions to a State as to the construction and maintenance of means of communication declared in the direction to be of national or military importance.
- **Article 355:** It entrusts the duty upon the Union to protect the states against "external aggression" and "internal disturbance" to ensure that the government of every State is carried on in accordance with the provisions of the Constitution.
- **Article 356:** In the event that a state government is unable to function according to constitutional provisions, the Central government can take direct control of the state machinery. The state's governor issues the proclamation, after obtaining the consent of the President of India.
- **Article 357:** It deals with Exercise of legislative powers under Proclamation issued under Article 356 by the central government.

Restrictions on Court Hearings Lawful

Why in News

Recently, the Supreme Court held that all **restrictions imposed on people** from entering, attending or taking part in court hearings **are lawful in the wake of the Covid-19 pandemic**.

- The court said these **restrictions were in tune with the social distancing norms** and best public health practices advocated to contain the Covid-19.

Key Points

- **Duty vs Discretion:** The apex court invoked its extraordinary Constitutional powers under **Article 142** to step away from the **convention of open court hearings**. It further clarified that use of this extraordinary power was **not a matter of discretion but of duty**.

Note:



- **Convention vs Public Health:** Although the open court system ensures transparency in administration of justice, scaling down of conventional operations was done to avoid congregation of a large number of people. The court made it clear **that public health takes precedence over conventions.**
- **Cooperation and Participation:** The court said every individual and institution is expected to cooperate in the implementation of measures designed to reduce the transmission of the virus.
 - It also argued courts at all levels respond to the call of social distancing and ensure that court premises do not contribute to the spread of virus.
- **Covid-19 and Rule of Law:** Access to justice is fundamental to preserve the **rule of law** in the democracy envisaged by the Constitution of India. In the absence of access to justice, people are unable to have their voice heard, exercise their rights, challenge discrimination or hold decision-makers accountable.
 - The challenges occasioned by the outbreak of Covid-19 have to be addressed **while preserving the constitutional commitment** to ensuring the delivery of and access to justice to those who seek it.

ICT and Delivery of Justice

- **Guidelines:** The Supreme Court also issued the following **guidelines to streamline the use of Information and Communications Technology (ICT)** in effective delivery of Justice:
 - **High Courts:** The High Courts to decide the modalities for the use of videoconferencing technologies in their respective States.
 - **District Courts:** District courts in each State would adopt the mode of videoconferencing prescribed by the respective High Courts.
 - **Helplines:** Helplines to be set up to receive and rectify technical complaints.
- The **courts should make available video conferencing facilities** for litigants who do not have it or appoint an amicus curiae (friend of the court).
- **Mutual Consent of Parties:** The court said in no case shall evidence be recorded without the mutual consent of both the parties by videoconferencing.
- **Social Distancing:** If it is necessary to record evidence in a courtroom, the presiding officer shall ensure the social distancing to be followed.

Article 142

- It provides **discretionary power to the Supreme Court** as it states that the Supreme Court in the exercise of its jurisdiction may pass such decree or make such order as is **necessary for doing complete justice** in any cause or matter pending before it.
- **Constructive Application:** In the early years of the evolution of Article 142, the general public and the lawyers both lauded the Supreme Court for its efforts to bring complete justice to various deprived sections of society or to protect the environment.
- In the Union Carbide case, relating to the victims of the Bhopal gas tragedy, the Supreme Court placed itself above the laws made by the Parliament or the legislatures of the States by saying that, to do complete justice, it could even override the laws made by Parliament.
 - However, in the **Supreme Court Bar Association v. Union of India**, the Supreme Court stated that **Article 142 could not be used to supplant the existing law, but only to supplement the law.**
- **Cases of Judicial Overreach:** In recent years, there have been several judgments of the Supreme Court wherein it has been foraying into areas which had long been forbidden to the judiciary by reason of the doctrine of 'separation of powers', which is part of the basic structure of the Constitution. One such example is:
 - **The ban on the sale of alcohol along national and state highways:** While the notification by the central government prohibited liquor stores along National Highways only, the Supreme Court put in place a ban on a distance of 500 metres by invoking Article 142.

Centre Defines J&K Domicile Rules

Why in News

Recently, the **Ministry of Home Affairs (MHA)** has issued the **Jammu and Kashmir Reorganisation (Adaptation of State Laws) Order, 2020.**

- On 6th August 2019, the Centre **revoked J&K's special status** under **Article 370 and Article 35A of the Constitution** and **bifurcated it into the UTs of J&K and Ladakh.**

Note:

- The two revoked constitutional provisions let the state legislature decide the **'permanent residents'**, prohibiting a non-J&K resident from buying property there and ensuring job reservation for its residents.
- There are **12 States**, including Himachal Pradesh, where provisions of **special status** under **Article 371** apply.
 - The provisions pertain to **regulation of ownership and transfer of land** in order to conserve the limited resources available for development and to ensure that the State preserves its unique identity.

Key Highlights of Order

- It amended 109 laws and repealed 29 laws of the erstwhile State and inserted the **'domicile'** clause in the **Jammu and Kashmir Civil Services (Decentralisation and Recruitment) Act, 2010**.
- The clause for **'permanent resident of the State'** under the 2010 Act, has been substituted by **'Domicile'** of the UT.
 - The Act pertained to **employment in the civil services** comprising "district, divisional and State" cadre posts.
 - Only permanent residents of J&K were eligible to apply for the gazetted and non-gazetted posts but **now non-domiciles can also apply** for these posts.
- The **domiciles will be eligible for the purposes of appointment to any post carrying a pay scale of not more than Level 4**.
 - The **Level 4** post comprises positions such as gardeners, barbers, office peons and waterman and the highest rank in the category is that of a junior assistant.
- The **reservation for domiciles would not apply to Group A and Group B posts**, and like other UTs, recruitment would be done by the **Union Public Service Commission (UPSC)**.
- **Criteria for Domiciles**
 - Someone who has **resided for a period of 15 years** in the UT of J&K or
 - Someone who has **studied for a period of seven years and appeared in Class 10th/12th examination** in an educational institution located in the UT of J&K or
 - Someone who is **registered as a migrant by the Relief and Rehabilitation Commissioner (Migrants)**.
 - **Children** of Central government officials, All India Services, PSUs, autonomous body of Centre, Public

Sector Banks, officials of statutory bodies, Central Universities, recognised research institutes of Centre who have served in J&K for a **total period of 10 years**.

- **Children of such residents of J&K** who reside outside J&K in connection with their employment or business or other professional or vocational reasons but their parents **fulfil any of the conditions provided**.
- The order also amended the **Jammu and Kashmir State Legislature Members' Pension Act, 1984** which fixes the pension for former legislators and councillors.
 - The notification **scraps all pension benefits** such as car, driver, accommodation, phones, electricity, medical facilities and rent-free accommodation to former J&K Chief Ministers.
- The order has also made amendments to the **Public Safety Act (PSA) 1978** by removing a clause that prohibited J&K residents booked under the Act to be lodged in jails outside.
 - It **changes the criteria for appointing the PSA advisory board** on the recommendation of a search committee headed by the Chief Secretary instead of the Chief Justice of the J&K High Court.
 - The advisory board has a crucial role to play in release of detenus under the PSA.
 - It also **bars sitting High Court judges to be made part of the board** without the Chief justice's consultation.
 - The order also **scraps a clause that deals with the power to regulate place and conditions of detention**.

Amendments

- The **Ministry of Home Affairs** amended the **Jammu and Kashmir Reorganisation (Adaptation of State Laws) Order-2020**.
 - The Order was issued by the Ministry on **31st March, 2020**.
- **Protection to domiciles to "any post"** in the government including senior level positions in **Group A and Group B category**. This reserves all jobs in the Union Territory for only its domiciles.
 - Earlier the protection to domiciles was **provided only in Group D** and entry level non-gazetted government posts. This opened all other government posts to anyone from the rest of the country.

Note:



- The amended order also **removed the clause** that any person fulfilling the criteria of domicile eligibility will “deemed to be” a domicile. The **power to issue domicile certificates has been given to “tahsildar”**.

National Security Act, 1980

Why in News

The Indore district administration invoked the **National Security Act (NSA), 1980**, against four persons accused of instigating residents of a locality to pelt stones and chase away health workers who were in the locality to trace the contact history of a **Covid-19** patient.

About the National Security Act, 1980

- The NSA is a **preventive detention law**.
 - Preventive Detention involves the **detainment (containment) of a person in order to keep him/her from committing future crimes** and/or from escaping future prosecution.
 - **Article 22 (3) (b) of the Constitution** allows for preventive detention and restriction on personal liberty for reasons of state security and public order.
 - Further, **Article 22(4)** states that **no law providing for preventive detention shall authorise the detention of a person for a longer period than three months unless:**
 - An Advisory Board reports sufficient cause for extended detention.
 - The **44th Amendment Act of 1978** has reduced the period of detention without obtaining the opinion of an advisory board from **three to two months**. However, this provision has not yet been brought into force, hence, the original period of three months still continues.
 - Such a person is **detained in accordance with the provisions of any law made by the Parliament**.
- History
 - Preventive detention laws in India date back to early days of the colonial era when the **Bengal Regulation III of 1818** was enacted to empower the government to arrest anyone for defence or maintenance of public order without giving the person recourse to judicial proceedings.
 - A century later, the British government enacted the **Rowlatt Acts of 1919** that allowed confinement of a suspect without trial.
 - Post-independence, India got its first preventive detention rule when the government of Prime Minister Jawaharlal Nehru enacted the **Preventive Detention Act of 1950 (expired in 1969)**. The NSA is a close iteration of the 1950 Act.
- Gives Power to the Government
 - The NSA empowers the **Centre or a State government** to detain a person to prevent him from acting in any manner **prejudicial to national security**.
 - The government can also detain a person to prevent him from **disrupting public order** or for **maintenance of supplies and services essential** to the community.
- **Period of Confinement:** The maximum period for which one may be detained is **12 months**. But the term **can be extended** if the government finds fresh evidence.
- **No Basic Rights to People Detained under the NSA**, including:
 - The **right to be informed of the reason for the arrest** (Section 50 of the **Criminal Procedure Code -Cr.PC**).
 - Under the NSA, a person could be kept in the dark about the reasons for his arrest for up to five days, and in exceptional circumstances upto ten days.
 - Even when providing the grounds for arrest, the government can withhold information which it considers to be against public interest to disclose.
 - Sections 56 and 76 of the Cr. PC also provides that a **person has to be produced before a court within 24 hours of arrest**.
 - **Article 22(1) of the Constitution** says an arrested person cannot be denied the right to consult, and to be defended by, a legal practitioner of his choice.
 - Under the NSA, the arrested person is not entitled to the aid of any legal practitioner in any matter connected with the proceedings before an advisory board, which is constituted by the government for dealing with NSA cases.

Criticism Against the NSA Act

- **No Record of Detentions under the NSA:** The National

Note:

Crime Records Bureau (NCRB), which collects and analyses crime data in the country, does not include cases under the NSA in its data as no FIRs are registered. Hence, no figures are available for the exact number of detentions under the NSA.

- In recent cases, different State governments have invoked the stringent provisions of the NSA to detain citizens for questionable offences.
- Some experts argue that the governments sometimes use the NSA as an **extra-judicial power**.
- NSA has come under wide criticism for its **misuse by the authorities**. Experts describe the validity of the Act even during peacetime as **'anachronism'**.

Way Forward

- It needs to be noted that the Act is 40 years old. Changes are required to ensure that the Act is not used arbitrarily. Arbitrary use of the Act hampers democracy and basic rights of an individual.
- Even, the Supreme Court has held that the law of preventive detention has to be strictly construed and meticulous compliance with the procedural safeguards, is mandatory and vital.

Foreign Contribution to PM-CARES Fund

Why in News

Recently, the Central Government has decided to accept contributions from abroad, irrespective of the nationalities, to the **Prime Minister's Citizen Assistance and Relief in Emergency Situations (PM-CARES) Fund**.

Key Points

- Now the **foreign governments, NGOs, and nationals** can contribute to the Fund.
- The move is a **major policy change** as in the **past 16 years India has not accepted any foreign aid**.
 - In 2018, the government refused to accept foreign aid to flood-ravaged Kerala since it was following the **disaster aid policy** set in December 2004.
 - After a tsunami hit India in **December 2004**, the government felt that it could cope up on its own. Since then, India has followed the policy of not accepting aid from foreign governments.

- It has been said that the contribution to **PM-CARES is not "aid"** and the **foreign contribution is "only" applicable to the PM-CARES fund** and not any other fund like the **Prime Minister's National Relief Fund**.

PM-CARES Fund

- PM-CARES was **set up as a public charitable trust** with the trust deed registered on March 27, 2020.
 - It is **meant for 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.
 - It includes the **creation or upgradation of healthcare or pharmaceutical facilities, funding relevant research** or any other type of support.
- **Composition of PM-CARES:**
 - **Prime Minister as chairperson**
 - Defence Minister, Home Minister, Finance Minister
 - **Three trustees** nominated by the Prime Minister "who shall be eminent persons in the field of research, health, science, social work, law, public administration and philanthropy".
- Donations to fund can avail **100% tax exemption**.
- PM-CARES is different from the **Prime Minister's National Relief Fund (PMNRF)**.

Corporate Social Responsibility Expenditure

Why in News

The **Ministry of Commerce and Industry** has clarified that the contributions to the Chief Minister's Relief Fund or the State relief fund will not qualify as **Corporate Social Responsibility (CSR)** expenditure, while any donation to the **PM CARES Fund** will.

Key Points

- The Chief Minister's Relief Fund or State Relief Fund for **Covid-19 is not included in Schedule VII of the Companies Act, 2013**, and therefore any contribution to such funds shall not qualify as admissible CSR expenditure.

Note:

- Schedule VII of the Companies Act, 2013 provides the list of activities that can be included in CSR.
- Some political parties criticised this saying it is **discriminatory** and goes **against the constitutional principle of federalism**.
- However, **donations to the State Disaster Management Authority to combat Covid-19** can be counted as admissible CSR expenditure.

Corporate Social Responsibility

- The term in general can be referred to as a corporate initiative to assess and take responsibility for the **company's effects on the environment and impact on social welfare**.
- In India, the concept of CSR is governed by **clause 135 of the Companies Act, 2013**.
- **India is the first country in the world to mandate CSR spending along with a framework to identify potential CSR activities**.
- The CSR provisions within the Act is applicable to companies with an annual turnover of **1,000 crore and more, or a net worth of Rs. 500 crore and more, or a net profit of Rs. 5 crore and more**.
- The Act requires companies to set up a **CSR committee** which shall recommend a Corporate Social Responsibility Policy to the Board of Directors and also monitor the same from time to time.
- The Act encourages companies to spend **2% of their average net profit in the previous three years** on CSR activities.
- The indicative activities, which can be undertaken by a company under CSR, have been specified under **Schedule VII of the Act**. The activities include:
 - Eradicating extreme hunger and poverty.
 - Promotion of education, gender equality and empowering women.
 - Combating Human Immunodeficiency Virus, Acquired Immune Deficiency Syndrome and other diseases.
 - Ensuring environmental sustainability.
 - Contribution to the Prime Minister's National Relief Fund or any other fund set up by the Central Government for socio-economic development and relief funds for the welfare of the Scheduled Castes, the Scheduled Tribes, other backward classes, minorities and women, etc.

Taxation and Other Laws (Relaxation of Certain Provisions) Ordinance, 2020

Why in News

Recently, the government has promulgated the 'Taxation and Other Laws (Relaxation of Certain Provisions) Ordinance, 2020'.

Key Points

- The Ordinance brings into effect various tax compliance related measures announced on 24th March 2020 in the wake of **Covid-19** pandemic.
- The government has extended the deadline for filing income tax, last dates for making investments in instruments such as **National Savings Certificates, Public Provident Fund** for claiming income tax benefits, etc.
- The last date for **linking PAN with biometric ID Aadhaar** has been extended by three months to 30th June.
- The Ordinance has also amended the provisions of the Income-tax Act to provide the **same tax treatment to the Prime Minister's Citizen Assistance and Relief in Emergency Situations Fund (PM-CARES Fund) as available to the Prime Minister's National Relief Fund (PMNRF)**.
 - The donation made to the PM-CARES Fund shall be eligible for 100% deduction under section 80G of the I-T Act.
 - The government has set up the PM-CARES Fund to deal with any kind of emergency or distress situation like posed by the **Covid-19 pandemic**.
 - PMNRF was **instituted in 1948 by then Prime Minister Jawaharlal Nehru, to assist displaced persons from Pakistan**.
 - The fund is currently used primarily to tackle **natural calamities** like floods, cyclones and earthquakes.
 - The fund is also used to help with **medical treatment** like kidney transplantation, cancer treatment and acid attack.

Ordinance

- Ordinance is a **decree or law promulgated by a state or national government** without the consent of the legislature.

Note:

- **Article 123** of the Constitution of India grants the **President** certain law-making powers to promulgate ordinances when either of the **two Houses of Parliament is not in session**.
- The fundamental reason for bestowing the executive with the power to issue ordinance according to Pandit H N Kunzru (involved in framing the Indian Constitution), was **“to deal with situations where an emergency in the country necessitated urgent action.”**
- There are **three limitations** with regard to the ordinance making power of the executive. They are:
 - The President can only promulgate an ordinance when **either of the two Houses of Parliament is not in session**.
 - The President cannot promulgate an ordinance unless **he is satisfied that there are circumstances that require taking ‘immediate action’**.
 - Ordinances must be **approved by Parliament within six weeks of reassembling or they shall cease to operate**. They will also cease to operate in case **resolutions disapproving the ordinance** are passed by both the Houses.

State Disaster Response Funds

Why in News

Recently, the Ministry of Home Affairs issued an order authorising the States to use **State Disaster Response Funds (SDRF)** to provide “for temporary accommodation, food, clothing, medical care, etc.” to homeless people, including the stranded migrant labourers.

- The government has decided to **treat Covid-19 as a “notified disaster”**.

Key Points

- SDRF has been constituted under the **Disaster Management Act, 2005**.
- It is the **primary fund available with the State governments for responses to notified disasters** to meet expenditure for providing immediate relief.
- The **Centre contributes 75% of the SDRF allocation for general category States** and Union Territories and **90% for special category States and Union Territories** (northeastern States, Sikkim, Uttarakhand, Himachal Pradesh, Jammu and Kashmir).

- The **annual Central contribution is released in two equal installments** as per the recommendation of the **Finance Commission**.
- **Disaster (s) covered under SDRF:** Cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, frost and cold waves.
- A State Government **may use up to 10% of the funds available under the SDRF** for providing immediate relief to the victims of natural disasters that they consider to be **‘disasters’ within the local context** in the State and which are not included in the notified list of disasters of the Ministry of Home Affairs.

MP's Salaries Cut and MPLADS Suspended

Why in News

Recently, the Union Cabinet has approved an **ordinance to amend the Salaries, Allowances and Pension of Members of Parliament Act, 1954**.

- It will **cut the salaries** of Members of Parliament (**MPs**) by **30%**, effective from 1st April 2020.
- Apart from this, it has been decided to **suspend the Members of Parliament Local Area Development Scheme (MPLADS) funds** for **two financial years** (2020-21 to 2021-22).
- The saved amount will go to the **Consolidated Fund of India** to fight the **Covid-19 pandemic**.

Key Points

- **30% Salary Cut**
 - It is applicable to **all MPs**, including the **Prime Minister** and the **Council of Ministers**, for the financial year 2020-2021.
 - The **President** and **Vice-President** of India along with all the **State Governors**, have also decided on their own to take a 30% salary cut.
 - However, the amendment will **only cut MPs' salaries, not allowances or the pensions** of ex-MPs.
 - According to the pay hike in 2018, each MP draws a monthly salary of ₹1 lakh, ₹70,000 as constituency allowance and ₹60,000 for running office besides other perks.
- **Suspension of MPLADS**

Note:



- The amount saved from the scheme would be **around ₹8,000 crore** and will be redirected to the Consolidation Fund.
- Many MPs had **already pledged to use their MPLADS funds** for efforts to combat the **coronavirus** pandemic.
- 74 Rajya Sabha members had contributed a total of ₹100 crore, and 265 Lok Sabha members had given a total of ₹265 crore.
- Currently, the **Lok Sabha** has **542 members** while the **Rajya Sabha** has a strength of **245 members, including 12 nominated**.
- The **comprehensive decision** was taken to convey the message of **social responsibility** of the MPs.
- **Other Previous Measures**
 - The **employees of the central government** have already given **one day's salary** on their own. However, it is **not clear** if they will face a **pay cut** or not.
 - State government of **Telangana** had already announced **salary cuts at all levels** on 30th March.
 - Government has announced **various other measures** including the **Pradhan Mantri Garib Kalyan Yojana**.
- The salary cut has been **supported** throughout the country. However, the suspension of MPLADS has been **criticised** on the grounds that it is a **disservice to the constituents** and will undermine the role and functions of the MPs. It is the **centralisation of funds** which goes **against federalism**.

Government Accounts

- **Consolidated Fund**
 - It was constituted under **Article 266 (1)** of the Constitution of India.
 - It is made up of:
 - All **revenues** received by the Government by way of **taxes** (Income Tax, Central Excise, Customs and other receipts) and all **non-tax revenues**.
 - All **loans** raised by the Government by issue of Public notifications, treasury bills (internal debt) and from foreign governments and international institutions (external debt).

- **All government expenditures are incurred** from this fund and no amount can be withdrawn from the Fund without **authorization from the Parliament**.
- **Each state** can have its own Consolidated Fund of the state with similar provisions.
- The **Comptroller and Auditor General of India** audits the fund and reports to the relevant legislatures on the management.
- **Contingency Fund**
 - It was constituted under the **Article 267 (1)** of the Indian Constitution.
 - Its **corpus is ₹500 crores**.
 - It is **used for meeting unforeseen expenditure**.
 - **Each state** can have its own Contingency Fund of the state with similar provisions.
- **Public Account**
 - It was constituted under **Article 266 (2)** of the Indian Constitution.
 - The **transactions** under this account relate to debt **other than those included in the Consolidated Fund of India**.
 - The receipts under Public Account do not constitute normal receipts of Government hence Parliamentary authorization for payments is not required.
 - **Every state can have their own similar accounts**.

Norms Relaxed under MPLAD Scheme

Why in News

The government has provided for “**one-time exemption in furnishing of utilization certificate**” for **release of the first installment**, and **exemption from furnishing of audit certificate for release of the second installment** under the Members of Parliament Local Area Development (**MPLAD**) Scheme.

- This exemption is **applicable only for the financial year 2020-21**.
- The exemption is **for the Members of Parliament (MPs) who have decided to contribute for Covid-19**.

Note:

- The **latest announcement comes after allowing a one-time dispensation** under the Scheme to allow MPs to recommend funds for purchase of medical testing and screening equipment for government hospitals and dispensaries in the wake of Covid-19.
- Each year under MPLADS, MPs **receive Rs 5 crore in two installments** of Rs 2.5 crore each. Funds under MPLADS are **non-lapsable**.
 - Lok Sabha MPs have to recommend the district authorities projects in their Lok Sabha constituencies, while Rajya Sabha MPs have to spend it in the state that has elected them to the House.
 - Under the MPLADS rules, an MP **can donate a maximum of Rs 1 crore to a trust** or a public fund.

Members of Parliament

Local Area Development Scheme

- It was announced in **December 1993** and initially came under the control of the Ministry of Rural Development. Later, in October 1994, it was transferred to the **Ministry of Statistics and Programme Implementation**.
- The 1st Guidelines were issued in February 1994, covering the concept, implementation and monitoring of the Scheme.
- Objective:
 - To enable MPs to recommend works of developmental nature with emphasis on the creation of durable community assets based on the locally felt needs to be taken up in their Constituencies.
 - Lok Sabha Members can recommend works within their constituencies and elected Members of Rajya Sabha can recommend works within the State they are elected from.
 - Nominated Members of both the Rajya Sabha and Lok Sabha can recommend works anywhere in the country.
 - To create durable assets of national priorities viz. drinking water, primary education, public health, sanitation and roads, etc.
- It is a **Central Sector Scheme**. The annual MPLADS fund entitlement per MP constituency is ₹5 crore.

Lockdown Extended

Why in News

The **National Disaster Management Authority (NDMA)** issued an order directing the Chairman of the **National Executive Committee**, that lockdown measures be continued to be implemented in all parts of the country till May 3, 2020.

- The order has been issued under the **Disaster Management (DM) Act, 2005**.
- The **DM Act, 2005** is a national law that **empowers the Central Government to declare the entire country or part of it as affected by a disaster** and to make plans for mitigation to reduce “risks, impacts and effects” of the disaster.
 - **Covid-19** has been declared as a **national disaster**.

National Executive Committee

- A National Executive Committee (NEC) is constituted under **Section 8 of the DM Act, 2005** to assist the National Disaster Management Authority in the performance of its functions.
- Union Home secretary is its **ex-officio chairperson**.
- NEC has been given the responsibility to act as the **coordinating and monitoring body for disaster management**, to prepare a National Plan, monitor the implementation of National Policy etc.

National Disaster Management Authority

- NDMA is the **apex statutory body** for disaster management in India, under the **Ministry of Home Affairs**.
- The NDMA was formally constituted on 27th September 2006, in accordance with the **Disaster Management Act, 2005** with the **Prime Minister as its Chairperson** and nine other members, and one such member to be designated as Vice-Chairperson.
- **Mandate:** Its primary purpose is to coordinate response to natural or man-made disasters and for capacity-building in disaster resiliency and crisis response. It is also the apex body to lay down policies, plans and guidelines for disaster management to ensure timely and effective response to disasters.
- **Vision:** To build a safer and disaster resilient India by a holistic, proactive, technology driven and sustainable

Note:

development strategy that involves all stakeholders and fosters a culture of prevention, preparedness and mitigation.

ICMR Advises 'Pool Testing' of Covid-19

Why in News

The **Indian Council of Medical Research (ICMR)** has advised the feasibility of using **pooled samples** for molecular testing of **Covid-19** citing the **rise of cases in India**.

- The advisory also stated that it is important to increase the number of tests being done in laboratories in India.

Pool Testing

- A pooled testing algorithm involves the **Polymerase Chain Reaction (PCR)** screening of a specimen pool **comprising multiple individual patient specimens**, followed by **individual testing (pool de-convolution)** only if a **pool screens positive**.
- As all individual samples in a negative pool are regarded as negative, it results in **substantial cost savings** when a large proportion of pools tests negative.
- This method is effective in two ways. First, it **increases the capacity of testing** and second, it **saves a lot of resources — time, cost and manpower**.

Advisory

- **Maximum Number of Samples:** Pooling of more than 5 samples is not recommended to avoid the effect of **dilution leading to false negatives**.
- **Pooling & Positivity Rates:** The ICMR has suggested **three different approaches** based on the **percentage of positive cases**. These are:
 - Pooling of samples should be done only in areas with **low prevalence of Covid-19** (initially using a proxy of low positivity of <2% from the existing data).
 - In areas with **positivity of 2-5%**, sample pooling for PCR screening may be considered only in community survey or surveillance among asymptomatic individuals, strictly excluding pooling samples of individuals with known contact with confirmed cases, Health Care Workers (in direct contact with care of COVID-19 patients). Sample

from such individuals should be directly tested without pooling.

- Pooling of samples is **not recommended** in areas or populations with **positivity rates of >5% for Covid-19**.

Privacy Concern Over Aarogya Setu App

Why in News

Recently, legal experts raised concerns over the privacy policy of **Aarogya Setu app**, launched by the government, to allow people to assess if they are at a risk of contracting **Covid-19**.

- There is a need for clarity on how the data collected by the app can be stored and used by the government.

Aarogya Setu App

- It has been launched by the **Ministry of Electronics and Information Technology**.
- It will help people in **identifying the risk of getting affected by the CoronaVirus**.
- It will calculate risk based on the **user's interaction with others**, using cutting edge **Bluetooth technology, algorithms and artificial intelligence**.
- Once installed in a smartphone, the app detects other nearby devices with Aarogya Setu installed.
- The App will help the Government take necessary timely steps for assessing risk of spread of Covid-19 infection and ensuring isolation where required.

Key Issues

- There is not enough information available on **what data will be collected, how long will it be stored and what uses it will be put to**.
- No specification on the issue of **how the government will use data if the data gets shared with the government of India**.
- On the data retention part, the app's privacy policy specifies only the data available on the app and does not specify for **how long the Government of India will retain server side data**.
- Additionally, there was also a **question of proportionality** with the app and whether it will be as effective as envisaged in containing the Covid-19 outbreak.

Note:

- India's situation is different from countries like Singapore, where a good number of people have smartphones.
- In India compared to its population, smartphone users are very less which means very few people will be able to download the app.

Way Forward

- The app's privacy policy needs detailed clarification on data collection, its storage and uses.
- The Government of India must specify how it will deal with the app's data and how long it will retain the server side data.
- According to the **Supreme Court** in the **Puttaswamy judgement (2017)**, the **right to privacy** is a **fundamental right** and it is necessary to protect personal data as an essential facet of informational privacy.

Sahyog App: Survey of India

Why in News

The Survey of India (Sol) has developed an **e-platform** that will collect geotagged information on the nation's critical infrastructure in order to help the **Government and public health agencies take critical decisions** in response to the current **Covid-19 pandemic situation**.

- To support this platform, a **mobile application called Sahyog** has also been created. This app will help collect location specific data with the help of community workers.

Survey of India

- It is the National Survey and Mapping Organization of the country **under the Department of Science & Technology**.
- It was **established in 1767** and is the **oldest scientific department** of the Government of India.
- It is **headquartered at Dehradun, Uttarakhand**.
- The Survey of India acts as adviser to the Government of India on all survey matters, viz Geodesy, Photogrammetry, Mapping and Map Reproduction.
 - **Geodesy** is the science of accurately measuring and understanding the Earth's geometric shape, orientation in space and gravity field.
 - **Photogrammetry** is the science of making measurements from photographs.

Key Points

- **Swift Solution:** Data collection by formal land survey is a lengthy and time taking process but the **mobile app can help crowdsource data quickly**.
- **Complement Arogya Setu App:** This will **complement** the recently launched **Arogya Setu App** that helps trace the contacts of those who may have been infected by Covid-19.
- **Relevant Information:** Information regarding biomedical waste disposals, containment areas, available hospitals for Covid-19 cases, **ICMR (Indian Council of Medical Research)** testing laboratories and quarantine camps will be integrated on this platform with their latitudinal and longitudinal parameters. This could be customised to a variety of '**Covid-related applications**' such as healthcare facilities, infection clusters and disaster management
- **Data Localisation:** Data collected using Sahyog application will be used for creating various applications for everyone's usage and would facilitate building a **dataset that remains inside India**.
- **Support System:** The data fed by the volunteers working on the ground such as the **ASHA (Accredited Social Health Activist) and Anganwadi workers** will lead to a good support system for the government and doctors on ground.
- **Health Delivery System:** This will **strengthen the public health delivery system** of the central and state governments by providing necessary information support to workers dealing with the challenges of health, socio-economic distress and livelihood changes.
- **Integration on Single Platform:** A lot of geospatial data about locations of fire services, banquet halls etc. is already present with the Government which was not **integrated in a single platform**. This is a step in that direction.

School Education & Covid-19

Why in News

The **lockdown** due to the **Covid-19 pandemic** has led to closing of educational institutes like schools, colleges and coaching institutions.

- The educational institutes are thus switching to **e-learning**.

Note:



- The Centre is also planning to start the next year **virtually**.
 - Many schools have been shut since early March due to the pandemic, even before the countrywide lockdown.

Key Points

- Different e-learning Techniques Being Used
 - **YouTube, Zoom app and Google Classroom** are being used by some institutions.
 - The **Kendriya Vidyalaya Sangathan** has deployed its **SWAYAM Prabha portal** which has lectures on **DTH (direct-to-home)** and online, to help students.
 - Few states are **trying to tap Doordarshan** to remove access barriers.
- **e-learning** poses a **challenge** to teachers, students and their parents over **technology and access** that is why the **effectiveness** of the instructors (teachers) can **not be analysed** and also not every student is joining the virtual classes.
- **Challenges**
 - All of the students do not have laptops or tablet computers.
 - Teachers are apprehensive about students using smartphones because of distracting apps.
 - Teachers or even some institutions too might have technical constraints
 - Parents are finding it difficult to adjust to the online system.
 - Most of the subjects like beauty culture, fashion design and tailoring, office management, travel and tourism, web design etc need practical learning so it is difficult to teach them from a distance.
- **Suggestions**
 - Online classes offered as live teaching can be sustained only with a mix of activities, worksheets and interactive sessions.
 - Teachers should have a structured plan which does not suffocate or burden them and also keep the students involved.
 - All institutions will have to chalk out an infrastructure plan which can be used in such a crisis.
 - Teachers need to be considerate about how children feel or what they are going through these days so an understanding should be developed.

Classes in Distance Mode

- The new academic calendar will begin as usual in April for classes 9 to 12.
 - For the examinations at halt this year, it has been decided that the **Central Board of Secondary Education (CBSE)** will conduct exams only for the main subjects: required for promotion or may be crucial for admission in higher educational institutions.
- The Centre plans to restart classes in the distance mode, with teaching via **dedicated TV and radio channels in English and Hindi**.
- **National Institute of Open Schooling(NIOS)** has been asked to create a structured programme for schools class-wise. This is being done along with the **National Council of Educational Research and Training (NCERT)** using their syllabus.
- The material will be ready for use by schools following the NIOS or the CBSE syllabus.
- **For the State Boards**
 - **Digital Infrastructure for Knowledge Sharing (DIKSHA) mobile app has been offered to States** as a platform to provide content in local languages.
 - If States are willing to produce the content in local languages, the Centre can give them 2-3 hours on the channel.

SWAYAM Prabha

- It is an initiative of the **Ministry of Human Resources Development** to provide **32 High Quality Educational Channels** through DTH across the length and breadth of the country on 24X7 basis.
- It has **curriculum-based course content** covering diverse disciplines.
- This is primarily **aimed** at making **quality learning resources** accessible to remote areas where internet availability is still a challenge.
- The DTH channels are using the **GSAT-15 satellite** for programme telecasts.

Digital Infrastructure for Knowledge Sharing

- It was launched by the **Ministry of Human Resource Development (MHRD) in 2017**.
- It provides for a digital platform to teachers giving them an opportunity to **learn and train themselves and connect with the teacher community**.

Note:



- It is built considering the **whole teacher's life cycle** - from the time student teachers enroll in **Teacher Education Institutes (TEIs)** to after they retire as teachers.
- **States, government bodies and even private organisations**, can integrate DIKSHA into their respective teacher initiatives based on their goals, needs and capabilities.
- It also provides access to NCERT textbooks and lessons, following the regular school curriculum.

Bharat Padhe Online and YUKTI Portal: MHRD

Why in News

Recently, the **Ministry of Human Resource Development (HRD)** has launched **two new initiatives** - **Bharat Padhe Online Campaign** and **YUKTI web-portal** - for improving and monitoring the online education ecosystem in India.

Bharat Padhe Online

- 'Bharat Padhe Online' is a **week-long campaign upto 16th April, 2020** for crowdsourcing of ideas for **improving the online education ecosystem of India**.
- It aims to invite all the best brains in India to share suggestions/solutions directly with the HRD Ministry to overcome constraints of online education while promoting the available digital education platforms.
- **Students and teachers are the main target audience in it.**

YUKTI Portal

- **YUKTI (Young India Combating Covid with Knowledge, Technology and Innovation)** is a unique portal and dashboard **to monitor and record the efforts and initiatives of MHRD**.
- It will also cover the **various initiatives and efforts of the institutions in academics, research especially related to Covid-19**.
- It will **allow various institutions to share their strategies for various challenges** arising due to unprecedented situation of Covid-19.
- The portal will also establish a **two-way communication channel** between the Ministry of HRD and the

institutions so that the Ministry can provide the necessary support system to the institutions.

- This portal will help in **addressing critical issues** related to student promotion policies, placements related challenges and physical and mental well-being of students in these challenging times.
- **Objectives:** The portal will give inputs for better planning and will enable it to monitor effectively its activities for coming six months.
 - It aims to fulfil the goals of the Ministry in the wake of Covid-19 to keep the academic community healthy, both physically & mentally and to enable a continuous high-quality learning environment for learners.

SAMADHAN Challenge

Why in News

Recently, a **mega online challenge, SAMADHAN** has been launched to test the ability of students to innovate.

- The **Innovation Cell of the Ministry of Human Resources Development** and **All India Council for Technical Education (AICTE)** has launched it in collaboration with **Forge** and **InnovatioCuris** (an organisation on healthcare expertise).

Key Points

- Under the challenge, the **participating students will search and develop measures** against **Coronavirus**.
- The challenge will **inspire students and faculty** for novel experiments and discoveries providing a strong baseline of experimentation.
- The newly developed measures can be **made available to the government agencies, health services, hospitals** and other services for the quick solution of such **epidemics**.
- The challenge will also **create awareness among citizens** and **motivate** them to face challenges, prevent crises and help them get livelihood.
- The **success of this program** depends on the **effectiveness of the ideas** of participating contestants with ability to find solutions, technically and commercially.

Note:



Indian Migrants and Challenges

Why in News

Recently, the **Covid-19** lockdown has led to an exodus of migrant workers from cities to rural areas and threw the spotlight on the vast number of Indians who live outside their home states.

Internal Migrants (Movement of People Within a Country)

- Internal migrants in India are a vast and heterogeneous population. They are of three traits (in general):
 - they predominantly **migrate from villages to cities**;
 - they are **low-income populations who work in the informal sector**;
 - they have **not permanently relocated their families to the city**. Instead, they circulate between villages and cities several times a year.

Key Points

- **Reasons for Migration**
 - Lakhs of migrant workers were rendered jobless as urban areas were shut due to lockdown.
 - Night shelters run by local authorities began overflowing, and supplies started dwindling.
 - These migrants were left with no choice but to head towards their hometowns.
- Governments are of the view that the **migration crisis** is purely as a consequence of the challenges of Covid-19. However, some experts argue that there are some structural inadequacies in public understanding of **circular rural-urban migrants**.
 - Circular migration is the temporary and usually repetitive movement of a migrant worker between home and host areas, typically for the purpose of employment.
- **Structural Inadequacies**
 - The first is an **inability to recognise the size and importance of these communities**.
 - The second is **inability to correctly count such migrants** because of the informal conditions in which they live and work and their shuttling between their villages and cities.
 - These inadequacies have real costs, rendering **governments ill-prepared to anticipate the responses of migrant communities** at crucial moments.

- It is being said that the **policymakers were unprepared for the speed and desperation** with which these migrants attempted to return home following the lockdown order.

- The Supreme Court has stated that the migrants be treated in a humane manner, including by providing them with enough food, water, beds and supplies as well as psychosocial counselling in shelters that are run by volunteers and not security forces.

Way Forward

- **Recognition of circular migrants as part of India's urban population.**
 - It might compel authorities to at least consider how proposed policies might impact these communities.
 - At present, such ex-ante awareness would have allowed the government to decide whether to target scarce resources towards enabling safe return or keep migrants in destination cities.
- Relaxing the restrictions that prevent migrants from accessing vital benefits such as food rations in their destination cities. Reconfiguring the domicile-centric public distribution system can help migrants.
- Prioritising dedicated transport options for migrants to prevent overcrowding, especially along high-intensity migration corridors.
- Special Measures should also take into account the particular situation of migrant women, who are among those most economically vulnerable and impacted by the situation.

National Investigation Agency

The National Investigation Agency (NIA) was constituted under the **National Investigation Agency (NIA) Act, 2008**.

- **Headquarters:** New Delhi
- It is a central agency to **investigate and prosecute offenses** related to terrorism and certain other Act **post-2008 Mumbai terror attacks** such as:
 - Affecting the **sovereignty, security, and integrity of India**, security of State, friendly relations with foreign States.
 - Against **atomic and nuclear facilities**.
 - Smuggling in High-Quality **Counterfeit Indian Currency**.

Note:

- It **implements international treaties, agreements, conventions and resolutions** of the United Nations, its agencies, and other international organisations.
- Its objective is also to **combat terror in India**. It acts as the **Central Counter-Terrorism Law Enforcement Agency**.
 - Assist all States and other investigating agencies in the investigation of **terrorist cases**.
 - **Build a database** of all terrorist-related information and share the database available with the States and other agencies.
 - Study and analyse laws relating to terrorism in other countries and regularly **evaluate the adequacy of existing laws** in India and propose changes as and when necessary.
 - To execute in-depth professional investigation of **scheduled offences** using the latest scientific methods of investigation.

Scheduled Offences

- The schedule to the Act specifies a **list of offences** which are to be investigated and prosecuted by the NIA.
- These include offences under Acts such as the **Atomic Energy Act, 1962, and the Unlawful Activities Prevention Act, 1967**.

Mandate of NIA

- The cases are assigned to the NIA by the Central Government in accordance with **section VI of the NIA Act, 2008**.
- The investigation of the cases is done by the Agency **independently**.
- After investigation, the cases are placed before the **NIA Special Court**.
- It is empowered to deal **with terror-related crimes across states without special permission from the states**.

Recent Amendments

- The various features of the NIA (Amendment) ACT, 2019 are:
 - It applied the provisions of the NIA Act **also to persons who commit a scheduled offence beyond India** against Indian citizens or affecting the interest of India.
 - It provided that the officers of the NIA shall have the similar powers, duties, privies, and liabilities

being exercised by the **police officers in connection with the investigation of offences**, not only in India but also outside India.

- It empowered the central government, with respect to a scheduled offence committed outside India, to direct the NIA to register the case and take up investigation as if **such offence had taken place in India**.
- It provided that the central government and the state governments may designate **Sessions Courts as Special Courts for conducting the trial of offences** under the NIA Act.
- It inserted certain new offences in the **Schedule of the NIA Act**. Consequently, the NIA is also empowered to probe the offences related to
 - human trafficking,
 - counterfeit currency or banknotes,
 - manufacture or sale of prohibited arms,
 - cyber-terrorism and
 - explosive substances.

Issues in the Recent Amendments

- Under schedule VII of the Constitution, the maintenance of **public order and police forces are matters of state list**.
 - However, **Criminal law forms part of the concurrent list** and national security comes under the domains of the union list.
- The Central government gets the authority to have the NIA take over the investigation of crimes, which involve allegations of human trafficking, offences under the Explosives Act, and certain offences under the Arms Act.
 - However, **not every criminal offence in the above act is a threat to national security and sovereignty** and consequently, states have the competence to deal with the same.
- The Amendment Bill puts **Section 66F of the Information Technology Act, 2000** into the Schedule listing offences. It deals with **cyber terrorism**.
 - But India **does not have a data protection act** and there is no **definition of cyber terrorism**.
- The amendment to the NIA Act also gives the agency authority to investigate crimes committed by persons which are against Indian citizens or **“affecting the interest of India”**.

Note:



- However, the term “affecting the interest of India” is **undefined** and can be **misused by governments** to curb freedom of speech and expression.
- Further, the laws, under which the NIA has the authority to investigate, themselves **do not mention** “affecting the interest of India” as an offence.

Measures for Smooth Disbursal of Funds Under PMGKY

Why in News

Recently, the Ministry of Finance has tweaked Prevention of Money Laundering (PML) norms with the aim to make all inoperative bank accounts functional.

- This is to ensure that cash transfers by the government under the Covid-19 relief package (Pradhan Mantri Garib Kalyan Yojana (PMGKY) scheme) reach beneficiaries.

Key Points

- As a part of the Pradhan Mantri Garib Kalyan Yojana (PMGKY) scheme, the government has decided to **transfer ₹500 per month for three months to the poor and vulnerable sections of the society** whose livelihood has been impacted due to the nationwide lockdown.
- The PML norms have been tweaked to ensure that beneficiaries are able to withdraw the money transferred to them by the government **without any problems or requirement of additional documentation.**
- The Rules have been amended in respect of
 - The Pradhan Mantri Jan Dhan Yojana (PMJDY) accounts.
 - Basic savings account and small accounts.
 - Those accounts which have become inoperative due to various reasons including **Non-completion of Know Your Customer (KYC)** requirements or updation.
- **Accounts that may have become dysfunctional** due to non-operation in the account for the last two years have also been **made functional.**
- The Finance Ministry had also requested the **Ministry of Home Affairs for adequate security personnel at bank branches** and with the business correspondents
 - This is to maintain law and order, and social distancing, in view of the higher customer footfall

expected for cash withdrawals after the transfers are made.

Pradhan Mantri Jan Dhan Yojana

- PMJDY is also known as the **National Mission on Financial Inclusion** was launched in **2014** to bring financial inclusion in India with important features like zero balance account, insurance cover, direct benefit transfers, overdraft/loan.

Money laundering

- It is the **concealing or disguising the identity of illegally obtained proceeds** so that they appear to have originated from legitimate sources.

Round Tripping of Funds

- Round tripping refers to money that leaves the country through various channels and makes its way back into the country often as foreign investment.
- This mostly involves black money and is allegedly often used for stock price manipulation.

Prevention of Money-Laundering Act

- **Prevention of Money-Laundering Act(PMLA), 2002** deals with money laundering and has three main objectives:
 - To prevent and control money laundering.
 - To provide for confiscation and seizure of property obtained from laundered money.
 - To deal with any other issue connected with money-laundering in India.
- Under the PMLA Act, **the Enforcement Directorate** is empowered to conduct a Money Laundering investigation.
- **PMLA (Amendment) Act, 2012**
 - Adds the concept of **‘reporting entity’** which includes a banking company, financial institution, intermediary etc.
 - It prescribes **obligation of banking companies, financial institutions and intermediaries for**
 - **Verification and maintenance of records of the identity of all its clients** and also of all transactions.
 - Furnishing information of such transactions in prescribed form to the **Financial Intelligence Unit-India (FIU-IND).**
 - It empowers the Director of FIU-IND to impose fine on banking company, financial

Note:

institution or intermediary if they or any of its officers fails to comply with the provisions of the Act as indicated above.

- PMLA, 2002 levied a fine up to Rs 5 lakh, but the amendment act has removed this upper limit.
- It has provided for **provisional attachment and confiscation of property** of any person involved in such activities.

Financial Intelligence Unit-India

- FIU-IND is a **central, national agency** responsible for receiving, processing, analyzing and disseminating information relating to suspect financial transactions to enforcement agencies and foreign FIUs.
- It was **set up in 2004**.
- It is an **independent body** reporting directly to the Economic Intelligence Council (EIC) headed by the **Finance Minister**.

Expert Panel Against Full Repeal of lockdown

Why in News

An **expert committee's report** to the government has suggested that **14th April, 2020** is **not the right time to fully withdraw the 21-days nationwide lockdown**.

- The committee was asked to look into the strategy to ease the lockdown restrictions.

21 Days Lockdown

- The period of 21 days was chosen due to **public health/epidemiological significance** and it is **supported by scientific data**.
 - The calculations are based on the **estimated incubation period of the virus** in a human host.
 - The 21-day quarantine value is derived from interpretations of outbreak data from past and present epidemics and pandemics. For example, the cases of **Spanish Flu** and **Ebola**.
- **Explanation:**
 - In epidemiological terms, **14 days** are of the **initial incubation period** and adding another week, i.e. 21 days is to ensure that residual infection dies out.
 - It is estimated that being a **new strain of coronavirus**, its **median incubation period** (the

time between the entry of virus to the onset of symptoms/disease) falls within the period of 14 days.

- According to a recent study the median incubation period for Covid-19 is **just over five days** and 97.5% of people who develop symptoms will do so **within 11.5 days** of infection.
- So, the current period of active monitoring (14 days) recommended by the **U.S. Centers for Disease Control and Prevention** is well supported by the evidence.

Key Points

- **Restrictions on large-scale movement of people** across International and State boundaries is **critical** and should be kept there unless and until the situation gets under control in every State.
- The major concern is that a **prolonged and stringent lockdown** will lead to **economic hardships, famine and law and order issues**, which may undermine the objectives of both the lockdown and health management.
- The committee suggested a **withdrawal strategy** which should be **gradual, phased and calibrated** so that it is ensured that the caseload is kept below the capacity of the health-care systems.
- Such a phased approach should be **operationalized at the revenue district level**.

Suggestions

- All states should fasten up **preparatory work for the predicted and rapid rise of Covid-19 cases** as they are expected to exceed the local capacity in some cities.
- **No relaxation in speedy production and procurement** of test kits, ventilators, PPEs for health-care personnel and masks.
- Centre should **release funds and create a national coordination mechanism** to distribute them on a need basis.
- Centre should ensure effective **coordination between the States and logistics operators**.
- **Supporting the agricultural sector** in production, marketing, storage, and transport.
- **Ensuring continuation of modern technological leaps**, like rapid innovations and practices which are being introduced in education, judiciary, local

Note:



business, telemedicine, among others, **even after the lockdown ends.**

Neighboring Rights Law

Why in News

The **French competition regulator has asked Google to negotiate with publishers and news agencies** the remuneration due to them **under the law relating to neighboring rights.**

- The French regulator has announced that Google must **start paying media for sharing their content**, as its practices had caused serious harm to the press sector.
- The order is an **interim decision**. Though the order is only for the French press, it has global ramifications for Google and the press, as it can set a legal precedent and shape the discourse around the economics of news on the net.
- The neighboring rights law that came into force on 24th July, 2019 in France aims to set the conditions for a balanced negotiation between publishers, news agencies and digital platforms, in order to redefine, in favour of press publishers and news agencies, the sharing of the value between these actors.

Neighboring Rights

- According to the **World Intellectual Property Organization (WIPO)**, related rights, also referred to as neighboring rights, **protect the legal interests of certain persons and legal entities that contribute to making works available to the public or that produce subject matter which, while not qualifying as works under the copyright systems of all countries**, contains sufficient creativity or technical and organizational skill to justify recognition of a copyright-like property right.
- **Traditionally**, related rights have been granted to **three categories of beneficiaries**:
 - Performers (actors/musicians);
 - Producers of sound recordings (also referred to as phonograms); and
 - Broadcasting organizations.

Protection in India

- The **Copyright Act, 1957** protects original literary, dramatic, musical and artistic works and cinematograph films and sound recordings from unauthorized uses.

Unlike the case with patents, **copyright protects the expressions and not the ideas**. There is no copyright in an idea.

- Copyright is a right given by the law to creators of literary, dramatic, musical and artistic works and producers of cinematograph films and sound recordings. In fact, it is a bundle of rights including, inter alia, rights of reproduction, communication to the public, adaptation and translation of the work.
- Copyright is an **Intellectual Property Right (IPR)**.
 - Intellectual Property Rights (IPR) are the rights given to persons over the creations of their minds: inventions, literary and artistic works, and symbols, names and images used in commerce.
 - Other IPRs include trademarks, **geographical indications**, industrial designs, patents, etc.
- Copyright as provided by the Indian Copyright Act is valid only within the borders of the country. To secure protection to Indian works in foreign countries, **India has become a member of the following international conventions on copyright and neighbouring (related) rights**:
 - Berne Convention for the Protection of Literary and Artistic works, 1886.
 - Universal Copyright Convention (Revised in 1971).
 - Convention for the Protection of Producers of Phonograms against Unauthorised Duplication of their Phonograms, 1971.
 - Multilateral Convention for the Avoidance of Double Taxation of Copyright Royalties, 1979.
 - Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement, 1995.

Covid-19 Impact on Measles Immunization Program

Why in News

According to the **United Nations (UN)**, due to the **Covid-19 pandemic, measles immunisation campaigns have been delayed** in 24 countries and will be canceled in 13 other countries.

- The reason being that the **healthcare workers are required to deal with the pandemic** in countries where healthcare systems are inadequate.

Note:

Key Points

- The **coronavirus pandemic**, which has necessitated many prevention measures including strict lockdowns, **has kept infants from getting routine immunisation services** from some other diseases such as polio, yellow fever and cholera.
- Mexico, Bolivia, Lebanon, Nepal, Chile, etc. have delayed their immunisation campaigns.
- Currently, Nigeria, Ukraine, Democratic Republic of Congo (DRC), Kazakhstan, etc. are **amid measles outbreak**.
- According to a report in the journal Nature, the **reproduction number for measles**, which is the number of people who get infected by an individual who has the disease, **is somewhere between 12-18**, which **makes measles the most contagious virus known**.
- According to the **World Health Organization (WHO)**, mass immunisation drives and routine vaccination for children are the key public health strategies against the Measles. Therefore, delaying the campaigns affects these strategies, potentially putting the life of thousands of children at risk.
- The WHO released an **interim guideline** for carrying out immunisation activities during Covid-19 on 26th March, 2020.
 - It says if immunisation activities are negatively impacted during the pandemic, respective countries will need to design strategies for delivering “catch-up” vaccines after the outbreak subsides. Implementing this will require strategies to **track and follow-up with individuals who missed getting vaccinated**, assessing immunity gaps and re-establishing community demand.
 - Further, it has advised that **mass immunisation campaigns** be “**temporarily suspended**” in light of the Covid-19 pandemic and that countries should monitor the necessity of delaying these campaigns at regular intervals.

Measles

- **Measles** is a **highly contagious viral disease** and despite the availability of a vaccine against it, it remains to be a **leading cause of death among young children globally**.
- The disease is **transmitted via droplets** released from the nose, mouth or throat of infected persons.

- The **initial symptoms** occur **10-12 days after contracting the infection** and include high fever, a runny nose, bloodshot eyes and the appearance of white spots on the inside of the mouth.
- **Some of the most serious complications** arising out of the disease include **blindness, encephalitis (brain swelling), severe diarrhea, dehydration and severe respiratory infections such as pneumonia**.
- The disease is **common in parts of Africa and Asia** and is more likely among poorly nourished children, especially those who are **deficient in vitamin A**.
- Measles **claimed 140,000 lives in 2018**, mostly of children and babies.
- The **measles vaccine has been in use since the 1960s**. It is safe, effective and inexpensive.
- As per the WHO, reaching all children with 2 doses of measles vaccine, either alone, or in a measles-rubella (MR), measles-mumps-rubella (MMR), or measles-mumps-rubella-varicella (MMRV) combination, should be the standard for all national immunization programmes.
 - In **India**, the first dose of measles vaccine was introduced in the 1990s.
 - India introduced the second dose from 2010 onwards. India was one of the last countries to add a second dose of measles vaccine.
- In 2019, **Sri Lanka** became the fifth country in the **WHO southeast Asia region to eliminate measles**. The other countries in the region which have eliminated measles in their geographical area are **Bhutan, Maldives, DPR Korea and Timor-Leste**.

Measures for Farmers' Welfare

Why in News

The Government has taken up measures to protect the farmers facing obstacles during the lockdown due to Covid-19.

Measures for Fruit and Vegetable Farmers

- Fruit and Vegetable Farmers have been **among the hardest hit by the lockdown**. They are facing major losses due to **obstacles in harvesting and marketing their perishable produce**.
- The Central Government has directed all the States and Union Territories to implement the **Market**

Note:



Intervention Scheme (MIS) to ensure remunerative prices to farmers for perishable crops.

- It has also begun a **train service to transport perishable agricultural and horticultural commodities** to markets due to the obstacles in road transport.
 - According to the Ministry of Agriculture & Farmers' Welfare **50 trains have been deployed for this purpose.**

Market Intervention Scheme

- It is implemented by the **Department of Agriculture & Cooperation, Ministry of Agriculture & Farmers' Welfare.**
- **Objective:** To provide remunerative prices to the farmers in case of excess of production and fall in prices.
- The MIS is an ad-hoc scheme under which include **horticultural commodities and other agricultural commodities.**
 - These commodities are perishable in nature and which are **not covered under the minimum price support scheme.**
- Further, the MIS is implemented on the specific requests of the **State Government/UT Administrations willing to share the loss with the Central Government on a 50:50 basis** (75:25 in case of North-Eastern States).

Measures for Pulses and Oilseeds Farmers

- Farmers, mostly in dry-land areas, have been complaining that **market prices** for toor and urad dal, chickpeas and soybean are **far below the Minimum Support Prices (MSP)** in many mandis, with trading disrupted by the lockdown.
 - The **MSP** is the **rate at which the government buys grains from farmers.**
 - It is fixed on the recommendations of the **Commission for Agricultural Costs and Prices (CACP).**
- The Centre has extended the procurement window for its **Price Support Scheme (PSS)** up to 90 days from the date of commencement of the scheme in each State.
- The **PSS** is operationalised on the State governments' request when the prices fall **below the minimum support price (MSP).**
- The **National Agricultural Cooperative Marketing Federation of India Limited (NAFED)** and other

agencies procure pulses and oilseeds under the scheme at the MSP.

- The procurement of pulses will also aid in the implementation of the Centre's promise to provide 1 kg of pulses per month to all families with ration cards for the 3 months as part of a **Covid-19 relief package (Pradhan Mantri Garib Kalyan Yojana).**

National Agricultural Cooperative Marketing Federation of India Limited

- It is registered under the **Multi State Cooperative Societies Act, 2002.**
- It was set up in **1958** with the objective to **promote Cooperative marketing of Agricultural Produce to benefit the farmers.**
- **Agricultural farmers are the members** of the General Body of NAFED, who participate in the decision making process of NAFED.

New Features Added to e-NAM

Why in News

Recently, the **Ministry of Agriculture and Farmers' Welfare** has launched three new features of the **National Agriculture Market (e-NAM)** Platform.

- The new features will strengthen agriculture marketing by **reducing farmers' need to physically go to wholesale mandis** for selling their harvested produce.
- It is an important move at a time when there is a critical need to **decongest mandis** to effectively fight against **Covid-19.**

Key Points

- **Integration of Negotiable Warehouse Receipt System (e-NWRs) Module with e-NAM**
 - Under it, a **warehouse trading module with a payment feature** is launched.
 - It will enable small and marginal farmers to directly trade their stored produce from selected **Warehousing Development and Regulatory Authority (WDRA) registered warehouses** which are declared deemed market by the State.
 - Farmers will be able to place their produce in **WDRA accredited warehouses.**

Note:

- Telangana (14 warehouses) and Andhra Pradesh (23 warehouses) have already declared designated warehouses as deemed markets.
- **Benefits:**
 - Depositor can save the logistics expenses and will have better income.
 - Farmers can sell the produce across the Nation at better price without the hassle of going to mandi.
 - Farmers with their produce in WDRA accredited warehouses can avail the benefit of pledge loan, if required.
 - Price stabilization by matching supply and demand through time and place utility.
- **FPO trading Module**
 - It will enable **Farmer Producers' Organisations (FPOs)** to upload the picture of their produce and quality parameters from their premise/collection centres for bidding.
 - Distant bidders can visualise the produce before bidding by seeing the pictures and quality.
 - After successful bidding, FPOs can deliver the produce from their premises or by bringing it to mandi.
 - **Benefits:**
 - This will decongest mandis and also reduce the hassle.
 - This will help FPOs by reducing logistics costs and enhance their bargaining power.
 - Facilitates FPOs to avail online payment facility with ease of doing business.
- **Launch of Logistic Module**
 - A provision has been made for **linking large logistic aggregator** platforms providing choices to users.
 - Presently, e-NAM provides a database of **individual transporters** to the traders.
 - Traders will be able to use the link to navigate to the logistics provider's website and select appropriate services.
 - With these additions, more than 3,75,000 number of trucks from large logistic providers would be added for logistic purposes.
 - **Benefits:**
 - This will help in seamless transportation of agri-produce.
 - This will promote inter-state trade by providing online transport facilities for distant buyers.

e-NAM

- It was launched on 14th April 2016 as a **pan-India electronic trade portal** linking **Agricultural Produce Market Committees (APMCs)** across the States.
- It provides for contactless remote bidding and mobile-based anytime payment for which traders do not need to either visit mandis or banks for the same.
- Already 585 mandis in 16 States and 2 Union Territories have been integrated on e-NAM portal and will be soon expanded to cover additional 415 mandis, which will take the total number of e-NAM mandis to 1,000.

Negotiable Warehouse Receipt System

- It was launched in **2011** by the **Ministry of Consumer Affairs, Food & Public Distribution**.
- Farmers can **seek loans from banks against the warehouse receipts** issued to them against their storage.
- These **receipts issued by the warehouses registered with the WDRA** would become a fully negotiable instrument backed by a Central legislation.
- The **Electronic Negotiable Warehouse Receipt (e-NWR) System** was launched in **2017**.

Warehousing Development and Regulatory Authority

- It was constituted on 26th October 2010 under the **Warehousing (Development and Regulation) Act, 2007**.
- It is a **statutory authority** under the Department of Food and Public Distribution, Government of India.
- It is headquartered in **New Delhi**.
- The Act provides for the establishment of the WDRA to exercise the powers conferred on it and to perform the functions assigned to it under the Act, Rules and Regulations for the development and regulation of warehouses, negotiability of warehouse receipts and promote orderly growth of the warehousing business in the country.

Schemes for Electronic Manufacturing

Why in News

Recently, the government notified **three schemes** involving total incentives of around **Rs. 48,000 crore** for electronics manufacturing.

Note:



- **The schemes are expected to:**
 - Attract Rs. 1 lakh crore investment in the sector.
 - Boost local electronics manufacturing and generate manufacturing revenue potential of Rs. 10 lakh crore by 2025.
 - Create 20 lakh direct and indirect jobs by 2025.

Production Linked Incentive Scheme

- The scheme proposes a financial incentive to boost domestic manufacturing and attract large investments in the electronics value chain including **electronic components and semiconductor packaging**.
- Under the scheme, electronic manufacturing companies will get an **incentive of 4 to 6% on incremental sales (over base year) of goods manufactured in India** and covered under target segments, to **eligible companies over a period of next 5 years**.
- The scheme shall only be applicable for target segments namely mobile phones and specified electronic components.
- The government estimates that with the PLI scheme, domestic value addition for mobile phones is expected to rise to 35-40% by 2025 from the current level of 20-25% and generate additional 8 lakh jobs, both direct and indirect.
 - The production of mobile phones in the country has surged eight-times in the last four years from around Rs. 18,900 crore in 2014-15 to Rs. 1.7 lakh crore in 2018-19.

Scheme for Promotion of Manufacturing of Electronic Components and Semiconductors

- Under the scheme, a **financial incentive of 25% of capital expenditure** has been approved by the Union Cabinet for the **manufacturing of goods that constitute the supply chain of an electronic product**.
- The SPECS notified for manufacturing of electronics components and semiconductors has a budget outlay of Rs 3,285 crore spread over a period of eight years.
- The government estimates that push for manufacturing of electronics components and electronic chips will create around **6 lakh direct and indirect jobs**.

Modified Electronics Manufacturing Clusters Scheme

- The **EMC 2.0** has a total incentive outlay of Rs 3,762.25 crore spread over a period of 8 years with an objective

to create 10 lakh direct and indirect jobs under the scheme.

- It will provide **financial assistance up to 50% of the project cost** subject to a ceiling of Rs 70 crore per 100 acres of land for setting up of Electronics Manufacturing Cluster projects.
- Electronic manufacturing clusters to be set up under the scheme will be spread in an **area of 200 acres across India and 100 acres in North East part of the country**.

Women SHGs Fight Against Covid-19

Why in News

Women members of around 63 lakh **Self Help Groups (SHGs)** across the country formed under the **Deendayal Antyodaya Yojana-National Rural Livelihoods Mission (DAY-NRLM), Ministry of Rural Development** are contributing in every possible way to contain the spread of **Covid-19**.

Key Points

- All **State Rural Livelihoods Missions (SRLMs)** have been made aware of the various aspects of the disease including the need to maintain personal hygiene, social distancing etc. through **Audio Visual (AV) Information, Education and Communication (IEC) material and advisories**.
- SRLMs are using all the information to ensure that the correct message is communicated to the community by various means like telephone calls, wall writings, pamphlets/fliers, social media, etc.
- **Important Interventions by SRLMs:**
 - **Bihar SRLM (JEEViKA):**
 - Utilizing **Mobile Vaani** Platform to spread awareness among the community through voice messages and answering queries on Covid-19.
 - **Mobile Vaani (MV)** is a mobile-based voice media platform for underserved areas in India whereby users generate content in their own local dialect through an **Interactive Voice Response System (IVRS)**.
 - **Uttar Pradesh SRLM (Prerna):**
 - Use of **rangolis** and markings such as lines and circles to re-emphasise the need for **'social distancing'**.

Note:

- Wall paintings to spread key messages about Covid prevention.
- **Jharkhand SRML:**
 - Initiated **Didi helpline**, which helps migrant labourers by providing them verified information 24 hours.
- **Kerala SRML:**
 - Dispelling the widespread fake news causing panic through its **WhatsApp groups** and propagating only the right information.

Deendayal Antyodaya Yojana-National Rural Livelihoods Mission

It was launched by the **Ministry of Rural Development** in **2011**. It **aims** at creating **efficient and effective institutional platforms** for the rural poor enabling them to increase household income through sustainable livelihood enhancements and improved access to financial services.

- NRLM has set out with an agenda to cover 7 crore rural poor households, across 600 districts, 6000 blocks, 2.5 lakh Gram Panchayats and 6 lakh villages in the country **through self-managed SHGs and institutions and support** them for livelihoods collectives in a period of 8-10 years.
- **Salient Features:**
 - It lays **special emphasis on targeting the poorest of the poor and the most vulnerable communities (i.e. Antyodaya)** and their financial inclusion.
 - Innovative projects under **National Rural Economic Transformation Project (NRETP)**: To pilot alternate channels of financial inclusion, creating value chains around rural products, introduce innovative models in livelihoods promotion and access to finance and scale-up initiatives on digital finance and livelihood interventions.
 - DAY-NRLM provides for mutually beneficial working relationships and formal platforms for consultations between **Panchayati Raj Institutions (PRIs)** and **Community Based Organizations (CBOs)**.
 - NRLM has also **developed an activity map to facilitate convergence in different areas of interventions** where NRLM institutions and PRIs could work together which has been disseminated to all SRLMs.

Healthcare Institutions Face Cyber Threats

Why in News

The **International Criminal Police Organisation (Interpol)** has warned member countries that **cyber-criminals are attempting to target major hospitals** and other institutions on the front lines of the fight against **Covid-19 with ransomware**.

- The organisation also talked about recent changes in the pattern of crime.

Key Points

- In an **alert sent to 194 nations, including India**, Interpol said that the hospitals and institutions had become targets of ransomware attacks.
- Interpol's **Cybercrime Threat Response Team** had detected an **increase in the number of attempted ransomware attacks** against key organisations and infrastructure engaged in the virus response.
- Cybercriminals are using ransomware to hold hospitals and medical services digitally hostage, preventing them from **accessing vital files and systems until a ransom is paid**.
 - The attacks are designed to lock these institutions out of their critical systems in an attempt to **extort payments**.
 - Locking hospitals out of their critical systems
 - Will delay the swift medical response required during these unprecedented times.
 - it could also directly lead to deaths.
- The ransomware appears to be spreading primarily via e-mails, often falsely claiming to **contain information or advice regarding the coronavirus from a government agency**, which encourages the recipient to click on an infected link or attachment.



Note:

International Criminal Police Organization

- Interpol is an intergovernmental organization that helps **coordinate the police force of 194 member countries**.
- Each of the member countries hosts an **interpol National Central Bureau (NCB)**. This connects their national law enforcement with other countries and with the General Secretariat.
 - The **Central Bureau of Investigation (CBI)** is designated as the National Central Bureau of India.
 - The **General Secretariat** provides a range of expertise and services to the member countries.
- It is headquartered in **Lyon, France**
- **Interpol Notices** are **international requests** for cooperation or alerts allowing police in member countries to share critical crime-related information.
- **Prevention and Mitigation efforts are crucial** to stop the attacks.
 - Interpol continues to stand by its member countries and provide any assistance necessary to ensure vital healthcare systems remain untouched and the criminals targeting them are held accountable.
 - Interpol also issued a **Purple Notice** to seek or provide information on modus operandi, objects, devices and concealment methods used by criminals.
- **Steps Taken by the Government**
 - Alerts received by the Government of India on the threat of ransomware/malware attacks have been communicated to the concerned departments.
 - Institutions and individuals have been appealed **not to open any mail or link on coronavirus data**

or home remedies unless it is from a trusted source like a government agency.

- They were also cautioned about a possibility of **email spoofing**, where a suspect operating from a remote location would send a mail that would appear as if it came from a known person.

Changed Pattern of Crimes

- Interpol warned that with a majority of **people working from home** due to the pandemic, there was a change in the pattern of crimes.
- Those are as follows
 - **Fraudulent trade** in personal protective equipment and anti-viral medicines,
 - individuals/businesses on reduced income becoming potential **targets of loan sharks (Persons who loan money at extremely high interest rates and often use threats of violence to collect debts)**.
 - The lockdown period has made **business establishments/factories vulnerable to thefts**.
 - Since more people were at home, the number of burglaries had dropped. But thieves are increasingly targeting factories or business premises that were locked.
- **Domestic violence cases have risen** since the start of coronavirus-related quarantines, with reports showing women and children at greater risk of abuse.
- Recent weeks have seen increased **online activity by paedophiles** (persons who are sexually attracted to children) **seeking child sexual abuse material**.
 - This is being intensified by a shortage of moderators who identify and remove offensive material from networks.



Note:



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Economic Scenario

Highlights

- *Impact of Covid-19 on Global Economy*
- *World Economic Outlook Report: IMF*
- *World Bank on India's Growth*
- *Monetary Policy Report*
- *Impact of Economic Slowdown Due to Covid-19*
- *RBI's Measures to Fight Economic Disruptions*
- *E-Way Bills During Lockdown*
- *Core Sector Growth at 5.5%*
- *Demand for MGNREGA Work Increased*
- *Fundraising for Covid-19*
- *Impact of Lockdown on Banks*
- *EPFO Disbursed Claims*
- *Fall in IHS Markit India Services Business Activity Index*
- *Fraud Oversight Wing*
- *NBFCs Face Moratorium Issue with Banks*
- *Renewable Energy Certificates*
- *Government Cuts Interest Rates on NSC, PPF*

Impact of Covid-19 on Global Economy

Why in News

Recently, the **United Nations Conference on Trade and Development (UNCTAD)** has observed that the economic uncertainty sparked by the **Covid-19** will likely cost the global economy \$1 trillion in 2020.

- The observation is based on the **World Economic Situation and Prospects 2020** released by UNCTAD.

Key Observations

- A **slowdown in the global economy to under 2%** for this year is envisaged which will probably cost in the order of \$1 trillion.
 - **Worst possible scenario:** If the world economy grew at only 0.5% which would involve a \$2 trillion hit to **gross domestic product (GDP)**.
 - **Best case scenario:** With moderate declines in private consumption, investment and exports and offsetting increases in government spending, global growth would fall to 1.2% in 2020.
- **Global financial market is fluctuating** due to the **supply-chain interruptions from China** and **oil price uncertainty** among major producers.
- **European economies** had already been performing extremely badly towards the end of 2019.

- **Europe** is almost certain to go into **recession** over the coming months.
- **German** economy is in a **fragile** state.
- **Italian** economy and other parts of the **European periphery** are also facing very **serious stresses** right now.
- Many parts of the **Latin American** region are also vulnerable.
 - **Argentina** in particular will be struggling as a consequence of the knock-on effects of this pandemic.
- The **least developed countries** whose economies are driven by the **sale of raw materials** will also face hard consequences.
- Heavily-indebted **developing countries**, particularly **commodity exporters**, face a particular threat due to the **weaker export returns linked to a stronger US dollar**.
 - The likelihood of a **stronger dollar** as investors seek safe-havens for their money and the almost certain **rise in commodity prices** as the global economy slows down, means that commodity exporters are particularly **vulnerable**.

Suggestions

- A series of **dedicated policy responses and institutional reforms** are needed to prevent a localized health scare from turning into a global economic meltdown.

Note:



- Governments need to **spend now in order to prevent more damaging meltdown** in the coming times.
 - Chinese Government is likely to introduce **significant expansionary measures** – shorthand for increasing spending or tax cuts.
 - The **US** government is in an election year and it needs to do **more than simply cutting taxes and reducing interest rates**.

United Nations Conference on Trade and Development

- It was established in **1964** to promote development-friendly integration of developing countries into the world economy.
- UNCTAD is a **permanent intergovernmental body** headquartered at **Geneva** in Switzerland.
- Some of the **reports published by it are:**
 - Trade and Development Report
 - World Investment Report
 - The Least Developed Countries Report
 - Information and Economy Report
 - Technology and Innovation Report
 - Commodities and Development Report

World Economic Outlook Report: IMF

Why in News

Recently, the **International Monetary Fund (IMF)** has released its **World Economic Outlook (WEO)** report.

Key Points

- The **Covid-19 pandemic** is having a severe effect on the world economy. As countries implement necessary **quarantines and social distancing** practices to contain Covid-19, the world has been put in a **Great Lockdown**.
 - It is expected to cause a **-3% change (i.e., a contraction) in global output in 2020**, which is much worse than the **2008-09 financial crises**.
 - **Case of India:** India's growth is **expected to dip to 1.9% in 2020 and rebound to 7.4% in 2021**.
- **Growth Projections:**
 - **Emerging Asia:**
 - Emerging Asia is projected to be the only region that **grows in 2020, at a rate of 1.0%** - still more

than 5 percentage points below the previous decade's average.

- **China is projected to grow at 1.2% in 2020 and 9.2% in 2021.**
- Apart from **India's modest 1.9% in 2020**, **Indonesia is expected to grow at 0.5%**, while **others in the region experience contractions**.
- **Advanced economies:**
 - Advanced economies will have an **output change of -6.1% (i.e., a contraction) in 2020** followed by 4.5% in 2021.
 - The **U.S. is projected to contract by 5.9%** in 2020 and grow by 4.7% 2021.
 - The **Euro area, will contract by 7.5%** in 2020 and grow by 4.7% 2021.
- **Impact on Global GDP:**
 - The cumulative loss to global Gross Domestic Product(GDP) over 2020 and 2021 from the pandemic crisis could be around **9 trillion dollars**, greater than the economies of Japan and Germany, combined.
 - Assuming that the pandemic fades in the second half of this year, with containment efforts gradually easing up, the **world economy is projected to grow at 5.8% in 2020** as economic activity normalizes, aided by policy.
 - If the pandemic does not recede in the second half of 2020, global GDP would **fall an additional 3% in 2020**.
- **Measures to combat the impact:**
 - **Policymakers have to make targeted fiscal, monetary and financial sector interventions** to support impacted households and businesses.
 - Fiscal measures **should be two-fold:**
 - Cushioning the impact on the most-exposed households and businesses.
 - Reducing firm closures, i.e., preserving economic relationships.
- **Monetary stimulus** by large central banks and liquidity facilities to reduce systemic stress will help limit the shock, positioning the economy for a better recovery.
- **Strong multilateral cooperation** is essential to overcome the effects of the pandemic, including to help financially constrained countries facing twin health and funding shocks, and for channeling aid to countries with weak healthcare systems.

Note:



International Monetary Fund

- IMF is an organization 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.
- Created in **1945**, the IMF is governed by and accountable to the **189 countries** that make up its near-global membership. **India** joined on December 27, 1945.
- The 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.
 - The Fund's mandate was updated in 2012 to include **all macroeconomic and financial sector issues** that bear on global stability.

World Economic Outlook

- WEO is a survey by the IMF that is usually published **twice a year in the months of April and October**.
- It analyzes and predicts **global economic developments** during the near and medium term.
- In response to the growing demand for more frequent forecast updates, the WEO **Update is published in January and July** between the two main WEO publications released usually in April and October.

World Bank on India's Growth

Why in News

The **World Bank** has released the **South Asia Economic Focus report**. The report saw **India's growth at 1.5-2.8% in 2020-21** which is the **slowest since 1991 economic reforms**.

Key Points

- The **South Asian region** has been estimated to **grow by 1.8-2.8% in 2020**, down from the 6.3%, projected six months ago.
- For 2020-21, for India, estimated growth (1.5-2.8%) is lower than 4.1-5.4% estimated in October, 2019.
- It estimated that **India will grow 4.8% to 5% in the 2019-20** fiscal year that ended on 31st March, 2020.

- This is lower by 1.2-1% of the estimate made in October 2019.
- India is **likely to record its worst growth performance in 2020-21 since the 1991 liberalisation** as the coronavirus outbreak severely disrupts the economy.
- **Disruptions due to Coronavirus:**
 - The Covid-19 outbreak came at a time when **India's economy was already slowing** due to persistent financial sector weaknesses.
 - To contain it, the government imposed a lockdown, shutting factories and businesses, suspending flights, stopping trains and restricting mobility of goods and people.
 - This resulted in **domestic supply and demand disruptions**.
- **Impact:**
 - A sharp growth deceleration in Financial Year-2021 (April 2020 to March 2021).
 - The **services sector** will be particularly hit.
 - A revival in domestic investment is likely to be delayed given enhanced risk aversion on a global scale, and renewed concerns about financial sector resilience.
- Growth is expected to rebound to 5% in Fiscal year 2022 (2021-22) as the impact of Covid-19 dissipates, and due to fiscal and monetary policy support.
 - India has set aside **just over 1% of Gross Domestic Product (GDP)** for programs to increase health sector spending and compensate the unemployed, with the bulk of the money going towards cash transfers, free food and gas cylinders, and interest-free loans.
- **Suggestions by the World Bank:**
 - India should focus on mitigating the spread of the disease, and to make sure that everybody has food.
 - It should also focus on temporary jobs programmes, especially at the local levels. These initiatives should be supported.
 - It should prevent bankruptcies, especially of a small and medium sized enterprise.
- **World Bank's Support to India:**
 - The World Bank has **approved USD 1 billion to India**, of which the first tranche has already been released to deal with the emergency in the health care sector.

Note:



- The first tranche aims at delivering civilian diagnostic equipment, put in place additional capacity to deal with testing and make testing available that benefits the entire population.
- It is also working with India on two additional operations, which are anticipated to be ready soon.
 - These include, employment, banking and micro, small and medium enterprises sectors.
- **Other international agencies that have made a similar growth estimates:**
 - **The Asian Development Bank (ADB)** sees India's economic growth decrease to 4% in the current fiscal.
 - **S&P Global Ratings** has estimated the GDP growth forecast for the country to 3.5% from a previous downgrade of 5.2%.
 - **Moody's Investors Service** has slashed its estimate of India's GDP growth during the 2020 calendar year to 2.5%, from an earlier estimate of 5.3%.

1991 Economic Reforms

- In **1990-1991**, Indian economy faced several uncertainties and strains. Inflation had increased to an annual rate of 17%.
- The fiscal deficit reached a peak of 8.2% of GDP while revenue deficit reached to a height of 2.6% of GDP, **growth rate decelerated to about 1%** showing symptoms of recession and industrial production falling at low level.
- The foreign exchange reserves of the **Reserve Bank of India (RBI)** had fallen to less than \$1 billion resulting in an unprecedented external debt crisis.
- Hence, the **New Economic Policy** was introduced, which consisted of a gradual process of **easing out government controls of industrial deregulations and some import liberalization.**
 - Significant changes in national policy with regards to Taxation, Industrial Licensing, Imports, Technology and Investment priorities were made.

South Asia Economic Focus

- It is a **biannual economic update** presenting recent economic developments and a near-term economic outlook for South Asia.
- It aims at providing important **background information and timely analysis of key indicators and economic and financial developments** of

relevance to **the World Bank Group operations** and interaction with counterparts in the region, particularly during annual and spring meetings.

- This biannual series is prepared by the **Office of the Chief Economist for the South Asia region.**
- It includes a Focus section presenting more in-depth analysis of an economic topic of relevance for stability, growth and prosperity in the region as well as country briefs covering **Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka.**

Monetary Policy Report

Why in News

- The **Reserve Bank of India (RBI)** has released its **Monetary Policy Report (MPR).**
- The report follows the unscheduled **monetary policy** meeting held in end March, 2020 to discuss the uncertainties arising from the nationwide lockdown.
 - Since the review was conducted in end March, 2020, the early policy review, scheduled for April, 2020 was withdrawn.

Key Points

- **Inflation**
 - The **consumer price index (CPI)-based inflation**, had stayed elevated in the last few months. It is expected to **decrease during the course of the financial year.**
 - **CPI inflation** is tentatively projected to ease from 4.8% in (Quarter) Q1 of 2020-21 to 4.4% in Q2, 2.7% in Q3 and 2.4% in Q4.
 - This may be due to the prevailing high uncertainty.
 - Aggregate demand may weaken further than currently anticipated and ease core inflation further.
 - Supply bottlenecks could increase pressures more than expected.
 - Estimates indicate that inflation could move in a **range of 3.6-3.8% assuming a normal monsoon and no major exogenous policy shocks.**
- **The RBI monetary policy:**
 - The **Repo Rate** was reduce by 75 basis points (bps) to 4.4%

Note:

- The **Cash Reserve Ratio** was reduced by 100 bps to 3%.
- However, the RBI refrained from making any prediction on growth. Forecasts for real **Gross Domestic Product (GDP) growth** in India were not provided due to prevailing uncertainties due to **Covid-19**.
- Improvements in inflation and growth are expected to emanate from monetary, fiscal and other policy measures and the early containment of Covid-19. However, there are uncertainties with these factors.
- **Oil Price Drop**
 - The sharp reduction in **international crude oil prices**, if sustained, could improve the country's terms of trade.
 - However, the gain from this channel is **not expected to offset the impact of shutdown and loss of external demand**.
- **Exchange Rates**
 - The global financial market volatility caused by the uncertainty of macroeconomic impact of the Covid-19, as in February-March 2020, could exert pressure on the Indian rupee.
 - **Should the rupee depreciate by 5%** from the baseline, inflation could increase by around 20 bps while GDP growth could be higher by about 15 bps through increased net exports.
 - In contrast, **should Covid-19 normalise quickly**, strong capital flows could revive.
 - **An appreciation of the rupee by 5%** could moderate inflation by around 20 bps and GDP growth by around 15 bps vis-a-vis the baseline.

Monetary Policy

- The Reserve Bank of India (RBI) uses monetary policy to control **inflation, interest rates, supply of money and credit availability**.
- The RBI has a government-constituted **Monetary Policy Committee (MPC)** which is tasked with framing monetary policy using tools like the **repo rate, reverse repo rate, bank rate, Cash Reserve Ratio (CRR)**.
- The **repo rate**, also known as the policy rate, is the interest rate at which the RBI provides loans to banks.
- The **reverse repo** is the rate at which commercial banks park their money with the central bank.
- **Bank rate** is the rate charged by the RBI for lending funds to commercial banks.

- **Cash Reserve Ratio:** Banks are required to hold a **certain proportion of their deposits in the form of cash**. This **minimum ratio** (that is the part of the total deposits to be held as cash) is stipulated by the RBI and is known as the CRR.

Impact of Economic Slowdown Due to Covid-19

Why in News

Amid the ongoing economic slowdown due to Covid-19 pandemic, the government is facing several challenges like:

- Fall in tax collections.
- Foreign investors sold over ₹1 lakh-crore securities in a month (March), for the first time in history.
- Reserve Bank of India (RBI) has decided to shorten trading hours for foreign exchange and money markets products.

Fall in Tax Collections

- **Direct Tax Collections**
 - Direct tax is a tax paid directly by an individual or organization to the imposing entity. For example, income.
 - The government's net direct tax collections have **missed the downward revised target** for 2019-20 by Rs. 1.42 lakh crore. The overall collection stood at Rs. 10.27 lakh crore.
 - This is a **decline of over 8%** from previous year's receipts.
 - The contraction in direct tax collections in a financial year has been witnessed after a **gap of 20 years**. The Centre's direct tax receipts had last seen a year-on-year decline in 1998-99, when collections recorded a contraction of 3.5% in that financial year.
- **Indirect Tax Collections**
 - **Indirect tax** is a tax collected by one entity in the supply chain and paid to the government, but it is passed on to the consumer as part of the purchase price of a good or service. GST is an indirect tax.
 - The government has missed its **Goods and Services Tax (GST) collections target**.

Note:

- The reasons that led to the fall in GST collections in March below the Rs1 lakh crore mark are:
 - A drop of 7.8% in returns filing over last month.
 - 4% fall over last year in domestic revenue.
 - A sharp 23% fall in revenue from imports.
- **Consequences**
 - The government is likely to miss its revised **fiscal deficit** target of 3.8% for 2019-20.
 - The government's fiscal deficit during April-February increased to 135.2% of the revised estimate for the fiscal year 2019-20.

Foreign Portfolio Investors Sell Securities

- For the first time in the history of the Indian capital markets, **Foreign Portfolio Investors** (FPIs) have sold securities worth over ₹1 lakh crore in a single month (March 2020).
- As per data from the **National Securities Depository Limited (NSDL)**:
 - The cumulative net outflow from the debt and equity segments was pegged at ₹1.18 lakh crore in March.
 - This is more than double the previous high of ₹44,000 crore witnessed in June.
- **Reason:**
 - According to market participants, the ongoing Covid-19 pandemic that has affected stocks worldwide is the primary reason for such record outflows as foreign investors move away from **riskier assets and emerging markets**.
- **Impact of the sales on Sensex:**
 - Sensex registered its worst monthly fall in over 11 years.
 - In March, the Sensex lost a little over 23% which was the highest since October 2008 when it fell 23.89%.
 - However, buying by **Domestic Institutional Investors (DIIs)** has been acting as a strong counter force to the selling by foreign investors.

National Securities Depository Limited

- The enactment of **Depositories Act in August 1996** paved the way for establishment of NSDL in August 1996.
- It handles most of the securities held and settled in dematerialized form in the Indian capital market.

- NSDL works to support the investors and brokers in the capital market of the country.
- It aims at ensuring the safety and soundness of Indian marketplaces by developing settlement solutions that increase efficiency, minimize risk and reduce costs.

Domestic institutional investors

- DIIs are those institutional investors which undertake investment in securities and other financial assets of the country they are based in.
- **DIIs include:**
 - Banks.
 - Insurance companies.
 - Mutual funds.
 - Domestic financial institutions.

Shortening of Trading Hours

- The RBI has decided to shorten trading hours for foreign exchange and money markets products in the light of challenges posed by lockdown imposed to curb the spread of coronavirus.
- The shortened hours, from 10 am to 2 pm (earlier 9 am to 5 pm), will be in place from 7th-17th April, 2020.
- The new hours will be applicable to:
 - Call/term money
 - Call Money refers to the borrowing or lending of funds for 1 day.
 - Term money refers to borrowing and lending of funds for a period of more than 14 days.
 - Market repo in g-secs.
 - Tri-party repo in g-secs.
 - Commercial Paper
 - It is a short-term debt instrument issued by companies to raise funds generally for a time period up to one year.
 - Certificates of Deposit
 - It is a product offered by banks and credit unions that provides an interest rate premium in exchange for the customer agreeing to leave a lump-sum deposit untouched for a predetermined period of time.
 - Repo in corporate bonds.
 - Foreign currency and rupee trades.

Note:

RBI's Measures to Fight Economic Disruptions

Why in News

The **Reserve Bank of India (RBI)** has extended the realisation period of export proceeds and Ways and Means Advance (WMA) limit of state governments.

- Further, the central bank has provided relief to the banking sector's capital requirements.
- These steps have been taken to cushion the economic impact of the **coronavirus pandemic** and lockdown.
- These steps have come after the **RBI recently cut repo rate by 75 basis points**.

Key Points

- Extended the Realisation Period of Export Proceeds
 - The time period for realisation and repatriation of export proceeds made up to or on July 31, 2020 has been **extended to 15 months** from the date of export.
 - Earlier, the value of the goods or software exports made by exporters is required to be **realised fully and repatriated to the country within nine months from the date of exports**.
 - The measure will enable exporters to realise their receipts, especially from Covid-19 affected countries, within the extended period, and also provide greater flexibility to exporters to negotiate future export contracts with buyers abroad.
 - Export activities have been disrupted in the wake of the pandemic and lockdown in many countries.
- **Increased Ways and Means Limit**
 - RBI has **formed an advisory committee** to review the **Ways and Means limit** for State governments and Union Territories.
 - Till the panel submits its report, the **RBI has increased the Ways and Means advances limit by 30%** for States and union territories.
 - The revised limits will come into force with effect from April 1, 2020 and will be valid till September 30, 2020.
 - Recently, the **Central Government has hiked Ways and Means Advance (WMA) limit with the Reserve Bank of India (RBI) by 60%**.

- The '**Ways and Means Advances**' is a **scheme that helps meet mismatches in receipts and payments of the government**. Under this scheme, a government can avail itself of **immediate cash from the RBI**.
- **Deferred Counter Cyclical Capital Buffer (CCyB)**
 - The RBI has deferred the implementation of **Counter Cyclical Capital Buffer (CCyB)** for banks.
 - It has decided that it is not necessary to activate CCyB for a period of one year or earlier, as may be necessary.
 - **CCyB** is the **capital** to be kept by a bank **to meet business cycle related risks**.
 - It is aimed to protect the banking sector against losses from changes in economic conditions like recession.
 - This is an important theme of the **Basel III norms**.

Basel III Norms

- Basel III is an internationally agreed set of measures developed by the **Basel Committee on Bank Supervision (BCBS)** in response to the financial crisis of 2007-09.
 - It is a **committee under the Bank For International Settlements (Basel, Switzerland)**.
- The measures aim to strengthen the regulation, supervision and risk management of banks.
- BCBS members are committed to implementing and applying standards in their jurisdictions within the time frame established by the Committee.
- Basel III measures are based on three pillars:
 - **Pillar 1:** Improve the banking sector's ability to absorb ups and downs arising from financial and economic instability
 - **Pillar 2:** Improve risk management ability and governance of banking sector
 - **Pillar 3:** Strengthen banks' transparency and disclosures

E-Way Bills During Lockdown

Why in News

Recently, the transporters have raised concerns over potential penalties arising from expired electronic way (e-way) bills.

Note:



- In a petition to the Ministry of Finance, a group of truckers pointed out that the e-way bills could not be extended by the transporters on account of closure of offices, godowns and unavailability of staff.
- Truckers requested for the issue of immediate directions/guidelines to GST Commissioners (all States/UTs) to allow the vehicles in transit and goods not delivered to be exempted from any scrutiny or penal provisions to reach their destination smoothly, even if the e-way bill had expired.

Electronic Way Bill

- E-Way Bill is a **compliance mechanism** wherein by way of a digital interface the person causing the movement of goods uploads the relevant information prior to the commencement of movement of goods and generates a **e-way bill on the GST portal**.
- An electronic way bill or 'e-way bill' system offers the **technological framework to track intra-state as well as inter-state movements of goods of value exceeding Rs 50,000, for sales beyond 10 km** in the Goods and Services Tax (GST) regime.
- When an e-way bill is generated, a **unique E-way Bill Number (EBN) is allocated** and is available to the supplier, recipient, and the transporter.
- It was launched to
 - Facilitate faster movement of goods.
 - Improve the turnaround time of vehicles.
 - Help the logistics industry by increasing the average distances travelled and reducing the travel time as well as costs.

E-Way Bill Rules

- According to notified e-way bill rules, every supplier requires **prior online registration** on the e-way bill portal for the movement of goods.
- **Tax officials** have the power to scrutinise the e-way bill at any point during transit to check tax evasion.
- **Validity:**
 - The rules also specify that the permits for conventional cargo (other than over-dimensional cargo) are **valid for one day for the movement of goods for 100 km**, and in the same proportion for the following days.

- In general, validity of the **e-way bill cannot be extended but a commissioner may extend** the validity period only through issuing notification for certain categories of goods.

➤ Penalty for goods moved without generating a valid e-way bill:

- A fine of Rs 10,000 or amount of tax sought to be evaded, whichever is higher, may be imposed by tax authorities.
- In such a situation, goods, and the vehicle transporting them, can be detained or seized.
- An e-way bill can be regenerated by the transporter before expiry, but, **if the e-way bill has expired, the system won't allow regeneration** linked to the same invoice.

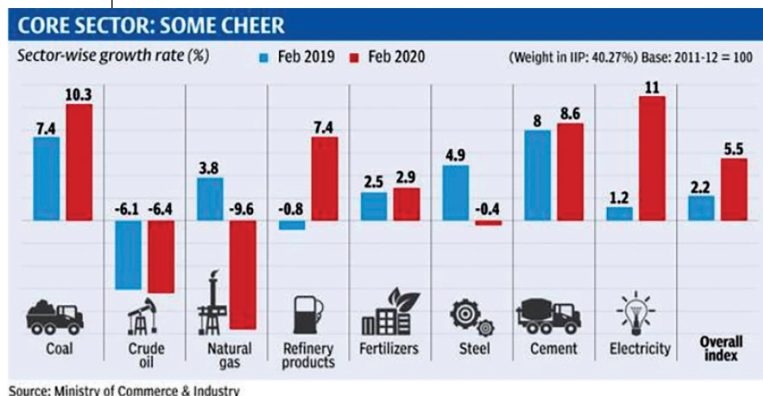
Core Sector Growth at 5.5%

Why in News

According to the data released by the **Ministry of Commerce and Industry**, the eight core sector industries recorded a **growth of 5.5% in February, 2020** which is **highest in 11-months**.

Key Points

- This spike is because of growth in **refinery products, electricity, fertiliser, cement and coal production**.
- However, **crude oil, natural gas, and steel** recorded negative growth rate in February.
- This was the **fourth consecutive month** when the index of eight core industries reported growth.
- The outlook may not be very bright for March 2020, as the **lockdown to check the spread of Covid-19** has disrupted the production process in the country and globally.



Note:

Core Sector Industries

- The **eight core sector industries** include coal, crude oil, natural gas, refinery products, fertiliser, steel, cement and electricity.
- The eight core industries **comprise 40.27% of the weight of items** included in the **Index of Industrial Production (IIP)**.
- The eight Core Industries in **decreasing order** of their weightage: **Refinery Products > Electricity > Steel > Coal > Crude Oil > Natural Gas > Cement > Fertilizers**.

Industry	Weight (In %)
Petroleum & Refinery production	28.04
Electricity generation	19.85
Steel production	17.92
Coal production	10.33
Crude Oil production	8.98
Natural Gas production	6.88
Cement production	5.37
Fertilizers production	2.63

Index of Industrial Production

- The Index of Industrial Production (IIP) is an index which details out the growth of various sectors in an economy such as mineral mining, electricity, manufacturing, etc.
- It is compiled and published monthly by the **Central Statistical Organisation (CSO), Ministry of Statistics and Programme Implementation** six weeks after the reference month ends, i.e a **lag of six weeks**.

The Base Year of the Index of Eight Core Industries has been revised from the year 2004-05 to 2011-12 from April, 2017.

Demand for MGNREGA Work Increased

Why in News

The demand for work by households under the **Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)** programme surged to a nine-year high in 2019-20.

Key Points

- According to the MGNREGA official portal, 5.47 crore households sought MGNREGA works, **the highest since 2010-11**, when the number was 5.5 crore.
- **More individuals too worked under MGNREGA in 2019-20**, with 7.86 crore employed at various sites across the country. This is the highest since 2012-13, when 7.97 crore individuals worked under this programme.
 - The **disruption caused by the coronavirus lockdown**, however, may impact the final figure of the person days generated in March 2020.
- The **gram panchayats not recording any MGNREGA expenditure has also declined**. This shows that more and more panchayats are using MGNREGA to provide unskilled work to the unemployed.
- These new **MGNREGA figures coincide with the sharp fall in GDP growth rate** to 5% in 2019-20, the lowest in a decade.
- The **demand for works under MGNREGA is surging despite the fact that wages have been flattening** in recent years.
 - In 2019-20, average MGNREGA wage per day per person was Rs 182.09, barely Rs 3 higher than Rs 179.13 in 2018-19.
- The data also showed that **263.73 crore person days** were generated during 2019-20, slightly lower than 267.96 crore in 2018-19 but significantly higher than the total person days generated during each financial year from 2012-13 to 2017-18.
- During 2019-20, the Centre released Rs 72,162.13 crore for the MGNREGA, the **highest ever amount**, and substantially higher than the Rs 62,125.07 crore released in 2018-19.

Mahatma Gandhi National

Rural Employment Guarantee Act, 2005

- The Act aims at **enhancing the livelihood security** of people in rural areas by **guaranteeing hundred days of wage employment in a financial year to a rural household** whose **adult members** (at least 18 years of age) volunteer to do unskilled work.
- The **central government bears the full cost of unskilled labour**, and 75% of the cost of material (the rest is borne by the states).
- It is a demand-driven, social security and labour law that aims to enforce the **'right to work'**.

Note:



- The **Ministry of Rural Development (MRD)**, Government of India in association with state governments, **monitors the implementation of the scheme.**
- Agriculture and allied activities constitute more than 65% of the works taken up under the programme.
- Social inclusion, gender parity, social security and equitable growth are the founding pillars of MGNREGA.

Fundraising for Covid-19

Why in News

Recently, the Government has hiked **Ways and Means Advance (WMA)** limit with the **Reserve Bank of India (RBI)** by 60%.

- The WMA limit is proposed to be revised to ₹1.20 lakh crore and would be reviewed on a need basis (from ₹75,000 crore last year).
- This is to compensate for the cash flow mismatch in Financial Year (FY) 21 expected from higher spending to combat the spread of **Covid-19**.

Ways and Means Advance scheme

- It was **introduced in 1997 to meet mismatches in the receipts and payments of the government.**
- The government can avail of **immediate cash from the RBI**, if required. However, it has to **return the amount within 90 days**. Interest is charged at the **existing repo rate**.
- If the WMA exceeds 90 days, it would be treated as an **overdraft** (the interest rate on overdrafts is 2 percentage points more than the repo rate).
- The limits for WMAs are **decided by the government and RBI** mutually and are revised periodically.
- A **higher limit provides the government flexibility** to raise funds from RBI without borrowing them from the market.

Key Points

- The government has announced a **₹1.7 lakh crore package (Pradhan Mantri Garib Kalyan Yojana)** to provide income support, free food and other facilities to the poor to help them **during the 21-day national lockdown**.
- The fundraising resources are **not only from the market, but also from institutions such as the RBI**.

- The **Budget 2020-21** has pegged the Centre's net market borrowing, including government securities, treasury bills and post office life insurance fund at ₹5.36 lakh crore.
- Out of **gross borrowings** of ₹7.8 lakh crore in FY21, the Centre has proposed to borrow ₹4.88 lakh crore, or 62.56%, in the first half of the fiscal, as against 62.25% in the previous fiscal.
- In FY21, the Centre also plans to issue the **Debt Exchange Traded Fund** comprising government securities to widen the base of investors.
 - This will enable **retail investors** who otherwise find it difficult to buy government bonds directly, take an exposure in this **risk free instrument**.

Exchange Traded Fund

- It is a **basket of securities** that trade on an exchange, just like a stock.
- ETF reflects the **composition of an Index**, like BSE Sensex. Its **trading value is based on the Net Asset Value (NAV) of the underlying stocks** (such as shares) that it represents.
- ETF share prices **fluctuate all day** as it is bought and sold. This is different from mutual funds that only trade once a day after the market closes.
- An ETF can **own hundreds or thousands of stocks across various industries**, or it could be isolated to one particular industry or sector.

Impact of Lockdown on Banks

Why in News

Banks are concerned about the **build up of Non-performing Assets (NPAs)** as the disruption caused to business operations and supply chains during the 21-day lockdown period will take time to repair.

- This is **despite the fact that the Reserve Bank of India (RBI) has injected fresh liquidity** into the banking system and given banks leeway to deal with potential stress in loan accounts.

Concerns of Bankers

- **Fresh NPAs**
 - The 21-day period lockdown caused pain to lenders, especially in loan accounts from sectors including Micro, Small & Medium Enterprises

Note:

(MSMEs), airlines, real estate, auto dealers, gems and jewellery, metals among others.

- Banks were **concerned about MSME loans and those extended to manufacturing sectors**, such as auto, steel, renewable energy, as those where fresh NPAs are looming.
- According to the **RBI's financial stability report**, the share of large borrowers in scheduled commercial banks' total loan portfolios and their share in GNPA's was at 51.8% and 79.3% respectively, in September 2019.
- **Problems Within Different Sectors**
 - **Capital intensive sectors** such as aviation, real estate, consumer durables, and jewellery **may take a long time before there is a demand revival**.
 - **Renewable power is struggling** because of **complete disruption of supply chains from China**, as a result of which they are way behind on project schedules and could face payment issues from their customers, the power discoms.
- **Fear of Extended Lockdown:** Measures by the RBI will provide banks some relief during the next three months, but a buildup of bad loans looks inevitable. While moratorium provides temporary relief to borrowers and helps check the NPAs during that period, an extended lockdown is expected to have a significant adverse effect on the economy.
- **Analysis By Different Rating Agencies**
 - **Moody's Investors Service:** It expects deterioration in banks' asset quality due to disruption in economic activity. It has changed the outlook for Indian banking system to negative from stable.

Non-Performing Asset

- NPA refers to a classification for loans or advances that are in **default or are in arrears** on scheduled payments of principal or interest.
- In most cases, debt is classified as non-performing, when the loan payments have not been made for a **minimum period of 90 days**.
- **Gross non-performing assets** are the sum of all the loans that have been defaulted by the individuals who have acquired loans from the financial institution.
- **Net non-performing assets** are the amount that is realized after provision amount has been deducted from the gross non-performing assets.

○ **According to a report released by Crisil:** The asset classes will see continuing pressures on asset quality due to weaker profiles of borrowers and expectation of only a gradual economic recovery. In study of 35 sectors, both from manufacturing and services, there is a sharp variation in resilience in a post-Covid-19 landscape.

- **High Resilience Category:** Pharmaceuticals, telecom, Fast Moving Consumer Goods (FMCG), fertiliser, oil refineries, power & gas distribution and transmission are among the sectors comprising nearly 44% of the debt.
- **Moderate Resilience Category:** Another 52% debt is in sectors such as automobile manufacturers, power generators, roads and construction.
- **Least Resilient Category:** Around 4% of debt in sectors such as airlines, gems and jewellery, auto dealers and real estate, given the discretionary nature of goods and services, and weak balance sheets.

EPFO Disbursed Claims

Why in News

The **Employees' Provident Fund Organisation (EPFO)** has processed nearly **1.37 lakh claims** and **disbursed an amount of Rs 279.65 crore since the launch of the online facility allowing advance withdrawal on March 29, 2020.**

Key Points

- The **scheme allowing advance withdrawal from EPF accounts** was notified in the wake of the **coronavirus pandemic**.
- It **allows withdrawal not exceeding the basic wages and dearness allowances for three months or up to 75% of the PF balance**, whichever is less.
- The Finance Minister — as part of the **Pradhan Mantri Garib Kalyan Yojana** — had said that the government will bear the **cost of the provident fund contributions, both of the employer and employees — 12% each — for the three months (April – June)** for those establishments which have up to **100 employees and 90% of whom are earning less than ₹15,000 per month as salary**.
 - The government also relaxed withdrawal conditions from EPF accounts.

Note:



Employees' Provident Fund Organisation (EPFO)

- It is a **government organization** that manages **provident fund and pension accounts** for the **workforce engaged in the organized sector** in India.
- It **implements the Employees' Provident Fund and Miscellaneous Provisions Act, 1952**.
 - The Employees' Provident Fund and Miscellaneous Provisions Act, 1952 provides for the institution of provident funds for employees in factories and other establishments.
- It is **administered by the Ministry of Labour & Employment**, Government of India.
- It is **one of the World's largest Social Security Organisations** in terms of clientele and the volume of financial transactions undertaken.

Fall in IHS Markit India Services Business Activity Index

Why in News

The **IHS Markit India Services Business Activity Index (i.e Service Purchasing Managers' Index (PMI))** was at 49.3 in March, down from February's 85-month high of 57.5.

Key Points

- The Index is **compiled by IHS Markit** for more than 40 economies worldwide. IHS Markit is a global leader in information, analytics and solutions for the major industries and markets that drive economies worldwide.
- The fall implies contraction in India's **services sector activity** during March basically due to **Covid-19**.
 - In PMI parlance, a print above 50 means expansion, while a score below that denotes contraction.
- The **Composite PMI Output Index** that maps both the manufacturing and services sector also fell to 50.6 in March, down 7 points from February's 57.6.

Purchasing Managers' Index

- PMI is an index of the prevailing direction of **economic trends in the manufacturing and service sectors**.
- It consists of a diffusion index that summarizes whether **market conditions**, as viewed by purchasing managers, are expanding, staying the same, or contracting.

- The purpose of the PMI is to provide information about **current and future business conditions to company decision makers, analysts, and investors**.
- It is **different from the Index of Industrial Production (IIP)**, which also gauges the level of activity in the economy.

Index of Industrial Production

- The Index of Industrial Production (IIP) is an index which details out the growth of various sectors in an economy such as mineral mining, electricity, manufacturing, etc.
- It is compiled and published monthly by the **Central Statistical Organisation (CSO), Ministry of Statistics and Programme Implementation**.
- The **Base Year of the Index of Eight Core Industries** has been revised from the year 2004-05 to 2011-12 from April, 2017.
 - The eight core industries comprise 40.27% of the weight of items included in the Index of Industrial Production (IIP).
 - The eight Core Industries in decreasing order of their weightage: Refinery Products> Electricity> Steel> Coal> Crude Oil> Natural Gas> Cement> Fertilizers.

Difference between PMI and IIP

- IIP covers the **broader industrial sector compared to PMI**.
 - Index of Industrial Production (IIP) measures **growth in the industrial sector**.
 - IIP shows the **change in production volume** in major industrial sub sectors like manufacturing, mining and electricity.
 - Similarly, the IIP also gives **use based (capital goods, consumer goods etc) trends in industrial production**.
- **PMI is more dynamic compared to a standard industrial production index**.
 - The PMI senses dynamic trends because of the variable it uses for the construction of the index compared to **volume based production indicators like the IIP**.
 - For example, new orders under PMI show growth oriented positive trends and not just volume of past production that can be traced in an ordinary Index of Industrial Production.

Note:

Fraud Oversight Wing

Why in News

The Reserve Bank of India (RBI) is in the process of putting together an **exclusive wing for banking fraud oversight**.

- This wing will have teams for meta-data processing and analysis, artificial intelligence analysis units, as well as proactive risk assessment cells.

Key Points

- **Strength and Participation: The banking fraud oversight wing** may comprise **up to 600 officers** along with experts from the private sector.
- The RBI would hire fresh people, including **industry veterans** to lead the teams.
- **Training:**
 - Experts from the **private sector working** in all these domains will be brought in to train the new members in the fraud oversight wing.
 - These training sessions will be repeated **every year in the initial years**.
 - These new teams will also be given training in the **latest technologies**, so that they can also **prevent another Yes Bank kind of event**.

Background

- The RBI had been mulling ways to proactively detect such frauds after the loan fiasco at **Punjab National Bank**.
 - The bank fraud to the tune of Rs 11,450 crore involving diamond merchant Nirav Modi. It came to light that the company, in connivance with retired employees of PNB, got at least 150 LoUs, allowing Nirav Modi Group to defraud the bank and many other banks who gave loans to him.
- As part of that plan, the banking regulator in 2019 had moved to create a **separate cadre** of its own employees who would work in **regulation and oversight sections**.
- However, the working conditions were very strict and anyone opting for that cadre **would not be allowed to leave for three years**. To overcome this problem, the RBI sought to create a fraud oversight wing.

Yes Bank Case

- Even though there were representatives of RBI on the Yes Bank board, it was difficult for them to flag the risk for they had never done a credit risk assessment task in their career so far.
- **Steps Taken:**
 - The RBI, on March 5, superseded the board of Yes Bank and placed it under immediate moratorium.
 - Withdrawals from the bank were capped at Rs 50,000.
 - RBI appointed the former State Bank of India (SBI) Chief Financial Officer as the bank's administrator.
- **Reconstruction Plan:**
 - RBI had suggested the possibility of SBI, India's largest bank, acquiring a 49% equity stake.
 - SBI later committed to invest up to Rs 7,250 crore in Yes bank.

NBFCs Face Moratorium Issue with Banks

Why in News

- Non-Banking Financial Companies (NBFCs)** may face a tough time following the Reserve Bank of India's recent directive on providing a moratorium on repayment.
- This is because though these entities are providing **moratoriums to their customers**, they still have to continue repaying banks and other borrowers.

Key Points

- **Banks are not willing to offer any moratorium** on term loans taken by the NBFCs. This has put significant pressure on liquidity profiles of many NBFCs.
 - A significant part of money disbursed by NBFCs is loan taken **from banks**.
 - **Moratorium simply refers** to a legal authorisation to existing borrowers to defer or postpone their loan repayments for a predetermined period.
- The Reserve Bank of India (RBI) had asked banks, co-operative banks and NBFCs to offer a **three-month moratorium on loan repayments by their customers** in the wake of the **Covid-19 pandemic** and the nationwide lockdown.
 - The RBI has not specifically said NBFCs should not be given moratorium by banks.

Note:



Non-Banking Financial Company

- NBFC is a company registered under the **Companies Act, 1956**.
- It is engaged in the **business of loans and advances, acquisition of shares/stocks/bonds/debentures/securities** issued by Government or local authority or other **marketable securities** of a like nature, leasing, hire-purchase, insurance business, chit business.
- But, it does not include any institution whose principal business is that of **agriculture activity, industrial activity, purchase or sale of any goods (other than securities) or providing any services and sale/purchase/construction of immovable property**.
- A non-banking institution which is a company and has principal business of receiving deposits under any scheme or arrangement in **one lump sum or in installments by way of contributions or in any other manner**, is also a non-banking financial company (Residuary non-banking company).

Features of NBFCs

- NBFC cannot accept demand deposits.
 - NBFCs do not form part of the payment and settlement system and cannot issue cheques drawn on itself.
 - Deposit insurance facility of Deposit Insurance and Credit Guarantee Corporation is not available to depositors of NBFCs.
- While a few banks are inclined to offer moratorium on NBFC loans, some of the big banks have ruled out any such facility.
 - The NBFCs have already been facing liquidity problems due to the **IL&FS and DHFL crises**.
 - Total bank loan outstandings to Non-Banking Financial Company (NBFC) sector were **Rs. 7,37,198 crore as of January 31, 2020 showing a rise of 32.2 per cent** on a year-on-year basis.
 - **Collections from customers have declined** due to the **lockdown**, closure of units and job losses.
 - Almost **60% of NBFC borrowings** are from non-bank sources and require continuity in debt servicing.
 - With minimal collections, NBFCs can only depend on their **cash reserves and any backup credit lines from banks**, if available for servicing such debt.

- Debt service is the cash that is required to cover the repayment of interest and principal on a debt for a particular period.

➤ **Reserve Bank of India's (RBI) Move**

- The **RBI** has made available **Rs 1 lakh crore through its targeted long-term repo operations (TLTRO) window**.
 - Corporates and government-owned financiers will also be interested in this window.
 - Only higher rated NBFCs may end up benefiting.
- **Industry chamber Assocham** has proposed a **special liquidity window for NBFCs**, but the RBI has not shown any inclination so far.

Renewable Energy Certificates**Why in News**

Recently, sales of **Renewable Energy Certificates (RECs)** rose over 79% to 8.38 lakh units in March compared to 4.68 lakh in the same month a year ago **owing to good supply**.

Key Points

- REC is a **market-based instrument to promote renewable sources of energy and development of the market in electricity**.
 - One REC is created when **one megawatt hour of electricity** is generated from an **eligible renewable energy source**.
- REC acts as a **tracking mechanism for solar, wind, and other green energies** as they flow into the power grid.
- RECs go by many names, including **Green tag, Tradable Renewable Certificates (TRCs), Renewable Electricity Certificates, or Renewable Energy Credits**.
- Under **Renewable Purchase Obligation (RPO)** bulk purchasers like discoms, open access consumers and capacitive users are required to buy a certain proportion of RECs. They can buy RECs from renewable energy producers.
 - **RPO was instituted in 2011**. It is a mandate that requires **large power procurers to buy a predetermined fraction of their electricity from renewable sources**.
- The **proportion** of renewable energy for utilities is **fixed by the central and state electricity regulatory commissions**.

Note:

- In India, RECs are traded on **two power exchanges** — **Indian Energy Exchange (IEX)** and **Power Exchange of India (PXIL)**.
- The price of RECs is **determined by market demand** and contained between the **'floor price'** (minimum price) and **'forbearance price'** (maximum price) specified by the **Central Electricity Regulatory Commission (CERC)**.

Central Electricity Regulatory Commission

- It is a **regulator of the power sector** in India.
- It intends to **promote competition, efficiency and economy in bulk power markets, improve the quality of supply, promote investments** and **advise the government** on the removal of institutional barriers to bridge the demand supply gap.
- It is a **statutory body** functioning with **quasi-judicial status** under the **Electricity Act, 2003**.

Government Cuts Interest Rates on NSC, PPF

Why in News

Recently, the Government of India **slashed interest rates on small savings schemes**, including National Savings Certificate and Public Provident Fund **to counter the economic fallout of the coronavirus pandemic**.

- **The move by the government has followed the Reserve Bank of India's (RBI) recent 75 bps cut in its key interest rate.**
- Interest rates for small savings schemes are **notified on a quarterly basis**.

Key Points

- **In the case of the National Savings Certificate**, the government has brought down interest rates by **110 basis points (bps) to 6.8%**.

- **Interest rates on Public Provident Funds (PPF)** for the quarter have been brought down by 80 bps to 7.1%.
- Interest rates for **Kisan Vikas Patra** have slashed by 70 bps to 6.9%.

Decoding the Rate Cuts

- The rate cut is in the line with RBI's recent move to slash key interest rates.
- Government's decision is the **part of the Fiscal Policy which is a sister strategy to monetary policy (decided by the Central Bank)** used in different combinations to achieve the country's economic goal.
- **Small savings schemes are attractive because of higher interest rates and tax benefits**, and that hurts the mobilisation of bank deposits.
- **It also affects the transmission of policy rate cuts**, which is why the RBI also advocated **rate rationalisation** on small saving.
- The move will lead the nation into a **low-interest rate regime**.

Small Saving Scheme

- The small savings scheme basket comprises 12 instruments.
- It includes - National Saving Certificate (NSC), Public Provident Fund (PPF), Kisan Vikas Patra (KVP) and Sukanya Samriddhi Scheme.
- It also includes Saving Deposit, Monthly Income Deposit, several time and recurring deposits.
- The rates for small saving schemes are **announced quarterly**.
- Theoretically the rate changes is based on yields of government securities of corresponding maturity. However, political factors also influence the rate change.
- The **Shyamala Gopinath panel** constituted on the Small Saving Scheme had suggested a market-linked interest rate system for small savings schemes.



Note:

International Relations

Highlights

- Globalisation & Covid-19
- India-China: 70 Years of Diplomatic Relations
- Talks on Oil Cut Deal at G-20
- IMF Cancels Debt Payments
- ADB Assures Covid-19 Support Package
- Syrian Air Force Behind Chemical Attacks
- Threat of Food Shortage: UN, FAO and WTO
- India Moves WTO on US Tariffs
- China at Top in Global Patent Race
- India-Pak Tension Amidst Covid-19
- ASEAN Summit on Covid-19
- Chinese Trawlers in South China Sea
- Operation Sanjeevani

Globalisation & Covid-19

Why in News

Global leaders have reached this consensus that the **pandemic Covid-19** and the crisis it has generated is a turning point in modern history.

- The crisis offers the world an opportunity to **forge a new human-centric concept of globalisation.**

Key Points

- The rapid worldwide spread of **Covid-19** has a lot to do with the **fallout of globalisation**, including the **travel industry, tourism**, and the neoliberal attack on **universal health care** which can be understood by the **examples of South Korea, Iran and Sri Lanka.**
- **South Korea:**
 - The transmission of the Covid-19 in South Korea is related to the Shincheonji Church of Jesus.
 - This **cult facilitated the transmission** of the disease from Wuhan to South Korea because of **frequent travel among its followers.**
- **Iran:**
 - The coronavirus was introduced in Iran through **globalisation-triggered international alignment and incubated through political and religious processes.**
 - **The economic sanctions imposed by the U.S. dominated western countries** compelled Iran to develop ties with China. Which in turn, made the **traders act as the carriers** of the viruses.

- The **initial hub of disease transmission** in Iran was Qom, a **popular pilgrimage centre for Shiite Muslims** from where it reached the **Iranian Parliament**, having strong ties with Qom.

➤ Sri Lanka & India:

- Here the onset of the Covid-19 has a lot to do with **tourism and labour migration**, processes intimately connected with globalisation.
- Both in **Sri Lanka and India**, the **first cases were reported among foreign tourists** from China and Italy respectively.
- The **tour guides** became the **first set of local people exposed** to the disease triggering local transmissions.
- Both Sri Lanka and Kerala in India have **large portions of their labour force employed overseas.**
- **Returnees** from these overseas destinations have contributed to the upsurge in the Covid-19 epidemic in South Asian countries.

Challenges

- The quarantine and social distancing processes may not be **totally effective** in so far as the migrant workers and their families are often in between two states, experiencing difficulties at both ends.
- Both migrant workers and tourist guides already experience discrimination of various kinds because of their occupations and the risks involved and the quarantine has added to their misery.

Way Forward

- The world needs to think **beyond social distancing and quarantining** the affected people and places.

Note:



Globalisation

- It refers to the **economic, social, and political integration of nations**. It entails the spread of products, technology, information, and jobs across national borders and cultures.
- In **economic terms**, it describes an **interdependence of nations** around the globe, fostered through free trade.
- Globalisation can be further divided into subcategories based on its time frame and focus areas:
 - **Globalization 1.0**
 - It was **pre-World War I** globalization, which was launched by a historic drop in trade costs.
 - This globalization came with almost no government support and was without global governance.
 - **Globalization 2.0**
 - It is the **post-World War II** phase where trade in goods was combined with complimentary domestic policies.
 - The market was in charge of efficiency while the government was in charge of justice.
 - It saw the establishment of institute-based, rule-based international governance, specifically the **United Nations (UN), International Monetary Fund (IMF), World Bank, World Trade Organisation (WTO, earlier GATT), International Labor Organization (ILO)**, etc.
 - **Globalization 3.0**
 - It created a new world of manufacturing in which high-tech was combined with low wages.
 - This was achieved through the establishment of global supply chains as factories crossed international borders.
 - It was variously called **New globalization, Hyper globalization, Global value chain evolution**.
 - **Globalization 4.0**
 - It is the latest stage of globalization which involves cutting-edge technologies like **artificial intelligence (AI)** that powers forward with the explosion of information technology.
 - These technologies shrink distances, open up borders and minds and bring people all across the globe closer together.

- Broader and deeper issues like **fallout from globalisation need to be analysed** and questioned.
- In the recent **G20 video conference**, Indian Prime Minister stressed the world leaders to look at **humanitarian aspects to global challenges like pandemics, climate change and terrorism, not just economic ones**.
- The world needs to redefine globalisation and make it more **human-centric instead of market and profit-oriented**.
- There is a need to **devote special attention to the needs of less developed countries** as they might not contribute to the causes but face the severity of the situation far worse.

India-China: 70 Years of Diplomatic Relations

Why in News

India and China mark 1st April 2020 as the **70th anniversary of the establishment of diplomatic relations between them starting from 1950 till now**.

Chronology

- **1950**
 - India and China established **diplomatic relations on 1st April 1950**.
 - **India** was the **first non-socialist country** to establish relations with the People's Republic of China and the catchphrase '**Hindi Chini Bhai Bhai**' became famous.
- **1955**
 - Both countries attended the **Asian-African Conference** in which 29 countries participated in **Bandung, Indonesia** and jointly advocated the **Bandung Spirit of solidarity, friendship and cooperation**.
 - It has led to the decolonisation of the whole of Asia and Africa and to the formation of a **Non-Aligned Movement** as the third way between the Two Blocs of Superpowers.
 - The First NAM Conference took place in **Belgrade, Yugoslavia, in September 1961**.
- **1962**
 - The **border conflict** led to a serious setback in bilateral relations.

Note:



- **1976**
 - China and India **restored ambassadorial relations** and bilateral ties improved gradually.
- **1988**
 - Indian Prime Minister Rajiv Gandhi visited China, **initiating the process of normalization of bilateral relations.**
 - The two sides **agreed to look forward** and develop bilateral relations actively in other fields.
 - It was also agreed to establish a Joint Working Group (JWG) - to seek fair, reasonable and mutually acceptable solutions on the boundary question - and a Joint Economic Group (JEG).
- **1992**
 - Indian President **R. Venkataraman** visited China.
 - He was the **first President who visited China since the independence of the Republic of India.**
- **1996**
 - Chinese President Jiang Zemin visited India.
 - He was the **first head of state from China who visited India since the establishment of bilateral ties.**
 - **Agreement** between the Government of China and the Government of India on **Confidence Building Measures in the Military Field** along the Line of Actual Control in the India-China Border Areas was **signed.**
- **2000**
 - Indian President K R Narayanan visited China on the occasion of the **50th anniversary of the establishment of diplomatic ties** between China and India.
- **2008**
 - **“A Shared Vision for the 21st Century”** was **agreed upon** by the two governments.
- **2010**
 - The **60th anniversary of the establishment of diplomatic ties** between China and India.
 - In December, the two countries issued a **Joint Communiqué.**
- **2011**
 - It was the **‘China-India Exchange Year’.**
 - Both sides held a **series of people-to-people and cultural exchange activities.**
 - Both of them signed a **memorandum on a joint**

- **compilation for the ‘Encyclopedia of India-China Cultural Contacts’.**
- **2012**
 - It was the **‘Year of China-India Friendship and Cooperation’.**
 - The head of the governments met each other on the **sidelines of the 4th BRICS Summit** and the **United Nations Conference on Sustainable Development.**
- **2015**
 - The two sides met on the sidelines of the **7th BRICS Summit in Ufa, Russia** and the **Leaders’ Meetings on East Asia Cooperation in Malaysia.**
 - China decided to **open the Nathu La Pass (Sikkim)** to Indian official pilgrims to Xizang.
 - India celebrated the **India Tourism Year** in China.
- **2018**
 - Chinese President held an **informal meeting with the Indian Prime Minister in Wuhan** which set up a new model of exchanges between two leaders.
 - Indian Prime Minister visited China to attend the **SCO Summit in Qingdao.**
 - The two leaders met again on the **sidelines of the 10th BRICS Summit and the G20 Summit in Buenos Aires.**
- **2019**
 - The **second informal meeting was held in Mamallapuram, Chennai** which reaffirmed the **Wuhan consensus.**
 - Both nations agreed to build a closer partnership for development, enhance the in-depth strategic communication, promote mutually beneficial cooperation in various fields, and advance exchanges and mutual learning between the two civilizations.
 - Both sides met on the sidelines of the **SCO Summit in Bishkek and the 11th BRICS Summit.**
- **2020**
 - It marks the year of the **70th anniversary of the establishment of diplomatic relations** between China and India.
 - It is also **China-India Year of Cultural and People-to-People Exchanges**, where the two sides agreed to hold 70 celebratory activities to demonstrate the historic connection between the two civilizations as well as their growing bilateral relationship.

Note:

Facts and Figures on China-India Cooperation

- **Political and Diplomatic Relations**
 - The **Communist Party of China (CPC)** has maintained friendly exchanges with 9 major Indian political parties including the BJP, Congress, and left-wing parties for a long time.
 - 20 **Inter-parliamentary friendship groups** have been set up by China and India.
 - There are 50 **dialogue mechanisms** between China and India for exchanging views on various topics of bilateral, regional, and global concern.
- **Economy and Trade**
 - Since the beginning of the 21st century, trade between China and India has grown from less than \$3 billion to nearly \$100 billion, an **increase of about 32 times**.
 - In 2019, the trade volume between China and India was \$92.68 billion.
 - With a **combined market of over 2.7 billion people and a GDP of 20% of the world's total**, China and India enjoy huge potential and broad prospects for economic and trade cooperation.
- **Science and Technology**
 - Both nations have held **Joint Research workshops** on Science and Technology Innovation.
 - Indian companies have set up **IT corridors in China**, which help promote China-India cooperation in information technology and high technology.
- **Defense**
 - **'Hand-in-Hand' joint anti-terrorist exercises** to enhance mutual understanding and trust, exchange training experiences and jointly improve anti-terrorism capabilities.
 - **China-India defense and security consultation** to strengthen exchanges and cooperation in the defense field.
- **People-to-People Exchanges**
 - Both nations have held meetings of **China-India High-Level People-to-People and Cultural Exchanges Mechanism**. The two sides have made progress on exchanges and cooperation in the fields of art, publishing, media, film and television, museum, sports, youth, tourism, locality, traditional medicine, yoga, education, and think tanks.
 - Sessions of **China-India High-Level Media Forum** and **China-India Think Tank Forum** were held to

strengthen exchanges and cooperation in the field of media and think tanks.

- The two countries have established **pairs of sister cities and provinces**. For example, sister provinces and cities between **Fujian Province and Tamil Nadu State, Quanzhou City and Chennai City**.
- The **number of Indian pilgrims to the Xizang Autonomous Region of China has surged** from several hundreds in the 1980s to more than 20,000 in 2019.

Way Forward

- Today's achievements in India-China relations embody the great efforts of several generations.
- Both nations **need to master the four keys of:**
 - **Leading:** To reach consensus and guide the direction of the development of bilateral relations under the guidance of leaders from both nations.
 - **Transmitting:** To transmit the leaders' consensus to all levels and translate it into tangible cooperation and outcomes.
 - **Shaping:** To go beyond the mode of managing differences, shape bilateral relations actively, and accumulate positive momentum.
 - **Integrating:** To strengthen exchanges and cooperation, promote convergence of interests, and achieve common development.
- At this moment, it is particularly important to revisit the original aspiration of establishing diplomatic relations 70 years ago and carry forward the spirit of good neighborliness and friendship, unity, and cooperation.

Talks on Oil Cut Deal at G-20

Why in News

Recently, at **G20** talks, top oil nations pushed to finalise a deal on oil cuts to lift prices slashed by the coronavirus crisis.

Key Points

- Measures to curb the spread of the **coronavirus have destroyed demand for fuel** and driven down oil prices.
 - It strained the budgets of oil producers and also affected the U.S. shale industry which is more vulnerable to low prices due to its high costs.

Note:



- **Saudi Arabia and Russia and its allies (OPEC + group)**, had forged a pact to curb crude production by the **equivalent of 10% of global supplies**.
- They **also want other producers** including the United States and Canada to cut a further 5%.
 - The **crisis in the oil market** has **pushed Russia and Saudi Arabia to patch up differences** after their hostile meeting in March, 2020.
 - The **dispute over how best to tackle falling prices** led them to scrap their existing pact on production restraint that had helped balance the oil market for three years.
- Russia and Saudi Arabia agreed that their cuts would both be calculated from an October 2018 baseline.
- But **efforts to conclude the deal hit the buffers** when **Mexico said it would only cut output by a quarter of the amount** demanded by OPEC +.
 - Mexico also said that the US had offered to make extra U.S. cuts on Mexico's behalf.
- The demand for oil has plunged by 30% and even an unprecedented cut of 15% made by the deal in global supplies would have little effect on prices.
- The head of the **International Energy Agency** said **importing countries could offer some support to the market by making extra purchases** of crude for strategic reserves.
 - The United States has said that it would help demand by opening its strategic reserve to store as much oil as possible.

OPEC +

- The **non-OPEC countries which export crude oil** are termed as **OPEC + countries**.
- OPEC + countries include Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, Russia, South Sudan and Sudan.

Organization of the Petroleum Exporting Countries

- It is a **permanent, intergovernmental organization**, created at the **Baghdad Conference** in 1960, by **Iran, Iraq, Kuwait, Saudi Arabia, and Venezuela**.
- It aims **to manage the supply of oil in an effort to set the price of oil in the world market**, in order to avoid fluctuations that might affect the economies of both producing and purchasing countries.

- It is headquartered in **Vienna, Austria**.
- OPEC membership is open to any country that is a substantial exporter of oil and which shares the ideals of the organization.
- As of April 2020, OPEC has a total of 13 Member Countries viz. Iran, Iraq, Kuwait, United Arab Emirates (UAE), Saudi Arabia, Algeria, Libya, Nigeria, Gabon, Equatorial Guinea, Republic of Congo, Angola, and Venezuela.

G-20

- The G20 is an **informal group of 19 countries** and the **European Union**, with representatives of the **International Monetary Fund and the World Bank**.
- The G20 membership comprises a **mix of the world's largest advanced and emerging economies**, representing about two-thirds of the world's population, 85% of global gross domestic product, 80% of global investment and over 75% of global trade.
- The members of the G20 are Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the United Kingdom, the United States and the European Union.
- It does not have **any permanent secretariat** or headquarters.

IMF Cancels Debt Payments

Why in News

Recently, the **International Monetary Fund (IMF)** approved a \$500 million grant to cancel six months of debt payments for 25 of the world's most impoverished countries.

Key Points

- This will provide grants to the poorest and most vulnerable member countries of the IMF to tackle the **Covid-19 pandemic**.
- Many of these 25 countries have less than 50 critical care unit beds per country. They will be able to channel more of their scarce financial resources towards vital emergency medical and other relief efforts.
- The money will come from the IMFs revamped **Catastrophe Containment and Relief Trust (CCRT)**

Note:

which will use recent pledges of **185 million from the United Kingdom** and **100 million from Japan**.

- The IMF urged other donors to help replenish the trusts resources.
- The IMF approved the immediate debt service relief for **19 African countries including Afghanistan, Haiti, Nepal, Solomon Islands, Tajikistan and Yemen**.

Catastrophe Containment and Relief Trust

- The 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**.
- The relief on debt service payments frees up additional resources to meet exceptional balance of payments needs created by the disaster and for containment and recovery.
- It was established in February 2015 during the **Ebola outbreak** and modified in March 2020 in response to the Covid-19 pandemic.

International Monetary Fund (IMF)

- The IMF came into existence after the **UN conference in Bretton Woods** in 1944.
- The 44 countries at that conference sought to build a framework for economic cooperation to avoid a repetition of the competitive devaluations that had contributed to the **Great Depression of the 1930s**.
- IMF currently has 189 member countries, each of **which has representation on the IMF's executive board** in proportion to its financial importance. The **most powerful countries in the global economy have the most voting power**.

Objective

- Foster global monetary cooperation
- Secure financial stability
- Facilitate international trade
- Promote high employment and sustainable economic growth
- And reduce poverty around the world

Functions

- **Provides Financial Assistance: To provide financial assistance to member countries with balance of payments problems, the IMF lends money to replenish international reserves, stabilize currencies and strengthen conditions for economic growth.**

Countries must embark on structural adjustment policies monitored by the IMF.

- **IMF Surveillance:** It oversees the international monetary system and monitors the economic and financial policies of its 189 member countries. As part of this process, which takes place both at the global level and in individual countries, the IMF highlights possible risks to stability and advises on needed policy adjustments.
- **Capacity Development:** It provides technical assistance and training to central banks, finance ministries, tax authorities, and other economic institutions. This helps countries raise public revenues, modernize banking systems, develop strong legal frameworks, improve governance, and enhance the reporting of macroeconomic and financial data. It also helps countries to make progress towards the **Sustainable Development Goals (SDGs)**.

ADB Assures Covid-19 Support Package

Why in News

The **Asian Development Bank (ADB)** has assured the **Ministry of Finance of USD 2.2 billion (about Rs 16,500 crore)** support to India in its fight against the Covid-19 pandemic.

- On **18th March, 2020**, ADB announced an **initial package of approximately USD 6.5 billion** to address the immediate needs of its **developing member countries, including India**, as they respond to the Covid-19.
- The **World Bank has approved a \$1-billion assistance to help India** prevent, detect and respond to the outbreak, and strengthen its public health preparedness.

Key Points

- **Background: Weakening global economic growth** is causing:
 - Disruptions in India's trade and manufacturing supply chains.
 - Slowdown in tourism and other economic activities.
 - Strain on the large number of micro, small, and medium-sized enterprises.
 - A negative impact on the livelihood of formal and informal labourers across the country, etc.

Note:

- **ADB praised efforts of the Government:** ADB praised the Indian government's decisive response to the pandemic, including:
 - A **national health emergency program**.
 - **Tax and other relief measures** provided to businesses.
 - **Rs 1.7 lakh crore economic relief package (Pradhan Mantri Garib Kalyan Yojana)**, which provides immediate income and consumption support to the poor, women and workers affected by the three-week nationwide lockdown.
- **ADB's Support to India**
 - It is now preparing **USD 2.2 billion in immediate assistance** in response to Covid-19 to the health sector to help alleviate the economic impact of the pandemic on the poor.
 - ADB is also engaged with the **private sector to meet its financing needs** during this period.
 - It is ready to provide **further financial assistance and policy advice** whenever the situation warrants.
 - ADB is also planning to **consider all financing options available to meet India's needs**, to facilitate swift disbursement of ADB funds including emergency assistance, policy-based loans, and budget support.

Asian Development Bank

- It is a **regional development bank** established on **19th December 1966**.
- ADB has **68 members, 49 from within Asia**.
- **Japan holds the largest proportion** of shares in ADB followed by the USA.
- It aims to promote social and economic development in Asia.
- ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty.
- ADB is **headquartered at Manila, Philippines**.

Syrian Air Force Behind Chemical Attacks

Why in News

Recently, the **Organisation for the Prohibition of Chemical Weapons (OPCW)** has said that the Syrian air force carried out three chemical attacks on a village in **Syria's western Hama region** in 2017.

Key Points

- The **OPCW Investigation and Identification Team (IIT)** was established by OPCW in 2018 to identify the perpetrators of illegal attacks.
 - It concluded that the Syrian air force helicopter dropped bombs containing **poisonous chlorine and sarin nerve gas**
- The Syrian government has denied using chemical weapons.

Organisation for the Prohibition of Chemical Weapons (OPCW)

- It is an international organization established by the **Chemical Weapons Convention, 1997** to **implement and enforce the terms of the non-proliferation treaty**, which prohibits the use, stockpiling, or transfer of chemical weapons by signatory states.
- The OPCW is **authorized to perform inspections** to verify that signatory states are complying with the convention.
 - This includes a commitment to grant inspectors full access to chemical weapons sites.
- The OPCW also **performs testing of sites and victims of suspected chemical weapons attacks**.
- By the **2001 Relationship Agreement** between the OPCW and the United Nations, the OPCW reports on its inspections and other activities to the UN through the office of the Secretary General.
- The OPCW was awarded the **Nobel Peace Prize in 2013**. Its headquarters are located in **the Hague, Netherlands**.

Chlorine gas

- Chlorine is a choking agent. Its greenish-yellow clouds of gas cause shortness of breath, wheezing, respiratory failure, irritation in the eyes, vomiting, and sometimes death.

Sarin gas

- Sarin is a chemical warfare agent classified as a **nerve agent**.
 - They are similar to certain kinds of insecticides (insect killers) called organophosphates in terms of how they work and what kind of harmful effects they cause.
- It was **originally developed in 1938 in Germany** as a pesticide.

Note:

- 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 **also known as GB**.

Threat of Food Shortage: UN, FAO and WTO

Why in News

Recently, global agencies like the **United Nations (UN)**, **Food and Agriculture Organization (FAO)** and **World Trade Organisation (WTO)** have warned the world of **food shortage risk** worldwide if authorities fail to manage the **Covid-19** pandemic properly.

Key Points

- **Major Reasons**
 - **Lockdowns:** Many governments around the world have put their populations on **lockdown** causing severe slow-downs in international trade and food supply chains.
 - **Travel restrictions:** Confinement orders and travel restrictions cause disruptions in agricultural production due to the unavailability of agricultural labour and the inability to get food to markets.
 - Such disruptions result in the **spoilage of perishables** and **increasing food waste**.
 - **Food Availability:** Uncertainty about food availability can create a shortage on the global market.
 - **Fragile Supply Chains:** Panic buying by people for social isolation has already demonstrated the fragility of supply chains.
- **Suggestions**
 - Every effort must be made to **ensure free trade flows** amidst this crisis to avoid food shortage(s) from developing.
 - When acting to protect the health and well-being of their citizens, countries should ensure that any **trade-related measures** do not disrupt the food supply chain.
 - There is a need to **protect employees** engaged in food production, processing and distribution, both for their own health and that of others, as well as to maintain food supply chains.
 - Efforts should be made for the **betterment of international cooperation**.

India Moves WTO on US Tariffs

Why in News

Under the **World Trade Organisation's (WTO's) safeguard agreement**, India has sought consultations with the US.

- The consultation has been sought on **American authorities' decision to increase import duties on derivatives of steel and aluminium products**.

Key Points

- **WTO's Safeguard Agreement**
 - The **Agreement on Safeguards ("SG Agreement")** sets forth the **rules for application of safeguard measures pursuant to Article XIX of General Agreement on Tariffs and Trade (GATT), 1994**.
 - Safeguard measures are defined as **"emergency" actions with respect to increased imports of particular products**, where such imports have **caused or threaten to cause serious injury to the importing member's domestic industry**.
 - As per its provisions, a WTO member country proposing to apply a safeguard measures shall provide adequate opportunity for **prior consultations** with those members having a **substantial interest as exporters of the product concerned**.
 - This is with a view to exchanging views on the measure.
- **India's Stand:**
 - India considers this measure of the US to be a **safeguard measure within a provision of the General Agreement on Tariffs and Trade 1994, and the Agreement on Safeguards**.
 - India has sought to exercise its right to consult on the specifics of the measures and its **right to determine appropriate trade compensation with the US**.
- **According to the WTO:**
 - India reserves the **right to raise additional issues and make further factual and legal arguments**.
 - This should be without prejudice to any other remedies provided for under the understanding of rules and procedures governing the settlement of disputes and the covered agreements during the course of consultations.

Note:



- India looks forward to receiving a prompt reply to its request from the US for a mutually convenient date and venue for the consultations.

General Agreement on Tariffs and Trade

- It traces its origins to the **1944 Bretton Woods Conference**, which laid the foundations for the post-World War II financial system and established two key institutions, the **International Monetary Fund (IMF)** and the **World Bank**.
- GATT, signed by **23 countries in Geneva in 1947**, came into force on **1st January, 1948** with the following purposes:
 - To phase out the use of import quotas.
 - To reduce tariffs on merchandise trade.
- GATT became the **only multilateral instrument** governing international trade from 1948 until the **WTO was established in 1995**.

China at Top in Global Patent Race

Why in News

Recently, the **World Intellectual Property Organization (WIPO)** has highlighted that **China** has become the **biggest source of applications for international patents** in the world.

Key Points

- **China has pushed the United States from the top position** which it has held since the global system was set up more than 40 years ago.
 - The U.S. had filed the most applications in the world every year since the **Patent Cooperation Treaty (PCT)** system was set up in **1970**.
- **China filed 58,990 applications** beating the **57,840 applications** filed by the **U.S.**
 - China's figure was a **200-fold increase in just 20 years**.
 - China's success can be attributed to the **deliberate strategy of advancing innovations** and to make the country's economy operate at a higher level of value.
- In the current times, more than half of patent applications, **almost 52.4%**, come from **Asia**.
- **Japan** is on the **third** rank followed by **Germany** and **South Korea**.

World Intellectual Property Organization

- It is the **global forum for intellectual property (IP) services, policy, information and cooperation**.
- It is a **self-funding** agency of the **United Nations**, with **193 member states**.
- **Mission:** To lead the development of a balanced and effective international IP system that enables innovation and creativity for the benefit of all.
- Its mandate, governing bodies and procedures are set out in the **WIPO Convention**, which established **WIPO in 1967**.
- It is **headquartered** at **Geneva, Switzerland**.

Patent Cooperation Treaty

- It is an **international treaty** with more than **150 Contracting States**.
- It makes it possible to **seek patent protection** for an invention simultaneously in each of a large number of countries by filing an **international patent application**.
 - Such an application may be filed by anyone who is a national or resident of a PCT Contracting State.
 - It may generally be filed with the national patent office of the Contracting State or at the applicant's option, with the International Bureau of WIPO in Geneva.
 - The granting of patents remains under the control of the national or regional patent Offices in what is called the **national phase**.
- **PCT is used by:**
 - **World's major corporations, research institutions and universities** when they seek international patent protection.
 - **Small and medium sized enterprises (SMEs) and individual inventors**.

India-Pak Tension Amidst Covid-19

Why in News

Recently, India has said that the degree of seriousness of each **South Asian Association for Regional Cooperation (SAARC)** member-nation in collectively fighting the **Covid-19** pandemic can be gauged by their behaviour.

Note:



drishti

- The statement is in clear reference to Pakistan's opposition to India's leadership in dealing with the crisis in the region.

Key Points

- Pakistan has pledged to contribute \$3 million to **SAARC Covid-19 Emergency Fund**.
- Pakistan has also demanded that any **initiative to deal with the situation must be brought under SAARC's framework** and utilised in accordance with the SAARC charter.
- **Pakistan also boycotted a video conference of trade officials** of the SAARC members.
 - It has said that these initiatives would only be effective if these are headed by the group's secretariat and not by India.
- India has maintained that **such initiatives** (formation of emergency fund) are **taken under extraordinary circumstances** which are **focused on jointly fighting** an issue or problem **without the limitations of procedural formalities**.
 - **Each member nation** has the **right to decide on the timing, manner and implementation** of their SAARC Covid-19 Emergency Fund commitments.

India's Role

- India has **taken the lead role in taking preventive measures** against the **novel coronavirus** crisis in the region.
- In March, India proposed an **Covid-19 Emergency Fund** in the **video conference of SAARC members** on **forming a joint strategy** to fight Covid-19.
 - The Fund would be based on a **voluntary contribution** from all SAARC members.
 - **Indian Prime Minister contributed \$10 million** to the fund.
 - Following Indian lead ,subsequently, Nepal and Afghanistan (\$1 million each), Maldives (\$200,000), Bhutan (\$100,000), Bangladesh (\$1.5 million) and Sri Lanka (\$5 million) also pledged to contribute to the fund.
 - The fund is used to **meet the cost of immediate actions** by any member and will be coordinated through foreign secretaries and embassies of the member countries.
- India has also **extended assistance in materials and services to Afghanistan, Bangladesh, Bhutan, the**

Maldives (Operation Sanjeevani), Nepal and Sri Lanka keeping in mind their early commitments to the fund and serious behaviour.

South Asian Association for Regional Cooperation

- It was **established on 8th December 1985** with the signing of the **SAARC Charter in Dhaka (Bangladesh)**.
- It has 8 members: **Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka and Afghanistan**.
 - **Afghanistan** became its **newest member** at the **13th annual summit in 2005**
- The **Headquarters and Secretariat** are at **Kathmandu, Nepal**.
- **Principles:**
 - Respect for the principles of sovereign equality, territorial integrity, political independence, non-interference in the internal affairs of other States and mutual benefit.
 - Such cooperation shall not be a substitute for bilateral and multilateral cooperation but shall complement them.
 - Such cooperation shall not be inconsistent with bilateral and multilateral obligations.



ASEAN Summit on Covid-19

Why in News

Vietnam chaired the **Association of Southeast Asian Nations (ASEAN) summit held online**. The discussions pertained to the **impact of Covid-19 on southeast Asia**.

- Leaders from China, Japan and South Korea also joined the summit.

Key Points

- ASEAN leaders have warned of the crippling economic cost of Covid-19 and called for trade routes to reopen to protect jobs and food supplies, as well as the stockpiling of medical equipment.

Note:

- The Covid-19 has ruined the region's tourism and export-reliant economies.
- Vietnam has urged Southeast Asian leaders to set up an **emergency fund to tackle the coronavirus**.
- Existing Fears on the impact of Covid-19 on the Region:
 - Limited testing in Indonesia has resulted in the lower number of cases – and under 400 deaths – for a country of 260 million.
 - Health systems from Myanmar to Laos are widely believed to be missing the true scale of infections.
 - A **recent surge in cases in Singapore** has raised fears the pandemic could rebound in places which had battled back the initial outbreak.
 - The Thai economy, the second largest in ASEAN, is **expected to shrink by 5.3%** in 2020 – a 22-year low – with millions left jobless.

Association of Southeast Asian Nations

- ASEAN is a **regional grouping** that promotes economic, political, and security cooperation.
- It was established on **8 August 1967 in Bangkok, Thailand**, with the signing of the **ASEAN Declaration (Bangkok Declaration)** by the founding fathers of ASEAN, namely Indonesia, Malaysia, Philippines, Singapore and Thailand.
- **Ten members:** Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.
- **Chairmanship of ASEAN rotates annually**, based on the alphabetical order of the English names of Member States.
- ASEAN countries have a **total population of 650 million people and a combined Gross Domestic Product (GDP) of \$2.8 trillion**.
- **ASEAN Secretariat** – Indonesia, Jakarta.



Chinese Trawlers in South China Sea

Why in News

Recently, the Chinese fishing fleets have been observed in the waters of the **South China Sea** which are internationally recognised as exclusively Indonesia's to fish.

- It raises the concerns of the fishermen in **Natuna Islands (Indonesia)**.

Key Points

- The Chinese steel trawlers scrape the bottom of the sea and **destroy marine life, breaching the maritime borders**.
- Since China is **Indonesia's largest trading partner**, it has been argued that the **Indonesian government has not taken any steps** to deal with the incursions by Chinese fishing boats.
- China's illegal fishing near the Natuna islands carries global consequence, reminding regional governments of Beijing's expanding claims to the South China Sea through which **one-third of the world's maritime trade flows**.
- China wants to claim the resources such as **oil, natural gas and fish** in the South China Sea.
- The presence of Chinese fishers also helps to **embody China's maritime claims**. The **nine dash line** (rejected by an international tribunal) asserted by China violates the principle of **Exclusive Economic Zones (EEZ)**.



South China Sea

- It is an arm of western Pacific Ocean in Southeast Asia.
- It is **south of China, east & south of Vietnam, west of the Philippines and north of the island of Borneo**.

Note:

- **Bordering states & territories** (clockwise from north): the People's Republic of China, the Republic of China (Taiwan), the Philippines, Malaysia, Brunei, Indonesia, Singapore and Vietnam.
- It is connected by **Taiwan Strait with the East China Sea** and by **Luzon Strait with the Philippine Sea**.
- It contains numerous shoals, reefs, atolls and islands. The **Paracel Islands, the Spratly Islands and the Scarborough Shoal** are the most important.

Importance

- This sea holds tremendous **strategic importance** for its location as it is the connecting link between the **Indian Ocean and the Pacific Ocean. (Strait of Malacca)**.
- According to the **United Nations Conference on Trade And Development (UNCTAD)** one-third of the global shipping passes through it, carrying trillions of trade which makes it a significant geopolitical water body.
- According to the **Department of Environment and Natural Resources, Philippines**, this sea has one-third of the entire world's marine biodiversity and contains lucrative fisheries providing food security to the Southeast Asian nations.
- The South China Sea is believed to have **huge oil and gas reserves** beneath its seabed.

Operation Sanjeevani

Why in News

Recently, **India supplied 6.2 tonnes of essential medicines to Maldives**, under **Operation Sanjeevani** as assistance in the fight against **Covid-19**.

Key Points

- The medicines were delivered by an **Hercules C-130J-30 aircraft of Indian Air Force**.
- The medicines **include influenza vaccines, antiviral drugs such as lopinavir and ritonavir** among others as well as consumables such as catheters, nebulisers, urine bags and infant feeding tubes.

- Lopinavir and ritonavir have been used to treat patients with Covid-19 in some countries.

- In March, India also dispatched a **14-member Army medical team to Maldives to set up a viral testing lab** there and **gifted 5.5 tonne of essential medicines**.

India's Assistance to Maldives

- **1988:** Under **Operation Cactus** the Indian Armed Forces helped the government of Maldives in the **neutralization of the coup attempt**.
- **2004:** India helped Maldives **after the tsunami**.
- **2014:** Under **Operation Neer**, India supplied drinking water to Maldives to deal with the drinking water crisis.
- The two **Advanced Light Helicopters (ALH)** given by India to the Maldivian armed forces have been used in saving Maldivian lives.
 - The Advanced Light Helicopter is a multi-role, new generation helicopter in the 5.5-ton weight class, indigenously designed and developed by **Hindustan Aeronautics Limited (HAL)**.

Relations Between the Two Countries

- **History:** India and Maldives share ethnic, linguistic, cultural, religious and commercial links. India was **among the first to recognize Maldives** after its independence in 1965 and later established its mission at Male in 1972.
- **Defence:** India provides the largest number of training opportunities for Maldivian National Defence Force (MNDF), meeting around 70% of their **defence training requirements**.
 - **'Ekuverin'** is a joint military exercise between India and Maldives.
- **Disaster Management:** The Government of India has provided large-scale assistance to Maldives in the aftermath of the 2004 Indian Ocean tsunami and during the 2014 Male water crisis.
- **Trade and Tourism:** India is Maldives' 4th largest trade partner after UAE, China and Singapore. In 2018, India was the 5th largest source of tourist arrivals in Maldives.
 - The Maldivian economy is heavily dependent on its tourism sector, which is the major source of foreign exchange earnings and government revenue.



Note:



Science and Technology

Highlights

- *Science of Covid-19 Spread*
- *Covid-19 & Cytokine Storms*
- *Kerala Gets Nod for Trial of Plasma Therapy*
- *Coronavirus Infection Rate: The Lancet*
- *Suggestions for Covid-19 and Lockdown Exit*
- *Sequencing Novel Coronavirus*
- *Ebola Death in Democratic Republic of Congo*
- *Recovery Curve and Case Rate Curve*
- *Test Positivity Rate*
- *False Negative Tests: A Concern*
- *Fight Against Covid-19*
- *SATYAM: Yoga Against Viruses*
- *Effect of BCG Vaccine on Covid-19*

Science of Covid-19 Spread

Why in News

The **novel coronavirus (SARS-CoV-2)** has already left a large footprint and is still spreading itself. Fighting this **pandemic** needs an understanding of how it works and spreads and preventive measures to stop it.

Key Points

- **Basic Reproductive Ratio (R0)**
 - It tells the **average number of people who will catch the disease from one contagious person.**
 - It is pronounced as **R-nought**.
 - The **larger this number, the more contagious** is the disease caused by the virus and the faster it will spread in the community.
 - R-nought can be **viewed as the product of three numbers:**
 1. The number of days an infected person remains infectious (that is, can infect others).
 2. The number of susceptible persons available to infect.
 3. The chance that a susceptible person gets infected.
 - The **easiest way to keep R-nought low** is by observing **social-distancing.**
 - **However**, maintaining distance from those who show symptoms of infection is not sufficient.
 - It is suggested to keep distance from **every other person as many apparently normal persons**

may actually be infected without showing symptoms of infection.

- Therefore, just as R-nought influences the spread of **Covid-19**, **human behaviour also influences R-nought.**
- **How R-nought works?**
 - A person infected with SARS-CoV-2 can remain infective for 10-14 days.
 - During the initial phases of spread, there is a large number of uninfected persons to infect.
 - For **SARS-CoV-2**, **R-nought has been estimated to be between 2 and 3.** For example:
 - Assuming R-nought to be 2 and the infective period to be 10 days, the first person will infect two others, each of whom will infect two others, each of these four persons will infect two others and so on. In 10 days, one infected person will have infected 2,046 persons.
 - As **herd immunity increases** in the community, many infected persons stop infecting others. Then, R-nought becomes less than one, on average.
 - Consequently, there are **few new cases arising** and existing cases either recover or die, slowing down the disease spread.
- **Herd Immunity**
 - It **happens when so many people in a community become immune to an infectious disease that it stops the disease from spreading.**
 - A person who is infected or has recovered **cannot be infected again.** At least, not in the next several months or even years.

Note:



- An infection activates the immune system which learns to recognize the virus and remembers it. The next time the virus tries to infect a person, her/his immune defenses are able to recognise and protect against further infection.
- Therefore, with the spread of the infection, there is less and less number of uninfected persons to infect. An increasing number of persons in the community gains immunity from having been infected earlier.
- However, **if there was a vaccine for SARS-CoV-2**, it would have **helped achieve herd immunity without a large number of persons being infected**.
 - A vaccine stimulates the effect of an infection and builds immune resistance to the virus.
 - **India has eradicated polio** by using vaccines against it.
- **Series Interval**
 - During an outbreak, people in the community get symptomatically infected one after another. The **length of time between appearance of two successive persons with symptoms of infection is called the Series Interval**.
 - This interval **informs about the spreadability of the virus**.
 - The shorter this interval, the greater the speed of spread through the community.
 - For **SARS-CoV-2**, the **Series Interval is between 5 and 7 days**.
 - For normal influenza, this interval is 1.3 days.
 - However, Covid-19 is spreading through the community slowly and herd immunity will therefore arise slowly which implies a **longer duration of the pandemic**.
- **Herd Immunity Threshold and Lockdown**
 - The **proportion of individuals in the country who are immune to the disease is called the herd immunity threshold**.
 - It is **calculated as $1-(1/R_0)$** .
 - For SARS-CoV-2, R_0 is 2 or 3.
 - An R_0 of 2 would mean a herd immunity threshold of $1-(1/2)$ or 50%.
 - An R_0 of 3 would mean a herd immunity threshold of $1-(1/3)$ or 67%.
 - **Lockdown can be safely lifted if about two-thirds of the population attains immunity to the virus**. Then the chances of an infected person finding

another person to infect are sufficiently low and the virus stops spreading.

- However, **estimating the number of those who have gained immunity is a tough task**. It can be done by **testing the citizens randomly and in large numbers** through surveillance testing in communities.

Preventive Measures

- **Contract tracing reduces the likelihood of the infection** thereby reducing R -naught in the region.
 - **Contact tracing**:
 - It is the identification and listing of persons in close contact with an infected person, testing to identify infected persons among contacts and isolating them or, if testing of all contacts is infeasible, isolating all contacts and following them up for signs of infection.
- **Identification of most affected geographical regions and extending lockdowns** there, **intensifying surveillance-testing, more strict monitoring** of cases and isolation of infected people is required.
 - There will be an overall reduction of infection in the country if the spread of the infection from these high-intensity regions can be arrested.
- **All large gatherings, including religious and political gatherings, must continue to be banned**.
- **Government needs to provide food and basic amenities** to the people whose life has come to a halt due to the lockdown.
 - The lockdown needs to be softened and daily wage earners should be allowed to work.
 - **A policy should be framed on allowing a minority of citizens to work**. However, it should only be done if social distancing is maintained and the net of symptom-monitoring and community-testing is casted more widely.
 - Surveillance-testing and deep monitoring should continue at all levels throughout the country to identify new pockets of high-intensity.

Covid-19 & Cytokine Storms

Why in News

Accumulating evidence suggests that a **subset of patients with severe Covid-19** might have a “**Cytokine Storm Syndrome**” (CSS).

Note:



- CSS is an **overly vigorous immune response** to a triggering event, mostly, certain viral infections.
- **Severe Covid-19 patients** are defined by manifestations that include **respiratory failure** requiring **mechanical ventilation** and shock or organ failure that requires intensive care, and may lead to death.

Cytokine Storm Syndrome

- **Body's Immune Response Working**
 - The immune systems in our bodies protect us from bacteria, viruses, and parasites by removing them from our systems.
 - The immune system gets activated by substances that the body does not recognise as its own. These are called **antigens**, and include **bacteria, fungi and viruses**.
 - An **effective immune system response involves inflammation**, an important and indispensable part of the process. **For example**, Inflammation is visible when one hurts one's knee or ankle — the area of this external injury becomes red and swollen.
 - Immune system deploys **white blood cells** to the injured area to begin work on repairs.
 - Without such an immune response, injuries would not heal, and infections would become deadly.
- **Role of Cytokines**
 - **Cytokines are inflammatory immunological proteins** that are there to fight off infections and ward off cancers.
 - 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. Thus, inflammation has an important protective function.
 - However, if this **inflammatory response is not regulated**, very dangerous consequences can follow. This is when a '**cytokine storm**' can be triggered.
- **Cytokine Storm Syndrome**
 - CSS is characterised by the **overproduction of immune cells and the cytokines** themselves because of a dysregulation in the process.
 - **Reasons:** A cytokine storm can occur due to an infection, auto-immune disorder (when the body's immune system **attacks healthy cells** as in case of coeliac disease- an immune disorder that **primarily affects the small intestine**), or other diseases.

- **Signs and symptoms** include high fever, inflammation (redness and swelling), severe fatigue, and nausea.
 - In the **case of any flu infection**, a cytokine storm is associated with a **surge of activated immune cells** into the lungs, which, instead of fighting off the antigen, leads to **lung inflammation** and fluid build-up, causing **respiratory distress**.
- **Harm**
 - A severe immune reaction, leading to the secretion of too many cytokines in the bloodstream, can be harmful since an excess of immune cells can attack healthy tissue as well.
 - The damage to the surrounding cells can be catastrophic, leading to sepsis and potentially, death.
 - Sepsis occurs when the body's response to infection is out of balance, triggering changes that can **damage multiple organ systems**.
- CSS and Covid-19
 - Cytokine storms are **not exclusive to coronavirus patients**. It is an immune reaction that can occur during other infectious and non-infectious diseases as well.
 - CSS is seen as a likely **major cause of mortality in both the 1918-20 Spanish Flu** that killed more than 50 million people worldwide, and the **H1N1 (swine flu)** and **H5N1 (bird flu)** outbreaks in recent years.
 - **Increased pro-inflammatory cytokine** responses against human coronaviruses such as SARS-CoV-1 (which caused Severe Acute Respiratory Syndrome - SARS), SARS-CoV-2 (responsible for the current Covid-19 pandemic), and Middle East Respiratory Syndrome (MERS) **can result in acute lung injury and Acute Respiratory Distress Syndrome (ARDS)**.
If the clinical features of CSS are not recognised and adequate treatment is not promptly instituted, multiple organ failure can result. Researchers writing in the Lancet have suggested that **all severe Covid-19 patients should be screened for hyper inflammation**.

Kerala Gets Nod for Trial of Plasma Therapy

Why in News

Recently, Kerala has got the **Indian Council of Medical Research (ICMR) approval** for the clinical protocol exploring

Note:

the feasibility of **convalescent plasma transfusion** which may be administered to severe **Covid-19** patients.

Key Points

- A proposal was submitted to ICMR saying that the **Transfusion Medicine Department of the Sree Chitra Tirunal Institute for Medical Sciences and Technology, Kerala** would help the Health Department in exploring the possibility of Convalescent Plasma (CP) therapy for Covid-19 treatment.
- The move was taken as a **precautionary step** to be prepared for the more severe second and third waves of the **novel coronavirus pandemic**.
- Kerala had also sought ICMR's early clearance for **using HIV antivirals (lopinavir/ritonavir)** for treating Covid-19 after reports on their potential use surfaced.
- Kerala might need to **submit an expanded access protocol to ICMR and Drugs Controller General's approval and Institutional Ethics Committee approval** would be necessary before the administration of the treatment.
- One **major challenge** is the **non-availability of the kit for checking the antibody level in the plasma of a recovered person**.
 - It is not available in India and has to be **brought from Germany**.
 - The **cancellation of international flights** would lead to **delay** in importing the desired number of kits.

Convalescent Plasma Therapy

- Convalescent plasma (CP) therapy is not a new therapy and banks on the age-old concept of **passive immunity**.
- **Basis of the Therapy:**
 - The convalescent plasma therapy seeks to make **use of the antibodies developed in the recovered patient** against the coronavirus.
 - The **whole blood or plasma** from such people is taken, and the plasma is then injected in critically ill patients so that the **antibodies are transferred** and boost their fight against the virus.
- **Time Period for Infusion:**
 - A study in The Lancet Infectious Diseases stated that a Covid patient usually **develops primary immunity against the virus in 10-14 days**.
 - Therefore, if the plasma is **injected at an early stage**, it can possibly help fight the virus and prevent severe illness.

➤ Infusion into Covid-19 Patients:

- The plasma can be **infused into two kinds of Covid-19 patients**, those with a **severe illness** or individuals at a **higher risk of getting the virus**.
- However, while plasma transfers immunity from one person to another, it is **not known if it can save lives** in Covid-19 infection.
- The treatment could be **effective for patients in the age group 40-60**, but **may be less effective for people aged beyond 60 years**.

➤ Previous Application:

- The **United States** used plasma of recovered patients to treat patients of **Spanish flu (1918-1920)**.
- Hong Kong used it to treat **SARS (Severe Acute Respiratory Syndrome)** patients in 2005.
- In 2009, the **Swine flu (H1N1)** patients were treated with plasma.
- It has also been used to treat critically ill patients during **Ebola** as well.

- The report of a study, **Proceedings of National Academies of Sciences (U.S.)**, highlighted that CP therapy shows a potential therapeutic effect and low risk in the treatment of severe Covid-19 patients.

- According to the study, **one dose (200 ml) of convalescent plasma with a high concentration of neutralising antibodies is well-tolerated** by patients and it can **rapidly reduce the viral load in patients and improve clinical symptoms** significantly.

Coronavirus Infection Rate: The Lancet

Why in News

A study in the Lancet Infectious Diseases has estimated the **mean duration from onset of symptoms (coronavirus) to death to be about 18 days** and that of **hospital discharge to be about 25 days**.

- This finding is based on data on 24 deaths that occurred in mainland China and 165 recoveries outside of China.

Key Points

➤ Infection Fatality Rate

- Overall infection fatality rate for China, where coronavirus first hit, was **0.66%**.

Note:



- Infection fatality ratio takes into account **the total number of people that might carry the virus without showing symptoms**. These people are not a part of the “official number of cases” in China.
- However, recently, **China has disclosed the number of asymptomatic (people showing no symptoms) cases**. China has found more than 43,000 cases of asymptomatic infection through contact tracing.
 - **Contact tracing** is the process of identifying, assessing and managing people who have been exposed to a disease to prevent transmission.
- China has decided to devote greater screening to asymptomatic sufferers and those in contact with them.
- **Infection Fatality Rate is lower than Crude Fatality Ratio**
 - Researchers from Imperial College, London, had earlier said that the ‘**crude fatality ratio**’ was about **3.67%**, which is on a par with the World Health Organization (WHO) estimates.
 - The **crude rate does not take into account the severity of the infection**, which means it just compares the total number of cases with the total number of deaths.
- **Age and Severity of Coronavirus**
 - Severity of coronavirus depends on the age of a patient, and the overall **case fatality ratio** (number of deaths per positive case) could be 1.38%.
 - In those above 60 years, it was found to be 6.4%; in those above 80 years, 13.4%; and in people aged below 60 years, 0.32%.
 - The findings are based on all the laboratory confirmed and clinically diagnosed cases from mainland China (70,117).
- **Implication of Study**
 - The estimates of the case fatality ratio for Covid-19, are substantially higher than for recent influenza pandemics (eg, **H1N1 influenza** in 2009).
 - With the rapid geographical spread observed to date, Covid-19 therefore represents a major global health threat in the coming weeks and months.
 - Till April 1, 8.53 lakh cases of Covid-19 had been reported world-wide, with 41,887 deaths.
 - The estimate of the proportion of infected individuals requiring hospitalisation, when combined with likely infection attack rates (around 50-80%), show that even the most advanced health-care systems are likely to be overwhelmed.

- Estimates are therefore crucial to enable countries around the world to best prepare as the global pandemic continues to unfold.

Suggestions for Covid-19 and Lockdown Exit

Why in News

Recently, the Prime Minister of India has held a video conference with the Chief Ministers of the States on tackling the **Covid-19** pandemic.

- He emphasised on the importance of formulating a common exit strategy to ensure a steady re-emergence of the population after the **lockdown** is over.

Key Suggestions

- Seamless **supply lines for medical equipment and drugs and raw materials**.
- Coordinated and prioritised **testing, tracing, isolation and quarantine** among and in all states.
- **Appointment of district-level disease surveillance officers** for optimum penetration of the combating strategy.
- Ensuring that there are separate hospitals for Covid-19 patients and proper protection to the doctors attending the patients.
- **Speedy online training of doctors** in the treatment of Covid-19.
- **Going beyond the route of Agricultural Produce Marketing Corporations (APMC)** for the procurement of this season’s harvest. **Starting a truck pooling scheme** for ferrying produce to the market.
- Using the amount from the **State Disaster Response Fund (SDRF)** to fight Covid-19. The Centre will release ₹11,000 crore from the **SDRF** by the end of April.
- **Rapid disbursement** of grants under the **Pradhan Mantri Gareeb Kalyan Yojana**.
- Recruitment of volunteers from the **National Cadet Corps (NCC)** and the **National Service Scheme (NSS)** in the effort to combat the crisis.
- Coordination between NGOs and crisis management groups and sharing of strategies.
- Promotion and use of **traditional immunity boosting methods mentioned in Ayurveda** to minimise the number of people with weak immunity. The **Ministry of AYUSH** has also issued an **advisory** regarding this.

Note:

Scientists on Lockdown

- **Lockdown is only a temporary solution** and this period should be used to prepare the healthcare system to avoid its social costs and to realise long-term epidemiological benefits.
- The government needs to **reveal a post-lockdown** plan that will ensure that the rate of new infections is kept low in a sustainable manner after the lockdown ends.
 - **Social distancing and better hygiene are helpful yet insufficient** measures by themselves.
- If the lockdown period will not be used responsibly, it might lead to a **possible bounce-back effect**.
 - The current restricted testing-policy creates the risk that a large number of mildly symptomatic or asymptomatic cases will remain undetected even at the end of the lockdown period.
 - These cases could easily serve as the nucleus for the epidemic to bounce back.
- The problem of **reverse migration** (from cities to sub-urban/rural areas) has also been highlighted. The exodus triggered by the lockdown will rapidly spread the virus to all parts of the country.
 - This can lead to both an **epidemiological** and a **humanitarian crisis**.
- Instead of stopping the reverse migration, the **forces should be used to stock up food-grains, ensure fast cash transfers for the food-security and welfare** of workers.
- Scientists have **offered their complete support to the people** and **possible expertise** in combating this disease and in ensuring that the country emerges from this difficult period with as little loss of life as possible.

New Developments

- **Alternative Sealant**
 - The **Defence Research and Development Organisation (DRDO)** has developed a **special sealant as an alternative to seam sealing tape** which is critical in **Personal Protective Equipment (PPE)**.
 - The alternative sealant is based on the sealant used in **submarine applications**.
 - DRDO can mass produce this glue through the industry to support the seam sealing activity by suit manufacturers.
- **Bio Suit**
 - DRDO has also developed a **bio suit to keep medical and other personnel safe from the virus**.

- Scientists developed it with the help of the industry at various DRDO laboratories **by applying the technical know-how and expertise in textile, coating and nanotechnology**.
- It has been **subjected to rigorous testing** for textile parameters as well as **protection against synthetic blood**.
- The production of bio-suits was **hampered due to the non-availability of seam sealing tapes** but the development of the alternative sealant will boost its production now.
- **Handheld InfraRed Temperature Sensor**
 - **Naval Dockyard, Mumbai**, has designed and developed its own **handheld InfraRed (IR) based temperature sensor for screening** people at its entry gates.
 - The instrument has been **manufactured through in-house resources** at a cost of under ₹1000, a fraction of the cost of the temperature guns in the market.

Sequencing Novel Coronavirus

Why in News

- India has shared **nine whole genome sequences of the novel coronavirus (SARS-CoV-2)** with the Global Initiative on Sharing All Influenza Data (GISAID).
- The **Indian Council of Medical Research (ICMR)** has allowed all national research laboratories to conduct testing for the novel coronavirus.

Global Initiative on Sharing All Influenza Data

- **GISAID is a public platform** started by the **World Health Organization (WHO)** in **2008** for countries to **share genome sequences**.
- The GISAID Initiative **promotes the international sharing** of all influenza virus sequences, related clinical and epidemiological data associated with human viruses, and geographical as well as species-specific data associated with avian and other animal viruses.
 - This helps researchers understand **how the viruses evolve, spread and potentially become pandemics**.
- It actively **promotes the development of novel research tools** for the analysis of influenza data by helping developers to facilitate the integration or connection of their tools to analyze GISAID data.

Note:

Key Points

- So far, 3,086 sequences of the virus isolated from humans have been shared by **57 countries**.
 - With 621, the U.S. has shared the most number of sequences, followed by the U.K. (350), Belgium (253) and China (242).
- It has been found that a **spike protein of SARS-CoV-2** also known as 2019-nCoV, enables the virus to **enter and infect human cells**.
- **Sequencing the genome** of SARS-CoV-2 will help understand
 - where the virus came from.
 - if there are different strains circulating in India.
 - how the virus has spread.
- **Genome sequencing** is **figuring out the order of Deoxyribonucleic acid (DNA) nucleotides, or bases**, in a genome—the order of Adenine, Cytosine, Guanines, and Thymine that make up an organism's DNA.
- On April 2, 2020, the **Indian Council of Medical Research (ICMR)** allowed all national research laboratories including those under the Council of Scientific and Industrial Research (CSIR) to conduct testing for the novel coronavirus.
- According to CSIR
 - Both the Centre for **Cellular and Molecular Biology (CSIR-CCMB, Telangana)** and the **Institute of Genomics and Integrative Biology (CSIR-IGIB, New Delhi)** have already started sequencing the virus.
 - The CCMB has both **Biosafety Level (BSL)-2 and BSL-3 labs**.
 - The virus is isolated and deactivated in BSL-3 facility and sequenced in BSL-2 facility.
 - Besides sequencing, the virus will also be cultured (grown in cells).
 - Cell culture is the **maintenance and growth of the cells** in specially designed containers and under precise conditions of temperature, humidity, nutrition, and freedom from contamination.
 - This will help in studying the virus and will be useful while **testing vaccines and drugs**.

Biosafety levels

- BSL is used to identify the **protective measures needed in a laboratory setting** to protect workers, the environment, and the public.

- **Activities and projects conducted in biological laboratories** are categorized by biosafety level.
- The four biosafety levels are **BSL-1, BSL-2, BSL-3, and BSL-4, with BSL-4 being the highest (maximum) level of containment**.

The Council of Scientific and Industrial Research

- CSIR was established by the Government of India in **September 1942 as an autonomous body**.
- It is known for its cutting edge R&D knowledge base in diverse S&T areas.
- Council of Scientific and Industrial Research (CSIR) has been ranked first in the **Nature Ranking Index-2020**.
 - The Nature Index provides a close to real-time proxy of high-quality research output and collaboration at the institutional, national and regional level.

Indian Council of Medical Research

- ICMR is the apex body in India for the **formulation, coordination and promotion of biomedical research**.
- Its mandate is to **conduct, coordinate and implement medical research** for the benefit of the Society; translating medical innovations into products/processes and introducing them into the public health system.
- It is funded by the Government of India through the **Department of Health Research, Ministry of Health & Family Welfare**.

Ebola Death in Democratic Republic of Congo

Why in News

According to the **World Health Organization (WHO)**, the Democratic Republic of Congo recorded a second **Ebola death** in days following more than seven weeks without a new case.

Key Points

- The Ebola outbreak has killed more than 2,200 people since August 2018. During this outbreak it **killed about two thirds of those it infected**.
- The cases appear when the **Democratic Republic of Congo** had been due to mark an end to the second-deadliest outbreak of the virus on record.

Note:



- **No clarity on contractions:** It is not yet clear how the new cases emerged. Neither there was any contact with other Ebola patients, nor the patient was a survivor of the virus which could have relapsed.
- **Flare-ups or one-off transmissions (sudden outburst) are common towards the end of Ebola outbreaks,** and a new case does not necessarily mean that the virus will spread out of control again.

Ebola Virus Disease

- Ebola virus disease, formerly known as **Ebola haemorrhagic fever** was first discovered in **1976 near the Ebola River** in what is now the Democratic Republic of Congo. Since then, the virus has been infecting people from time to time, leading to outbreaks in several African countries.
- **Transmission: Fruit bats of the Pteropodidae family** are natural Ebola virus hosts.
 - **Animal to human transmission:** Ebola is introduced into the human population through close contact with the blood, secretions, organs or other bodily fluids of infected animals such as fruit bats, chimpanzees, gorillas, monkeys, forest antelope or porcupines found ill or dead or in the rainforest.
 - **Human-to-human transmission:** Ebola spreads via direct contact (through broken skin or mucous membranes) with:
 - Blood or body fluids of a person who is sick with or has died from Ebola.
 - Objects that have been contaminated with body fluids (like blood, feces, vomit) from a person sick with Ebola or the body of a person who died from Ebola.

- **Incubation Period:** The incubation period, that is, the time interval from infection with the virus to onset of symptoms, is from 2 to 21 days.
 - A person infected with Ebola cannot spread the disease until they develop symptoms.
- **Symptoms:** Symptoms of Ebola can be sudden and include:
 - Fever
 - Fatigue
 - Muscle pain
 - Headache
 - Sore throat
 - Vomiting
 - Diarrhoea
 - Symptoms of impaired kidney and liver function
 - In some cases, both internal and external bleeding
- **Diagnosis:** It can be difficult to clinically distinguish Ebola from other infectious diseases such as malaria, typhoid fever, and meningitis but confirmation that symptoms are caused by Ebola virus infection are made using the following diagnostic methods:
 - Antibody-capture Enzyme-linked Immunosorbent Assay (ELISA). It also tests **Acute Encephalitis Syndrome** and **Kyasanur Forest Disease**.
 - Antigen-capture detection tests
 - Serum neutralization test
 - Reverse Transcriptase Polymerase Chain Reaction (RT-PCR) assay
 - Electron microscopy
 - Virus isolation by cell culture.
- **Vaccines:** An experimental Ebola vaccine, called **rVSV-ZEBOV** proved highly protective against EVD in a major trial in Guinea in 2015.
 - The rVSV-ZEBOV vaccine is being used in the ongoing 2018-2019 Ebola outbreak in DRC. Pregnant and breastfeeding women should have access to the vaccine under the same conditions as for the general population.
 - The public mistrust and militia attacks have prevented health workers from reaching some hard-hit areas for administering the vaccines.

Note:

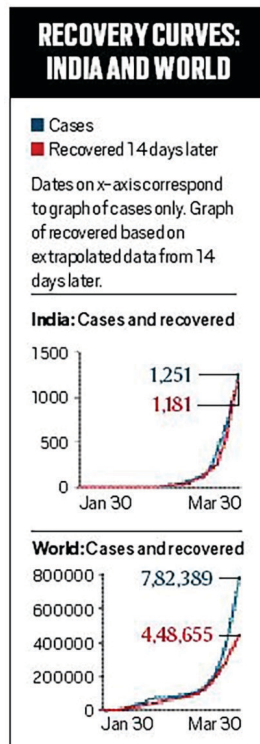
Recovery Curve and Case Rate Curve

Why in News

The recovery rate of Covid-19 patients in India aligns closely with the curve of confirmed cases, with a lag of two weeks, according to an examination of absolute numbers of the cases.

Key Points

- For making the global comparison, data from the Johns Hopkins University database was used.
- Mapping the global number of Covid-19 patients who recovered largely mimics the global case load, with a 14-day lag.
 - However, the high recovery rate does not take into account the severity of the disease during the recovery process.
- Indian graph shows that the mortality rate in India is lower than global rates, so far.
- The graph for global rates shows the overall recovery rate as significantly flatter than the caseload.
 - The cases worldwide are growing exponentially but the global recovery rate has begun to fall flat.
 - Globally, there is considerable research on the mortality of Covid-19 but there is less literature to help understand the patterns of recovery.
- **Science of the Curves:**
 - The two curves would align exactly if everyone who fell sick on Day 1 recovered 14 days later.
 - Any discrepancy between the two lines is either due to people who fell sick and died, or people who recovered earlier or later than the mean period of 14 days.
 - People who recover before 14 days and the people who recover after



14 days, almost balance out each other and do not hamper the curve.

- This leaves only accounting for those who die.
 - This is probably why the recovered curve is lower than the infected curve in the global figure.
- **Recovery Time for Covid-19**
 - There is no established recovery time of Covid-19 patients.
 - Recovery is measured by a patient no longer showing symptoms and having two consecutive negative tests for the virus at least one day apart.
 - According to an early World Health Organisation (WHO) report, mild cases have a recovery time of roughly two weeks and severe cases have the recovery time of somewhere between three to six weeks.
 - However, countries measure recovery differently.
 - The number of the global recoveries will inevitably be an estimate in the absence of global recovery rates by the WHO and uniform methods of reporting recoveries.

False Negative Tests: A Concern

Why in News

Recently, there have been concerns about the manner in which some **Covid-19** patients have apparently relapsed due to **false negative** tests.

- They have been tested positive only a few days after testing negative.

False Negative Test

- There is a **possibility that the virus does not show up in the first test** because patients have not rid themselves of the virus. However, on **testing again, the virus shows up** and the patients test positive.
- According to the research on the subject of false negative tests, **no lab test is 100% accurate**.
- Although the tests based on detection of genetic material are very sensitive, they can be negative sometimes. Therefore, scientists and researchers have to constantly deal with the **positive and negative predictive values**.

Possible Reasons

- The **swab is not obtained or processed correctly** or may be **obtained too early**.

Note:

- An initial swab sample may **not always collect enough genetic material** to provide an accurate test.
- This problem may arise more often in patients who do not show many symptoms at the time of their test.
- The **test runs badly** due to some technical glitch.
- The **virus may shed in different amounts** and is **probably not present in the nose** while the swab is collected.
- If the infection is in the lung, then a nose swab may not detect it.
- According to a study on **SARS (Severe Acute Respiratory Syndrome)** respiratory swabs can be negative, but faeces may test positive in tests done at the same time which **proves that the virus can exist in the body even if not in the nose at a given time.**

Suggestions

- The public data on false negative rates in the clinical setting is very limited so **each negative test must be guarded and analysed.**
- A **negative test does not mean** the person does not have the disease so the test results need to be **considered in the context of patient characteristics and exposure.**
- Public health officials **should stick to principles of evidence-based reasoning** regarding diagnostic test results and false-negatives.
- False negative test results may be reassuring for the low-risk individuals but for higher-risk individuals, even those without symptoms, the risk of such results **requires additional protective measures against the spread of disease,** like extended self-isolation.
- To be **confirmed negative after being positive,** a patient normally **needs two negative swabs 24 hours apart** to be sure.

Test Positivity Rate

Why in News

Recently, the **Indian Council of Medical Research (ICMR)** has observed that the **test positivity rate had not changed substantially** over the last one to two months, **maintaining between 3% and 5%.**

Key Points

- **Test Positivity Rate:**
 - It is the **proportion of positive cases among all tests done.**
 - It is taken to be a useful indicator if a substantial section of suspected cases has been tested.
 - It is **one among the measures for assessing the spread of an infection.**
- From data on tests for **Covid-19** and positive cases between 18th March and 13th April, it emerges that the test positivity rate in India has been between 1.1% and 4.3% (ratios based on cumulative counts until any date).
- If **more people are tested** and the **positivity rate remains the same,** it's a **clue that the infection is where it was and is not expanding.**
 - A sudden spike in the infection spread would be an alarming concern.

Fight Against Covid-19

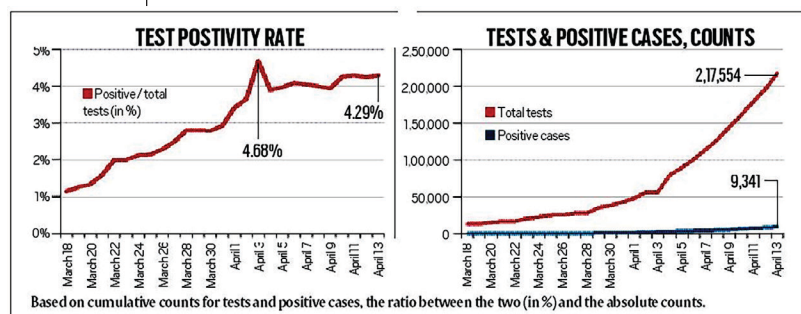
Why in News

According to an article in the New England Journal of Medicine (NEJM), **over 40 vaccines against the Novel Coronavirus (SARS-CoV2) are in various stages of development** across the world.

- **One** of these vaccines is **being developed by the Serum Institute of India (Pune, Maharashtra).**
- Out of 40, only **two vaccines are currently in clinical trials.**
- However, a vaccine against coronavirus **can be available only in the next 12-18 months** at the earliest.

Development of Covid-19 Vaccines

- **Clinical trials** are a type of research that studies new tests and treatments and evaluates their effects on human health outcomes.



Note:

- According to the NEJM article, written by researchers affiliated to the **Coalition for Epidemic Preparedness Innovations (CEPI)**, there is a **need to speed up the vaccine development**.
 - **CEPI** is an international non-governmental organisation funded by the Wellcome Trust, the Bill and Melinda Gates Foundation, the European Commission, and eight countries (Australia, Belgium, Canada, Ethiopia, Germany, Japan, Norway, and the UK).
 - Launched in 2017, its **mission** is to stimulate and accelerate the development of vaccines against emerging infectious diseases and enable access to these vaccines for people during outbreaks.
- The speed is of essence for millions of people around the world. However, there is also a **business side** to it.
 - **Severe Acute Respiratory Syndrome (SARS)** and **Zika** epidemics ended before vaccine development was complete.
 - As a result, federal funding agencies reallocated funds that had been committed to vaccine development, leaving **manufacturers with financial losses** and setting back other vaccine-development programmes.

Indian Government's Latest Moves

- Combination of Hydroxychloroquine and Azithromycin against Covid-19 instead of HIV drugs
 - According to the new clinical management guidelines issued on 31st March, 2020, a **combination of hydroxychloroquine (HCQ)** - used for treatment of auto-immune disorders, and **azithromycin** - the antibiotic has been recommended for use in severe patients.
 - The earlier guidelines, dated 17th March, 2020, which included use of Anti HIV drugs - **Ritonavir and Lopinavir in high risk patients, now stand repealed**.
 - **Reasons:**
 - No specific antivirals have been proven to be effective as per currently available data.
 - The **azithromycin-hydroxychloroquine combination** is part of an upcoming **multi-country trial anchored by the World Health Organization** to examine the efficacy of various drug combinations against Covid-19.

Alcohol Sanitizers and Coronaviruses

- The novel coronavirus has a **lipid envelope**. Soap being a detergent destroys this envelope. The same is **true for alcohol also**.
- **Structure of Lipid Envelope:**
 - SARS-CoV-2 particles, like other coronaviruses, are spherical and **have proteins called spikes** protruding from their surface.
 - These spikes **latch onto human cells**, then undergo a structural change that allows the viral membrane to **fuse with the cell membrane**. The viral genes can then enter the host cell to be copied, producing more viruses.
 - Recent work shows that, like the virus that caused the 2002 SARS outbreak, SARS-CoV-2 spikes bind to receptors on the **human cell surface called angiotensin-converting enzyme 2 (ACE2)**.
 - All of this is **held together by a fatty layer, called an envelope**.
- **Functioning of Alcohol in Sanitizers:**
 - The Envelope layer is **disrupted when it comes into contact with soap or a hand sanitiser with more than 60% alcohol**.
 - Disruption of the envelope leads to the **killing of the virus**.
 - Handwashing for 20 seconds at least kills the virus.
- **Indian Government's Move:** The Government has notified **hand sanitizers as an essential commodity under the Essential Commodities Act, 1955**.
 - **India has announced its decision to be part of the WHO global trials**, which are also looking at these two drugs.
- **Portal for Stranded Foreigners in India**
 - The **Ministry of Tourism** has come up with a portal titled '**Stranded in India**' to disseminate information regarding the services that can be availed by foreign tourists who are stuck far away from their home land.
 - The Portal has information on the Ministry of External Affairs control centres and state-based/ regional tourism support infrastructure. It also lists the Covid-19 helpline numbers for tourists.
 - On 19th March, 2020, the Directorate General of Civil Aviation (DCGA) had issued an advisory stating that no international commercial passenger flights

Note:

will operate here from March 23 to March 29. The advisory was later extended and all international flight operations remain suspended till April 14.

- The government has announced **visa extensions** for stranded foreigners till flight operations resume.

IITs Support to the Indian Government

- The Indian Institutes of Technology (IITs) has offered a **range of inexpensive solutions** developed by their faculty to assist the government in the fight against the Covid-19 outbreak.
- From low-cost ventilators and testing kits to personal protective equipment for health workers, the directors of IIT-Delhi, IIT-Guwahati, IIT-Bombay and IIT-Kanpur shared their institute's work on containing the spread of the virus with the Government.
- The institutions have also sought the government's assistance in facilitating tie-up with Public Sector Units (PSUs) to scale up production of prototypes and to mitigate difficulties faced in procuring raw material because of the lockdown.
- **Example:** IIT-Guwahati has offered to pitch in with its 3D-printed full-face shield and headgear for health workers, robotic cart to deliver food to isolation wards and high-grade sanitiser. It needs the government's help to tie up with a PSU for large-scale manufacturing.
- Indian Institutes of Technology are apex institutions for engineering education and research. At present, there are **twenty three Indian** Institutes of Technology (IITs).
 - All are governed by the **Institutes of Technology Act, 1961** which has declared them as "**Institutions of national importance**", and lays down their powers, duties, framework for governance etc.

SATYAM: Yoga Against Viruses

Why in News

Recently, the **Department of Science and Technology (DST)** has initiated the **Science and Technology of Yoga and Meditation (SATYAM)** programme.

- Under SATYAM, DST has **invited proposals to study appropriate intervention of yoga and meditation in fighting Covid-19** and similar kinds of viruses.

Key Points

- **Objective:** DST is encouraging scientists, clinicians and experienced practitioners of yoga and meditation, with a proven track record, to **submit concept notes on the proposal covering:**
 - Aims and objectives of proposed work.
 - Existing literature.
 - Methodology.
 - Expected outcome.
 - Budget requirement.
 - Details of host institutions along with detailed bio-data of the principal investigator with latest publications included in scientific journal databases.
- **Aim:**
 - To **provide assistance to society** in today's critical condition arising due to pandemic Covid-19.
 - This is a **need-based call**, therefore, proposed work should be completed within 6-12 months.
- **Dimensions of Covid:** Covid-19 usually has **three dimensions**, related to:
 - Stress (worry, sitting at home).
 - Respiratory.
 - Immune system.
- **Scientific Investigation:** The **effects of yoga and meditation on the life** of a person during such stressful times have to be **scientifically investigated**.
 - Sometimes, there is an **empirical correlation in the actions and the outcome**, but it needs to be understood scientifically.
- **Modern Tools:** All the participants are expected to work together **using the modern tools of life science and bio-sciences** to understand what works and what does not.
 - If something works then what is the efficacy and in what conditions does it work.
- **Holistic Target:** The **project may address** improving immunity, improving respiratory systems and interventions to overcome respiratory disorders and other dimensions like stress, anxiety and depression-related issues due to isolation, uncertainty and disruption in normal life.

Science and Technology of Yoga and Meditation Programme

- It was **conceptualized in 2015** by the DST under its **Cognitive Science Research Initiative (CSRI)**.

Note:



- **Aims:** To foster scientific research on the effects of yoga and meditation on physical & mental health and on cognitive functioning in healthy people as well as in patients with disorders.
- **Themes:**
 - Investigations on the effect of Yoga and Meditation on physical and mental health and well being.
 - Investigations on the effect of Yoga and Meditation on the body, brain, and mind in terms of basic processes and mechanisms.
- **Eligibility:**
 - Scientists/academicians with **research background in 'Yoga and Meditation'** and having regular positions are invited to participate in this initiative.
 - **Practitioners actively involved in yoga and meditation practices** are also encouraged to apply in collaboration with academic and research institutions of repute.
- **Project Duration:** The project is tenable for a maximum period of **three years**.

Cognitive Science Research Initiative

- DST initiated this as a **highly focused programme in 2008** during the **11th Five year plan**.
- The DSRI facilitates a platform to the scientific community to work for better solutions of challenges related with cognitive disorders and social issues through various psychological tools & batteries, early diagnosis & better therapies, intervention technologies and rehabilitation programmes.
- **Aim:**
 - To foster scientific research in the interdisciplinary field of Cognitive Science for better understanding of Indian mind sets, languages and cognitive disorders etc.
- CSRI **revolutionizes research in various fields**, such as:
 - Nature and origins of mental disorders, of physiological, social and neuro-chemical origins.
 - Design of better learning tools and educational paradigm.
 - Design of better software technologies and artificial intelligence devices.
 - Streamlining of social policy formulation and analysis.
- **Activities Supported under CSRI:**
 - Individual R&D Projects.

- Multi-centric Mega Projects.
- Post Doctoral Fellowship.
- Support for Schools, Training, Workshops, Conferences, etc.

Effect of BCG Vaccine on Covid-19

Why in News

Recently, **Doctors and scientists in India have expressed caution on a study**, which argues that countries that have deployed the BCG-tuberculosis vaccine in their immunisation programmes have seen fewer deaths from Covid-19.

- **BCG**, or bacille Calmette-Guerin, is a vaccine for **Tuberculosis (TB) disease**.

Key Points Related to Study

- **BCG Vaccine Policy and Covid-19 Deaths**
 - **The middle and high-income countries**
 - Countries that have universal BCG policy had 0.78 deaths per million people.
 - The countries that **never had a universal BCG policy** had a **larger mortality rate**, with 16.39 deaths per million people, a significant variation.
 - **Low and middle-income countries**, even if they had universal immunisation policies, were **excluded** from the analysis because they were also likely to have low testing rates for Covid-19 infection and therefore fewer reported deaths.
 - **India having a universal BCG policy in place** and relatively fewer deaths as a proportion of confirmed coronavirus infections, **wasn't included** in the analysis.
- **BCG Vaccine confers a strong immune response**
 - The BCG vaccine is known to confer a strong immune response and a significant degree of protection against **leprosy and non-invasive bladder cancers**.
 - Those countries where the elderly were likely to have had a BCG shot in their childhood were likely to be better protected against coronavirus because Covid-19 was **particularly lethal to the elderly**.
- **Cases of Different Countries**
 - **Japan** (which has a BCG policy since 1947) had one

Note:

of the early cases of Covid-19 but it has maintained a low mortality rate despite not implementing the most strict forms of social isolation.

- Japan had 1,655 cases and 65 deaths as of March 29.
- **Iran**, which has seen at least 3,000 deaths, began implementing its BCG vaccination policy only in 1984 and therefore anyone over 36 was vulnerable.
- Spain, France, the United States, Italy and the Netherlands:
 - These countries don't have universal BCG policies and have seen many deaths from Covid-19.
 - Many of these countries don't have a universal

programme because BCG has been shown to **not be always protective against tuberculosis in adults** as well as an **increased risk of mycobacterium (bacteria) species**.

- **Italy**, where the Covid-19 mortality is very high, never implemented universal BCG vaccination.

➤ **Views of Indian Scientists and Doctors**

- It is premature for India, that has had a **consistent TB vaccination policy since 1968**, to take comfort from the study.
- Australia, the Netherlands, the United States are going to vaccinate healthcare workers with BCG. This may provide some evidence.



Note:



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Environment and Ecology

Highlights

- Armyworm Attack
- Agasthyavanam Biological Park
- Koundinya Wildlife Sanctuary
- Animals and Covid-19
- Wildlife Panel Holds Virtual Conference
- Ionospheric Based Monitoring of Large Earthquakes

Armyworm Attack

Why in News

The **Directorate of Agriculture** has reported an **armyworm attack** on the standing crops in the northeastern **Dhemaji district of Assam**.

- The pest attack has added to sorrows of the already worried farmers, due to the **Covid-19 pandemic**.

Key Points

- The **armyworm caterpillar** is the **larval stage** of several species of **moths**.
- It has a **huge appetite** and can **feed on more than 80 species of plants** according to the **entomologists**.
 - **Entomology** is a branch of **zoology** which involves the **scientific study of insects**.
- **Challenges:**
 - The **weather is a factor** because there are **no pre-monsoon rains** in Assam yet and the **temperature is very high now**. The armyworm can cause more damage in the absence of rain.
 - Another major issue is **reaching out to farmers**. All the roads and gaps have been blocked due to the fear of contracting coronavirus.
- **Other Concerns:**
 - Officials are **afraid of the winter crop cycle getting affected** if the lockdown continues beyond 14th April, 2020.
 - **April-May** is the time when paddy farmers in Assam clear weeds and manure the fields for transplanting the seedlings of the **winter crop** from the nursery. The process takes 35-40 days.
 - According to the farm experts, if the cycle is pushed back by more than a month it **could impact yield**

because the sowing and maintenance phase of the crops would be very close to the **flood timings of Assam**.

Armyworm

- Its scientific name is **Spodoptera frugiperda** and also commonly referred as **Fall Armyworm (FAW)**.
- It is a **dangerous transboundary insect** with a high potential to spread rapidly due to its **natural distribution capacity** and opportunities presented by **international trade**.
- FAW represents a **real threat to food security and livelihoods** of millions of smallholder farmers by spreading across all of **sub-Saharan Africa, the Near East and Asia**.
- **Control and Elimination:**
 - Farmers need significant support to manage FAW sustainably in their cropping systems through **Integrated Pest Management (IPM)** activities.
 - FAW **cannot be eliminated**.
- The **Food and Agriculture Organisation (FAO)** has launched a **Global Action for FAW Control** as a response to the international threat posed by the armyworms.



Note:

Agasthyavanam Biological Park

Why in News

The Forest Department is procuring forest produce collected by the tribespeople of the Agasthyavanam Biological Park (ABP) and surrounding forest ranges to be sold to commercial establishments and various collectives to deal with the lockdown necessitated by the **Covid-19 pandemic**.

- Established in **1997**, Agasthyavanam Biological Park is a **wildlife sanctuary in Kerala**.
 - The park is located **near Thiruvananthapuram/Trivandrum**, the capital city of Kerala.
 - It is contiguous to **Neyyar Wildlife Sanctuary** and **Peppara Wildlife Sanctuary**.
- The park has been **named after the Agasthyamalai Agasthyakoodam Peak**, which can be seen at a distance from the park.
 - The **Agasthyamala Biosphere Reserve** is located in the southernmost end of the Western Ghats and incorporates peaks towering 1,868 m above sea level. It covers 3,500 km² and encompasses tropical forest ecosystems that fall within the Tirunelveli and Kanyakumari districts of Tamil Nadu and the Thiruvananthapuram and Kollam districts of Kerala.
- Agasthyavanam Biological Park is **spread** over an area of 23 sq. km., of which 17.5 sq. km. of the park has been dedicated for natural regeneration to develop into a dense forest. The rest area of the park is left for systematic conservation programs.
- The Park has **endemic medicinal plants** and **rich biodiversity**.

Koundinya Wildlife Sanctuary

Koundinya Wildlife Sanctuary is the only sanctuary in **Andhra Pradesh** with a population of **Asian elephants**. The sanctuary is covered by **southern tropical dry deciduous and thorn forests**. Some of the important flora consists of Albizia amara, Acacia, Lagerstroemia, Ficus, bamboo, and a species which is a regeneration of Santalum album.

- **Apart from Elephant**, some of the animals found in the sanctuary are: sloth bear, panther, cheetal,

chowsingha, sambar, porcupine, wild boar, jungle cat, jackal, jungle fowl, starred tortoise and slender loris.

Asian Elephant

- There are **three subspecies of Asian elephant – the Indian, Sumatran and Sri Lankan**.
 - The Indian has the widest range and accounts for the majority of the remaining elephants on the continent.
- Escalation of poaching, habitat loss, **human-elephant conflict** and mistreatment in captivity are some common threats to both African and Asian elephants.
- **African elephants are listed as “vulnerable”** and **Asian elephants as “endangered”** in IUCN Red List of threatened species.
- The elephant has been accorded the highest possible protection under the Indian wildlife law through its listing under **Schedule I of the Wildlife (Protection) Act, 1972**.
- **Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) status-Appendix I**.
 - Appendix I lists species that are the **most endangered among CITES-listed animals and plants**.
- Few **important initiatives for the conservation of elephants** are:
 - **Project Elephant** launched by the **Government of India in the year 1992** as a **Centrally Sponsored Scheme**. Elephant census is conducted once in 5 years under the aegis of Project elephant.
 - Establishment of elephant reserves and adoption of the **“World Elephant Day” (August 12)** to help conserve and protect elephants in India and improve their welfare.
 - **‘Gaj Yatra’** a nationwide awareness campaign to celebrate elephants and highlight the necessity of securing elephant corridors.
 - The **Wildlife Trust of India (WTI)**, had come out with a publication on the **right of passage in 101 elephant corridors** of the country in 2017, stressed on the need for greater surveillance and protection of elephant corridors.
 - The **Monitoring the Killing of Elephants (MIKE) programme launched in 2003** is an international collaboration that tracks trends in information related to the illegal killing of elephants from across Africa and Asia, to monitor effectiveness of field conservation efforts.

Note:



Animals and Covid-19

Why in News

Owing to a recent news report on a **Tiger being infected with Covid-19** in New York (Bronx Zoo), the **Ministry of Environment, Forest and Climate Change** has issued an advisory regarding the containing and management of Covid-19 in National Parks/Sanctuaries/Tiger Reserves.

- Also, a tiger in **Pench Tiger Reserve (Madhya Pradesh)** has died due to respiratory illness. The **National Tiger Conservation Authority (NTCA)** is investigating whether the tiger should be tested for the novel coronavirus disease.
- However, swabs from the throat and nose to test for **rhinotracheitis, a viral infection that afflicts cats and causes respiratory illness** were collected.

Key Points

- **Spread of Infection from humans to animals**
 - The Bronx Zoo case suggests that a zoo employee spread the virus to the tiger.
 - The virus came from an animal source and mutated; humans have since been infecting humans. Thus, it is **theoretically possible for the virus to mutate again** to survive in certain species after being transmitted by humans.
- **Advisory by the Ministry of Environment, Forest and Climate Change**
 - It has asked all **Chief Wildlife Wardens (CWLWs)** of all States/UTs to take immediate preventive measures to stop the transmission and spread of the virus from humans to animals and vice versa, in National Parks/Sanctuaries and Tiger Reserves.
 - The CWLW is the **statutory authority under the Wildlife (Protection) Act, 1972** who heads the Wildlife Wing of a State Forest Department and exercises complete administrative control over **Protected Areas (PAs)** within a state.
- **Guidelines issued by the NTCA and CZA**
 - Both the **Central Zoo Authority (CZA)** and the NTCA have issued guidelines that require zoos to be on the “highest alert” and monitor animals on closed-circuit cameras 24/7 for “abnormal behaviour and symptoms.”

- The CZA has also directed zookeepers to approach sick animals wearing personal protective equipment and isolate and quarantine them.

Central Zoo Authority

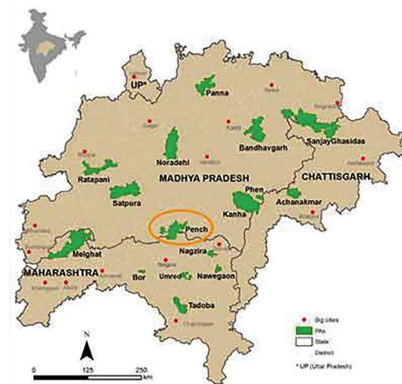
- It is a **statutory body** whose main objective is to enforce minimum standards and norms for upkeep and health care of animals in Indian zoos. It was established in **1992**.
- Zoos are regulated as per the provisions of **Wildlife (Protection) Act, 1972** and are guided by the **National Zoo Policy, 1998**.

National Tiger Conservation Authority

- It is a **statutory body** under the Ministry of Environment, Forests and Climate Change.
- It was **established in December, 2005** following the recommendations of the **Tiger Task Force**.
- It was constituted under enabling provisions of the Wildlife (Protection) Act, 1972, and amended in 2006, for strengthening tiger conservation, as per powers and functions assigned to it.

Pench Tiger Reserve

- It is located in **Seoni (Madhya Pradesh)** and is one of the major Protected Areas of **Sapura-Maikal ranges** of the Central Highlands. It was **included in the Project Tiger in 1992-93**.
- It is among the sites notified as **Important Bird Areas of India**.
 - The IBA is a programme of **Birdlife International** which aims to identify, monitor and protect a global network of IBAs for conservation of the world’s birds and associated diversity.
- It has a **contiguous forest cover with Kanha Tiger Reserve and Pench Tiger Reserve (Maharashtra)**.
- The area of the Pench Tiger Reserve and the surrounding area is the real story area of **Rudyard Kipling’s famous “The Jungle Book”**.
- The **forests** found in Pench Tiger Reserve



Note:

are divided **into three parts**: southern tropical wet dry forest, southern tropical dry deciduous teak forest and southern tropical dry deciduous mixed forest.

- The **major Carnivores** are Tiger, leopard, wild cat, wild dog, hyena, jackal, fox, wolf, weasel, etc. Among the vegetarian species, Gaur, Nilgai, Sambar, Chital, Chasinga, Chinkara, Wild Pig etc. are prominent.
- There are a **lot of migratory birds** seen in the cold season. Among the migratory birds, Ruddy shelduck, Pintail, Whistling Teal, Vegtel etc. are prominent.

Wildlife Panel Holds Virtual Conference

Why in News

Recently, the Standing Committee of the **National Board for Wildlife (NBWL)** had its first ever video-conferencing meet in which it **cleared infrastructure projects in 11 States**.

Key Points

- According to experts associated with the conference **most of the projects were given “in-principal approval”**.
 - In a virtual conference, it is difficult to scrutinise maps that show the location of the proposed projects.
 - It is because only the formal minutes of the meeting would reveal the conditions which projects would have to adhere to.
- Projects that encroach into forests or protected reserves **require NBWL approval** as part of the government’s **environmental clearance process**.

Environment Clearance Process

- An **Environment Impact Assessment (EIA)** report is prepared to get Environment Clearance (EC) for a project.
- A process of **‘Public Hearing’** is conducted before the issue of **‘Consent to Establish (NOC)’** by **state regulators**. Concerns of people living in the proposed project area are heard.
- An application form with EIA report, details of public hearing and **NOC is submitted for environmental clearance** with the **Ministry of Environment, Forests and Climate Change (MoEFCC)** if the project falls

under A category or the **state government** if the **project falls under B category**.

- The documents submitted for A and B category are then analyzed by an **Expert Appraisal Committee (EAC)** under the Union Environment Ministry or the concerned **State Environmental Impact Assessment Authorities (SEIAAs)** respectively.
- The recommendations of the Committee gets processed in the Ministry of Environment, Forests and Climate Change for final approval or rejection.

National Board for Wildlife

- It is a **statutory Board** constituted officially in **2003** under the **Wild Life (Protection) Act, 1972**.
- It is **chaired by the Prime Minister** and is **responsible for promotion of conservation and development of wildlife and forests**.
- The **board is ‘advisory’ in nature** and can only advise the Government on policy making for conservation of wildlife.
- It is an important body because it serves as an apex body for the review of all wildlife-related matters and for the approval of projects in and around national parks and sanctuaries.
- The **standing committee** of NBWL is chaired by the Ministry of Environment Forest and Climate Change.
 - The standing committee approves all the projects falling within protected wildlife areas or within 10 km of them.

Ionospheric Based Monitoring of Large Earthquakes

Why in News

Recently, scientists of the **Indian Institute of Geomagnetism (IIG)** have come up with a study of the signatures of recent large **earthquakes** into the ionosphere.

- Its aim was to derive the seismic source characteristics from the ionosphere.
- The research is a part of the interdisciplinary program **‘Coupled Lithosphere-Atmosphere- Ionosphere- Magnetosphere System (CLAIMS)’** of IIG.
 - CLAIMS focuses on energy transfer to the atmosphere during solid Earth processes such as earthquakes as well as tsunamis.

Note:

- IIG is an **autonomous institution** of the **Department of Science and Technology**.

Key Points

- Scientists noticed that the spatial distribution of near field **co-seismic ionospheric perturbations (CIP) associated with the earthquake could reflect well the ground deformation pattern** evolved around the epicentre.
 - These CIP were derived using the **Global Positioning System (GPS)** measured **Total Electron Content (TEC)**.
 - The TEC is the total number of electrons present along a path between a radio transmitter and receiver.
 - The CIP distribution was estimated at **ionospheric piercing point (IPP)** altitude.
- **Co-seismic Ionospheric Perturbations (CIP) :**
 - In general, the Earth crust uplift during an earthquake produces compressional (i.e. pressure) waves in the overlying atmosphere.
 - These waves propagate upward in the region of exponentially decreasing atmospheric neutral density, and thus, waves amplitudes increase with atmospheric heights.
 - **On arrival at ionospheric heights, the waves redistribute ionospheric electron density and produce electron density perturbations (disruption) known as Co-seismic Ionospheric Perturbations (CIP).**
- However, the evolution of seismic/tectonically induced ionospheric perturbation is **highly controlled by the non-tectonic forcing mechanisms**.
- The major effective **non-tectonic forcing mechanisms at ionospheric altitudes** are:
 - Orientation between the ambient geomagnetic field and seismic induced neutral wave perturbations.
 - Orientation between the moving satellite line of sights and the wave perturbations.
 - Ambient ionospheric electron density gradient.
- **Challenge:** The ionosphere is a **highly dynamic region** and the **origin of any perturbations** in ionospheric electron density can be traced to various origins **either from above** (e.g. solar, geomagnetic etc.) **or below** (e.g. lower atmospheric, seismic etc.) the ionosphere. This is a **major challenge** while identifying the CIP.
- **Inference:** The manifestation of **CIP has to be seen in light of the prevailing non-tectonic forcing mechanisms**.
 - In this line, it is believed that the present study may assist while designing a tool for the ionospheric based seismic source characterisation.

Ionosphere

- The ionosphere is defined as the layer of the Earth's atmosphere that is ionized by solar and cosmic radiation. It **overlaps** the **mesosphere, thermosphere, and exosphere**.
- It lies 75-1000 kms above the Earth.



Note:

Social Issues

Highlights

- Rise in Violence Against Women Amidst Lockdown
- Gender Disparity and Covid-19
- Rare Diseases
- Covid-19 Community Mobility Report: Google
- Kendriya Bhandar

Rise in Violence Against Women Amidst Lockdown

Why in News

The UN-Women, women's rights activists, government authorities, and civil society partners across the globe have said that domestic violence during the **Covid-19** crisis has increased against women.

UN Women

- It is the **United Nations entity** dedicated to gender equality and the empowerment of women.
- It is a global champion for women and girls, established to accelerate progress on meeting the needs of women worldwide.

Key Points

- The reports of violence have increased in countries like Argentina, Canada, France, Germany, Spain, the United Kingdom, and the United States, Cyprus, Singapore and Australia among others.
- In **India**, the **National Commission for Women (NCW)** has recorded a **more than twofold rise in gender-based violence**.
- The **confinement due to Covid-19** is fostering the tension and strain created by security, health, and money is the reason behind this.
- This will have **multiple impacts on women's wellbeing**, their sexual and reproductive health, mental health, and their ability to participate and lead in the recovery of societies, economy and difficulty in achieving **Sustainable Development Goal -5 (SDG-5) -Gender equality**.

Challenges in the wake of Covid-19 Outbreak

- Even before Covid-19, **domestic violence was already one of the most rampant human rights violations**.
 - In 2019-20, 243 million women and girls (aged 15-49) across the world have been subjected to sexual or physical violence by an intimate partner.
 - As the Covid-19 pandemic continues, the violence is likely to grow.
- **Wide under-reporting** of domestic and other forms of violence
 - Less than 40 % of women who experience violence seek help of any sort or report the crime.
 - Less than 10 % of those women seeking help go to the police.
- The current circumstances (Covid-19 pandemic) **make reporting even harder**, including limitations on women's and girls' access to phones and helplines and disrupted public services like police, justice and social services.
 - These disruptions is **compromising the care and support** that survivors need, like clinical management of rape, and mental health and psycho-social support.
 - The disruptions also fuel impunity for the perpetrators.
- In many countries **the law is not on the women's side**. 1 in 4 countries have no laws specifically protecting women from domestic violence.

Scenario in India

- The **National Commission for Women (NCW)** has recorded a **more than twofold rise in gender-based violence**.

Note:



National Commission for Women

- It was set up as a **statutory body** in January 1992 under the National Commission for Women Act, 1990.
- Its **mission** is to strive towards enabling women to achieve equality and equal participation in all spheres of life by securing her due rights and entitlements through suitable policy formulation, legislative measures, etc.
- Its **functions** are to:
 - Review the constitutional and legal safeguards for women.
 - Recommend remedial legislative measures.
 - Facilitate redressal of grievances.
 - Advise the Government on all policy matters affecting women.

➤ Data Analysis:

- **Total complaints**- Rose from 116 in the first week of March 2020 to 257 in the final week of March 2020.
- **Rape or attempt to rape**- Rose sharply from 2 to 13.
- **Domestic violence**- Increased from 30 to 69 over the same comparative period.
- **Police apathy towards women**- Almost threefold increase as the police are busy enforcing the lockdown to curb the spread of **Covid-19**.
- **Cases under Right to live with dignity (Article 21)**- Rose to 77 from 35. Such cases could pertain to discrimination on the basis of gender, class or caste or all three of them combined.
- These cases might be a **fragment of the actual number** as many women will not be able to reach out due to various reasons.

➤ Possible Reasons:

- **Privacy**: Women are not able to reach out because of restrictions on movement as well as a lack of privacy within homes. Women need privacy and certainty that they will not be discovered by their family but that becomes impossible in the presence of the entire house.
- **Frustration among Males**: There is a lot of **anxiety in people's minds** about their jobs, salaries and livelihood. **Women become easy targets for men** for venting out their anger in **patriarchal societies**.
- **Lockdown**: It has **restricted the movement** and closed women's avenues to escape violence such

as by relocating to their natal homes or contacting the local police.

- There is evidence that in situations of crisis or calamity there is an increase in violence against women.

➤ Suggestions:

- The police do not seem the first port of call for victims of domestic violence and, therefore, **alternative arrangements** should be put in place.
- The government should **ensure resources to help women in distress**, and put **health services** to women and abortion in the list of essential services.
- **Inspiration** can be taken from **France** which announced that it would pay for 20,000 hotel bookings and contribute €1 million to organisations that fight domestic abuse as well as set up assistance points at supermarkets and pharmacies.

Constitutional and Legal Safeguards for Women

- **Fundamental Rights**: Guarantees all Indian women equality (Article 14), no discrimination by the State on the basis of gender (Article 15(1)) and special provisions to be made by the State in favour of women (Article 15(3)).
- **Directive Principles of State Policies (DPSPs)**: Ensures equal pay for equal work (Article 39 (d)).
- **Fundamental Duties**: Ensures that practices derogatory to the dignity of women are prohibited under Article 51 (A).
- **Protection of Women from Domestic Violence Act 2005**: Provides victims of domestic violence with a means for practical remedy through prosecution.
- **The Dowry Prohibition Act 1961**: Prohibits the request, payment or acceptance of a dowry.
- **The Sexual Harassment of Women at Workplace (Prevention, Prohibition, and redressal) Act, 2013**: This legislative act seeks to protect women from sexual harassment at their place of work.

Way Forward

- The increase in **violence against women should be dealt with urgently** with measures embedded in **economic support and stimulus packages** that meet the gravity and scale of the challenge and reflect the needs of women who face multiple forms of discrimination.
- **Grassroots women's organizations and communities** need to be supported strongly in their current frontline role.

Note:

- **Helplines, psychosocial support and online counselling** should be boosted, using technology-based solutions such as SMS, online tools and networks to expand social support, and to reach women with no access to phones or internet.
- **Police and justice services should mobilize** to ensure that incidents of violence against women and girls are given high priority with no impunity for perpetrators.

Gender Disparity and Covid-19

Why in News

Recently, **GlobalHealth50/50** suggested that the **gender-split** of **Covid-19** cases in all countries is roughly 50-50, barring **two exceptions**: India and Pakistan.

- GlobalHealth50/50 is an **independent research initiative** that tracks **gender and health**. It compiled data from almost 40 countries on Covid-19 cases.

Key Points

- Men in India more than women appear disproportionately likely to test positive for Covid-19.
- Another unusual exception was South Korea, which has conducted the maximum number of tests as a proportion of population, where more women tested positive than men.
- **Many countries**, including the United Kingdom and the United States, **do not have sex-segregated national data** while publicising data on cases and death rates.
- **Data Analysis (% of men out of total cases):**
 - Greece- 55%
 - Italy- 53%
 - China- almost 51%(February data).
 - India- 76%
 - Pakistan- 72%
 - Germany- 50%
 - South Korea- 40% (more women positive)
- India has not shared national figures on Covid-19 mortality rates in men and women yet. However, on 6th April 2020, the Health Ministry said 76% of the confirmed cases in India were men.
- **Reasons:**
 - **Epidemiologists** have highlighted that in most countries men and women equally travelled **internationally**.

- Indian case is **reflective of employment trends** also. There are **less working women** and very less are likely to travel internationally for work.
- India's wide disparity is more likely due to **sociological factors**.
- **Global research on coronavirus** so far has shown that **men are more likely to be harbouring additional ailments** like cardiovascular disease, diabetes and more likely to **smoke**.
 - These conditions make men even more vulnerable to the severe infection.
- The figure seems to be a statistical reflection of relatively low testing for the disease. With more testing and more infections detected, the male-female gap would likely narrow.

Rare Diseases

- A rare disease is a health condition of low prevalence that affects a **small number of people** compared with other prevalent diseases in the general population.
 - There is **no universally accepted definition** of rare diseases and the definitions usually vary across different countries.
- Though rare diseases are of low prevalence and individually rare, collectively they affect a considerable proportion of the population.
- 80% of rare diseases are **genetic in origin and hence disproportionately impact children**.
- In India there are **56-72 million people affected by rare diseases**.
- There is also a demand for the **reformulation of National Policy for Treatment of Rare Diseases, 2017**.

National Policy for Treatment of Rare Diseases, 2017

- The policy highlights the measures and steps, both in the short as well as in the long term, that need to be taken to deal comprehensively with rare diseases.
- The policy intends to constitute an **Inter-ministerial Consultative Committee** to coordinate and steer the initiatives of different ministries and departments on rare diseases.
- It also mentions the creation of a **corpus fund** at Central and State level for funding treatment of rare diseases.

Note:

- The policy aims to create a **patient registry** for diseases housed in **Indian Council of Medical Research (ICMR)**.
- However, recognizing the higher cost of treatment for rare diseases, the policy also seeks to strike a balance between access to treatment and health system sustainability.
- It also aims to create awareness among health professionals, families of patients and the public in general, about rare diseases.

Covid-19 Community Mobility Report: Google

Why in News

Google has released 'Covid-19 Community Mobility Reports'. These reports aim to provide insights into what has changed in response to policies aimed at combating Covid-19.

- The reports **cover 131 countries** and chart movement trends over time by geography, across different categories of places such as retail and recreation, groceries and pharmacies, parks, transit stations, workplaces, and residential.
- The report comes at a time when communities across the globe are looking at measures such as **social distancing** as a key action to deal with the Covid-19 pandemic.
- The company said it adopted technical measures to ensure that no individual could be identified through the new reports. The reports have been **developed according to the company's stringent privacy protocols and policies**.
- Google is an **American search engine company founded in 1998** by Serge Brin and Larry Page. It is a subsidiary of Alphabet Inc.

Finding Related to India

- In the wake of the **March 22 'Janata Curfew'** and the subsequent ongoing **21-day nationwide lockdown**, **public movement in India** at areas with restaurants, pharmacies, parks and workplaces had **declined** while movement in residential areas had increased.
- The data is **based on the 5-week period Jan 3–Feb 6, 2020** and the **first few days of the lockdown period**.

- There has been a **dip of 77% in mobility trends** for places like restaurants, cafes, shopping centres and movie theaters and a **65% drop at grocery markets**, food warehouses, farmers' markets and pharmacies.
- A **57% fall for places like public beaches** and gardens, a **71% decline at public transport hubs** and a **47% drop for places of work**.
- However, the **mobility trends in the places of residence category** showed an **increase of 22%**.
- These reports will **help support decisions about how to manage the Covid-19 pandemic**. For example, the information could help officials understand changes in essential trips that can shape recommendations on business hours or inform delivery service offerings.

Movement Across Other Countries

- Reports compared traffic from Feb 16 to March 29 to retail and recreational venues, train and bus stations, grocery stores and workplaces with a five-week period (Jan 3- Feb 6).
- **Italy and Spain**, two of the hardest-hit countries, both saw visits to retail and recreation locations such as **restaurants and movie theaters fall 94%**.
- The **United Kingdom, France and Philippines** had **declines of more than 80%**.
- In Japan and Sweden, where authorities have not imposed harsh restrictions, visits to retail and recreation sites **fell by roughly only a quarter**.
- While in South Korea, which has successfully contained a large outbreak through aggressive testing and contact tracing, the **decline was just 19%**.
- There were **no reports for China and Iran**, where Google services are blocked.

Kendriya Bhandar

Why In News

- **Kendriya Bhandar prepared 2200 essential kits for distribution to needy families in Delhi in the wake of Covid-19.**
 - Each such Kit consisting of 9 items is meant to assist one needy family for some time.
 - 9 items in the kit are Rice, Wheat Flour, Dal, Cooking Oil, Chiwda/Poha, Salt, Bathing Soap bar, Detergent Soap bar, and Biscuits.

Note:

Key Points

- Kendriya Bhandar is the **Central Government Employees Consumer Cooperative Society Ltd, established in 1963.**
- The society endeavors to serve the Central Government Employees and general public at large by
 - providing quality goods of daily needs at reasonable prices and
 - playing an effective role in the Public Distribution System through its retail outlets.
- It functions under the **Department of Personnel and Training (DoPT), Ministry of Personnel, Public Grievances and Pensions.**
- It is the **largest Consumer Cooperative Society in the country.** It is a **Multi State Consumer Cooperative Society**, i.e. functioning in more than one state.
- In general, a **cooperative society** is a voluntary association of individuals having common needs who join hands for the achievement of common economic interest. Its aim is to serve the interest of the poorer sections of society through the principle of self-help and mutual help. The main objective is to provide support to the members.



Note:



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Miscellaneous

Highlights

- Madhuban Gajar: Biofortified Variety
- Yanomami Tribe
- Covid-19 Affects Odisha's Art and Festival
- World Health Day
- Wimbledon Postponed due to Covid-19

Madhuban Gajar: Biofortified Variety

Why in News

Madhuban Gajar, a biofortified carrot variety, is benefitting more than 150 local farmers in Junagadh, Gujarat.

- It is being planted in an area of over 200 hectares in Junagadh, and the average yield, which is 40-50 tonne/hectare (t/ha), has become the main source of income to the local farmers.
- It is used for various value-added products like carrot chips, juices, and pickles.

Key Points

- **Biofortified Variety:** The Madhuban Gajar is a highly nutritious carrot variety developed through the selection method with higher **β-carotene content** (277.75 mg/kg, source of Vitamin A) and **iron content** (276.7 mg/kg).
- **Developed By:** Shri Vallabhhai Vasrambhai Marvaniya, a farmer scientist from Junagadh district, Gujarat.
 - He was conferred with a **National Award by the President of India** at Rashtrapati Bhavan, New Delhi during **Festival of Innovation (FOIN)–2017**.
 - He was also conferred with **Padma Shri** in the year 2019 for his extraordinary work.
- **Tested By:** National Innovation Foundation (NIF) – India, an autonomous institute under the Department of Science and Technology during 2016-17. It was found that the Madhuban Gajar carrot variety possesses a significantly **higher root yield (74.2 t/ha) and plant biomass (275 gm per plant)**.

- **Areas of Cultivation:** The variety is being cultivated in more than 1000 hectares of land in Gujarat, Maharashtra, Rajasthan, West Bengal, Uttar Pradesh.

Biofortification

- **Fortification** is the practice of **deliberately increasing the content of an essential micronutrient**, i.e. vitamins and minerals in food, so as to improve the nutritional quality of the food supply and provide a public health benefit with minimal risk to health.
- **Biofortification** is the process by which the nutritional quality of food crops is improved through agronomic practices, conventional plant breeding, or modern biotechnology.
- **Biofortification differs from conventional fortification** in that biofortification aims to increase **nutrient levels in crops during plant growth rather than through manual means during processing of the crops**.
- Increased nutritional quantity through biofortification will further support India's **National Nutrition Mission**.
 - Indian government launched the **National Nutrition Mission (renamed as Poshan Abhiyaan)** in March 2018.
 - The National Nutrition Mission is backed by a **National Nutrition Strategy** prepared by the NITI Aayog with the goal of attaining "**Kuposhan Mukh Bharat**" or malnutrition-free India, by 2022.

Festival of Innovation

- **The Festival of Innovation & Entrepreneurship (FINE)** {previously known as Festival of Innovation FOIN} is a unique initiative of the **Office of the President of India** to recognise, respect, and reward **grassroots innovations and foster a supportive ecosystem**.

Note:

- Hosted in the month of March at the President's House, FINE has become a national celebration of **creativity and innovation at and for the grassroots.**

Yanomami Tribe

Why in News

- Recently, a **Yanomami indigenous** boy died in Brazil after contracting **Covid-19**, raising fears for the Amazon tribes.

Key Points

- Brazil is home to an estimated 8,00,000 indigenous people from more than 300 ethnic groups.
- **Guarani, Kaingang, Pataxó Hã Hã Hãe Tupinambá, Yanomami, Tikuna and Akuntsu** are popular tribe of Amazon.
- **Yanomami Tribe**
 - Yanomami, also called **South American Indians**, live in the remote forest of the **Orinoco River basin** in **southern Venezuela** and the **northernmost reaches of the Amazon River basin in northern Brazil.**
 - They numbered around 27,000 individuals throughout their range.
 - Yanomami live in small, scattered, semi-permanent villages and speak the **Xirianá language.**
 - They practice **hunting and slash-and-burn agriculture.**
- It can be noted that recently, a Brazilian indigenous leader **Davi Kopenawa** who secured the land rights of the **Yanomami people** was awarded the **Right Livelihood Award-2019**, also known as **Sweden's alternative Nobel Prize.**

Covid-19 Affects Odisha's Art and Festival

Why in News


Recently, Odisha's Ganjam district administration banned the **Meru Jatra festival** and congregations related to it at temples on the occasion of **Mahavishub Sankranti (13th April, 2020)**, due to Covid-19.

- Covid-19 has also affected the sale of **Pattachitra paintings.**

Meru Jatra Festival

- Meru Jatra marks the end of the 21-day-long festival of penance named '**Danda Nata**'.
- Danda Nata is celebrated in the month of '**Chaitra**'.
 - Danda as the name implies, is **self-inflicted pain, which the danduas (people who participate in the festival) undergo** to pay their obeisance to the **lord Kali**. It is also a form of worshipping the lord Shiva and his consort Parvati.
 - The **origin of the festival** is generally traced to **8th and 9th AD** after the decadence of Buddhism in Orissa.
- On the occasion of **Mahavishub Sankranti** thousands of devotees used to gather at the **Tara Tarini hill shrine** and other temples.
 - Tara Tarini hill shrine, located at a hilltop on banks of the **Rushikulya river**, is a major centre of Shakti worship in Odisha.
 - **The twin goddesses Tara and Tarini** represent one Shakti and are the main deity of Ganjam district (Odisha).
- **Mahavishub Sankranti** is the start of the **Odia New Year.**
- Earlier, the administrations had also banned the famous Chaitra Jatra festival at Tara Tarini hill shrine as a precautionary measure against Covid-19 infection.

Pattachitra Painting

- Pattachitra style of painting is one of the **oldest and most popular art forms of Odisha.**
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- The name **Pattachitra** has evolved from the Sanskrit words **Patta**, meaning **canvas**, and **Chitra**, meaning **picture**. Pattachitra is done on canvas and is manifested by rich colourful application, creative motifs and designs, and portrayal of simple themes, mostly mythological in depiction.
 - Some of the popular themes represented through this art form are **Thia Badhia** - depiction of the temple of Jagannath; **Krishna Lila** - enactment of Jagannath as Lord Krishna displaying his powers as a

Note:

child; **Dasabatar Patti** - the ten incarnations of Lord Vishnu; **Panchamukhi** - depiction of Lord Ganesh as a five-headed deity.

- The Pattachitra, when painted on cloth, follows a traditional process of preparation of the canvas. First, the **base is prepared by coating the cloth with the soft, white, stone powder of chalk and glue made from tamarind seeds.**
- It is a tradition to complete the borders of the painting first. The painter then starts making a rough sketch directly with the brush using light red and yellow. The colours used are normally white, red, yellow, and black.
- When the painting is completed it is held over a charcoal fire and lacquer is applied to the surface. This makes the painting water resistant and durable, besides giving it a shining finish.

World Health Day

- **Every year 7th April** marks the celebration of **World Health Day.**
- Its idea was conceived at the **First Health Assembly in 1948** and came into **effect in 1950.**
- **Aim:** To create awareness of a specific health theme to highlight a priority area of concern for the **World Health Organization (WHO).**
 - Over the years, it has brought to light **important health issues** such as mental health, maternal and child care and climate change.
- **Theme for 2020: Support Nurses and Midwives.**
- **2020** has been designated as the **International Year of the Nurse and the Midwife.**
 - This year, the day celebrates the work of nurses and midwives and reminds world leaders of the critical role they play in keeping the world healthy.
 - On the Day, the **'State of the World's Nursing 2020'** report has been launched.
 - WHO and its partners will make a series of recommendations to strengthen the nursing and midwifery workforce.
- Nurses and other health workers are at the forefront of **Covid-19** response-providing high quality, respectful treatment and care, leading community dialogue to address fears and questions and collecting data for clinical studies.

Wimbledon Postponed due to Covid-19

Why in News

Recently, the **Wimbledon championships**, which were scheduled for 29th June-12th July, have been cancelled for the



first time since **World War Two (WWII)** in the wake of the ongoing crisis of **Covid-19.**

- Wimbledon (**one of the Grand Slams**) had been one of the few events not to have been officially cancelled or postponed.
- Few days back, the **Tokyo Olympics** were also postponed.

Grand Slam Tournaments

- These are the **four most important annual tennis events** and each tournament is played for about two weeks.
- It consists of:
 - **Australian Open**
 - It takes place in **mid-January**
 - Played in **hard** courts.
 - **French Open**
 - It is also known as the Roland-Garros de Paris.
 - It takes place in **May and June.**
 - Played on **clay** court.
 - **Wimbledon**
 - It takes place in **June and July.**
 - Played on a **grass** court.
 - **US Open**
 - It takes place in **August and September.**
 - Played in **hard** courts.
- Wimbledon is relatively older than the rest (1877), followed by the US (1881), French (1891) and the Australian (1905).
- Only Wimbledon was a major before **1924–25**, when **all the four became designated Grand Slam tournaments.**



Note:

