

CIVIL SERVICES MONTHLY

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Ram setu

NITI index

H1B visa rules

“UDYOG MANTHAN” BEGINS

Jallikattu: pride & politics

Caste, covid and the city: the problem of people

Issues of Poverty and malnutrition

FOOD MATHS

Vaccine route to healthy India

NEW INDIA, NEW DALIT

THE WHATSAPP FIX

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PRELIMS

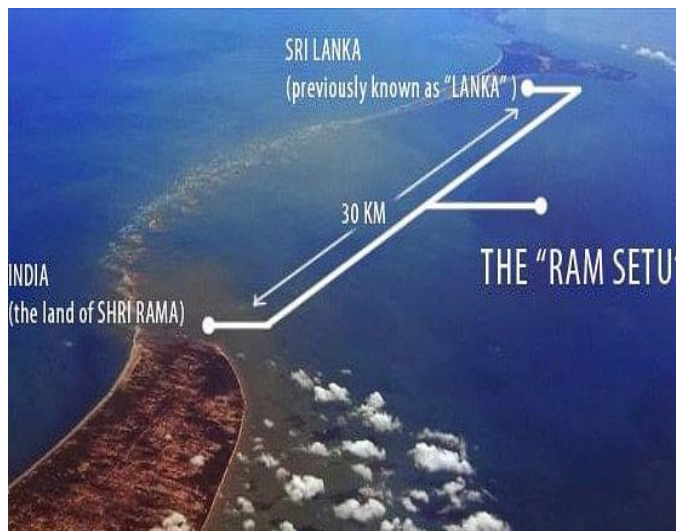
Ram Setu

IN NEWS:

1. The historicity and the date of ‘**Ramayana**’ remain a debatable subject among historians, archaeologists and scientists. Hence, the government has approved an underwater research project to ascertain the **origins of the Ram Setu** — a 48-km-long chain of shoals between India and Sri Lanka.
2. Ram Setu’s age will be ascertained through the **study of fossils and sedimentation** to see if it correlates with the Ramayana period.

ABOUT:

1. **Ram Setu**, also known as **Adam’s Bridge** or **Nala Setu**, holds religious significance because of the Ramayana.
2. The **central advisory board on archaeology**, which functions under the Archaeological Survey of India (ASI), has approved the proposal for this underwater exploration project.
3. The **study — to be conducted by the Council for Scientific and Industrial Research (CSIR) and National Institute of Oceanography (NIO) Goa** — will focus on the process behind Ram Setu’s formation and also whether there are any submerged habitations around the structure.
4. The agency’s research vessel named **Sindhu Sadhana** will be deployed to collect samples of sediment from 35-40 metres below the water level. **Sindhu Sadhana is an indigenous exploration vessel which can stay underwater for up to 45 days.**
5. The proposed study will be based on archaeological antiquities, [radiometric](#) and thermoluminescence (TL) dating for geological timescale and other supporting environmental data.



GHTC-India CONTEXT:

- Prime Minister laid the foundation stone of six Light House Projects in six cities as part of the **Global Housing Technology Challenge-India (GHTC-India) initiative**.

ABOUT:

- The aim of the programme is to build around 1,000 houses each in **Indore** (Madhya Pradesh), **Rajkot** (Gujarat), **Chennai** (Tamil Nadu), **Ranchi** (Jharkhand), **Agartala** (Tripura) and **Lucknow** (Uttar Pradesh) over a period of 12 months. Modern construction practices from countries such as France, Germany and Canada would be adopted.
- **About Global Housing Technology Challenge-India (GHTC-I)**: It was launched in 2019 under Pradhan Mantri Awas Yojana Urban (PMAY-U)
 - It intends to get the best globally available innovative construction technologies through a challenge process.
 - It aims to demonstrate and deliver ready to live-in houses in minimum time and minimum cost with high-quality of construction in a sustainable manner.
 - This challenge seeks to promote future potential technologies through Incubation support and accelerator workshops, in order to foster an environment of research and development in the country.

Composite Digital Payments Index(DPI)

CONTEXT:

- DPI constructed by Reserve Bank of India (RBI) aims to capture the extent of digitisation of payments across the country.

ABOUT:

The RBI-DPI has been constructed with **March 2018 as the base** period with score 100. The DPI for March 2019 and March 2020 work out to 153.47 and 207.84 respectively, indicating appreciable growth.

- **It comprises five broad parameters, including:**
 - Payment Enablers - 25% weightage
 - Payment Infrastructure – Demand-side factors - 10% weightage
 - Payment Infrastructure – Supply-side factors -15% weightage
 - Payment Performance -45% weightage
 - Consumer Centricity -5% weightage
- **Latest Digital Transaction Data:** According to the RBI data, digital transactions exhibited a sustained recovery and momentum picked up in November 2020, supported by both wholesale and retail transactions.

REWARI-MADAR

CONTEXT:

- **306 km long Rewari - Madar section of the Western Dedicated Freight Corridor (WDFC)** inaugurated by PM.

ABOUT:

- He also flagged off world's first 1.5 km-long electrified double stack container train. He said with the flag off of the first double stacked container freight train from New Ateli in Haryana to New Kishanganj in Rajasthan, India has joined the select nations in the world.
- Since its launch in December 2020, the **New Bhaupur - New Khurja** section of the **Eastern DFC or EDFC** average speed of the freight train has tripled in that particular section.
- **Dedicated Freight Corridors:** It is a freight only railway corridor being built to ease the movement of freight traffic. It is being implemented by

DFCCIL(Dedicated Freight Corridor Corporation of India)

with the **World Bank** loan. There are two such corridors being built in India:

1. **Eastern Dedicated Freight Corridors (EDFC)** will connect **Ludhiana-Khurja-Dankuni**(Kolkata), with a dedicated Freight corridor line. It would have two stretches **Dadri-Khurja-Kanpur, Kanpur-Mughal-Sarai** respectively.
2. **Western Dedicated Freight Corridor(WDFC)** functions between **Khurja and JNPT Mumbai**.

India Justice Report 2020

CONTEXT:

1. Recently, **India Justice Report 2020** has been released. The report was an initiative of **Tata Trusts, along with the Centre for Social Justice, Common Cause, CHRI, DAKSH and TISS-Prayas and Vidhi Centre for Legal Policy**.

HIGHLIGHTS:

1. At 25.3 per cent, **Bihar leads the list of 25 states for employing most women in its police** force, according to the second annual survey on police, prisons, judiciary and legal aid.
2. The state finished ahead of **Himachal Pradesh (19.2%) and Tamil Nadu (18.5%)**.
3. However, although it is the only state to have more than 20 per cent women in the police force, women account for only 6.1 per cent in the officer category. **Tamil Nadu has the highest percentage of women police officers (24.8%) , followed by Mizoram (20.1%)**.
4. On diversity, **Karnataka is the only state to meet its quotas for SC, ST and OBC in both officer cadre and constabulary, Chhattisgarh being the only other state that meets the diversity requirements for constabulary**.
5. The **lack of representation of women as judges in high courts** is telling. **Sikkim tops the list with 33.3 per cent**

women – Sikkim High Court has just three judges.

6. Only 29 per cent judges in HCs across the country are women, but no state except Sikkim has over 20 per cent women judges.
7. **Andhra Pradesh tops the list with 19 per cent**, followed by Punjab and Haryana, where the common HC for the two states has 18.2 per cent women judges.
8. **Four states – Bihar, Uttarakhand, Tripura and Meghalaya – have no woman judge in its high courts.**
9. Despite the low figures, women's representation has marginally increased in police, prisons and the judiciary.
10. Women account for 10 per cent of all police personnel, up from 7 per cent in January 2017; 13 per cent prison staff (10% in December 2016); 29.3% of judges (26.5% in 2017-18).
11. Overall, **Maharashtra retained the top spot on delivery of justice to people** among 18 large and mid-sized states, followed by Tamil Nadu, Telangana, Punjab and Kerala.
12. An overwhelming two-thirds of all prisoners are undertrials awaiting a conviction.

That 2/3rds of the prisoners are undertrials is a telling commentary on how slowly the wheels of justice grind in India. These detainees are trapped in a helpless limbo. This is a human rights issue. Such a high number of undertrials only highlights the crying need for speeding up the judicial process, which translates into more judges and more benches.

ABOUT REPORT:

1. The report analysed expenditure, vacancies, representation of women and members of SC, ST and Other Backward Classes, across 18 large and mid-sized states with a population of over 1 crore and eight smaller states.

Sexual assault under POCSO

CONTEXT:

1. The Nagpur bench of Bombay High Court acquitted a man of sexual assault on the grounds that pressing the breasts of a child over her clothes without direct "skin to skin" physical contact does not constitute "sexual assault" under the Protection of Children from Sexual Offences (POCSO) Act.

ABOUT:

1. It could have implications on a range of cases. It set aside the ruling of a lower court under Section 8 of POCSO applicable to "sexual assault" on children, against convict.
2. Section 8 of POCSO provides for stringent punishment of five years' of rigorous imprisonment (RI), the High Court observed that "stricter proof and serious allegations are required".
3. As such there is no direct physical contact i.e. skin to skin with sexual intent without penetration".
4. The bench observed that "the act of pressing breast can be a criminal force to a woman/girl with the intention to outrage her modesty."
5. This Court holds that the appellant is acquitted under Section 8 of the POCSO Act and convicted under minor offence u/s 354 of IPC and sentenced him to undergo RI. The maximum sentence is five years and the minimum one year for an offence under this section.
6. **POCSO's definition of sexual assault:** As per the definition, the offence involves following necessary ingredients — act must have been committed with sexual intent, act must involve touching the vagina, penis, anus or breast of the child or making the child touch the vagina, penis, anus or breast of such person or any other person or doing any other act with sexual intent which involve contact without penetration."
7. As per the definition of 'sexual assault', a 'physical contact with sexual intent without penetration' is an essential ingredient of the offence.
8. The words 'any other act' encompasses within itself the nature of the acts which are similar to the acts which have been specifically mentioned in the definition on

the premise of the principle of ejusdem generis (of the same kind). The act should be of the same nature or close to that."

E-EPIC (Electoral photo identity card)

CONTEXT:

1. Recently, on National Voter's Day on 25 January 2021, e-EPIC has been launched.

ABOUT:

1. e-EPIC will be a non-editable secure portable document format (PDF) version of the EPIC which can be downloaded on mobile or in a self-printable form on the computer.
2. A voter can thus store the card on his mobile, upload it on Digi locker or print it and self-laminate it.
3. This is in addition to PVC EPIC being issued for fresh registration.



BENEFITS TO CITIZENS:

1. Alternate and faster mode of obtaining Electoral Photo Identity Card in a digital format.
2. Equally valid as a proof of document for voter identification.
3. Can be printed at the convenience of the voter and can bring it as proof during polling.
4. Self-service model.



CSR-like policy for scientific community

CONTEXT:

1. The **Ministry of Science and Technology** has drafted a policy on the lines of the mandatory corporate social responsibility model for the country's scientific community, this was necessitated by scientists' "isolation" from societal needs.
2. The **"Scientific Social Responsibility" policy**, under consultation for a year now, has been finalised and will soon be sent to the Union cabinet for approval.

ABOUT:

1. As per the draft policy, every "knowledge worker" has to devote atleast 10 person-days each year to SSR activity, which can include giving lectures in schools and colleges, sharing infrastructure, conducting skill development workshops, and coming up with solutions to local environmental or health issues.
2. Beneficiaries can include students, school and college teachers, local bodies, communities, women's groups, NGOs and MSMEs, among others.
3. While the knowledge worker would be given wide latitude in choosing the SSR activity, it should necessarily pertain to the transmission of scientific knowledge to society.
4. The policy envisages an SSR monitoring system in each institution to assess institutional projects and individual activity.

5. Institutes are also to publish their SSR activity as part of their annual reports. Individual SSR work is to be given due weightage in “performance evaluation of the knowledge worker, such as the performance-based assessment system the output of university and college teachers”.

THE SCIENCE, Technology and Innovations Policy, 2020 the new SSR draft policy have both emphasised the need “line ministries”—that is, central ministries that would benefit from scientific innovations—as well as state governments to keep aside a portion of their budget for scientific innovations. The SSR policy envisages that such a budget be for pro bono activities of scientists for various projects

Smart Anti Airfield Weapon

CONTEXT:

1. DRDO successfully conducted captive and release trial of indigenously developed Smart Anti-Airfield Weapon (SAAW) from Hawk-I of Hindustan Aeronautics Limited (HAL) off the Odisha coast.

ABOUT:

1. The smart weapon was successfully test fired from Indian Hawk-Mk132 of HAL.
2. This was the 9th successful mission of SAAW conducted by DRDO till now.
3. It was a text book launch, which met all mission objectives.
4. SAAW is indigenously designed and developed by DRDO's Research Centre Imarat (RCI) Hyderabad.
5. This is 125 Kg class smart weapon, capable of engaging ground enemy airfield assets such as radars, bunkers, taxi tracks, and runways etc. up to a range of 100 kms.
6. The high precision guided bomb is light weight as compared to weapon system of the same class. The weapon was earlier successfully test fired from Jaguar aircraft.

Exercise Kavach

CONTEXT:

1. A large scale Joint Military exercise ‘Exercise Kavach’ involving assets of Indian Army, Indian Navy, Indian Air Force and Indian Coast Guard will be conducted in January 2021 under the aegis of the Andaman and Nicobar Command (ANC), the only Joint Forces Command of the country.

ABOUT:

1. The exercise would involve participation and deployment of elements of Army's Amphibious Brigade along with supporting forces including Special Forces of Navy, Armour/Mechanised components, Naval Ships comprising Destroyers, ASW Corvettes and Landing Ships with ship-borne helicopters of Eastern Naval Command and ANC, Jaguar Maritime Strike and Transport aircrafts from Indian Air Force and assets of Coast Guard.
2. The exercise involves synergised application of maritime surveillance assets, coordinated air and maritime strikes, air defence, submarine and landing operations.
3. Concurrently Joint Intelligence Surveillance and Reconnaissance (ISR) exercise involving various technical, electronic and human intelligence from three services will be conducted.
4. The ISR exercise will validate the capabilities of intelligence gathering from space, air, land and sea-based assets/sensors, its analysis and sharing to achieve battle field transparency for quick decision making at different stages of operations.
5. The joint force would execute multi domain, high intensity offensive and defensive manoeuvres in the Andaman Sea and Bay of Bengal and carry out amphibious landing operations, air landed operation, helicopters-borne insertion of Special Forces from sea culminating in tactical follow-on operations on land.
6. The tri-services exercise aims to fine tune joint war-fighting capabilities and SOPs towards enhancing operational synergy.

World Economic Outlook

IN NEWS:

1. Recently, the **International Monetary Fund (IMF)** has issued the **World Economic Outlook Update**.

Highlights:

1. According to the IMF, multiple vaccines currently being rolled out around the world raised the prospect of an eventual end to the coronavirus pandemic in 2021.
2. Like 2020, 2021 economic outlook is still closely related to COVID-19, which is still the only factor driving everything at this point.
3. **BAD NEWS:** The strength of the projected recovery varies across countries, "depending on the **severity of the health crisis**, the **extent of domestic disruptions to activity** (related to the structure of the economy and its reliance on contact-intensive sectors), the **exposure to cross-border spillovers**, and **effectiveness of policy support to limit persistent damage**."
4. The **pandemic-induced acceleration in inequality** by reiterating that close to **90 million people are likely to fall below the extreme poverty threshold during 2020-21**

GDP growth		
(Estimates/Projections : In %)		
Agencies	2020-21	2021-22
IMF	(-) 8.0	11.5
FITCH	(-) 9.4	11
OECD	(-) 9.9	8
UBS	(-) 7.5	11
S&P	(-) 7.7	10

K-SHAPED RECOVERY:

1. The global economy is projected to grow **5.5% in 2021** and **4.2% in 2022**.
2. For the Emerging Market and Developing Economies category, Asian economies are projected to do much better – at 8.3 percent overall, leading by India (11.5 percent) and China (8.1 percent), compared with Sub-Saharan Africa at only 3.2 percent.
3. India's Gross Domestic Product (GDP) will grow by 11.5% in the Financial Year (FY) 2021-22, 2.7% higher than the projection made in October, 2020. In FY 2022-23, the economy will likely grow **6.8%**.
4. This revision for the current fiscal is higher than the **government's first advance estimate of 7.7%** and also the **RBI's estimate of 7.5%**.
5. This great divergence in growth in the aftermath of a major pandemic has historic precedents, and the economics academic across the world termed it as the K-shaped recovery, valid across different social strata within the same country.

OVERVIEW OF WORLD ECONOMIC OUTLOOK PROJECTIONS

Nation	YEAR-OVER-YEAR (% CHANGE)	
	PROJECTIONS	
	2021	2022
The United States	5.1	2.5
Germany	3.5	3.1
The UK	4.5	5.0
China	8.1	5.6
India*	11.5	6.8

*For India, data and forecasts are presented on a fiscal year basis and GDP from 2011 onward is based on GDP at market prices with fiscal year 2011/12 as a base year; source: IMF

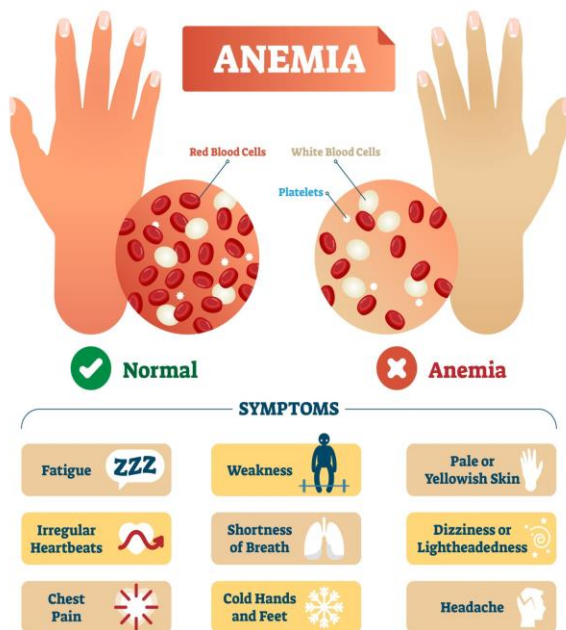
Anaemia

IN NEWS:

1. A study, titled '**The Association Between Ambient PM 2.5 Exposure and Anaemia Outcomes Among Children Under Five Years of Age in India**', published in the journal **Environmental Epidemiology**, conducted by **IIT-Delhi** has found that extended periods of exposure to **PM 2.5 can lead to anaemia among children under the age of 5 years**.

ABOUT:

1. The study has found that for every 10 micrograms per meter cube **increase in PM_{2.5}** levels exposure, there is a **decrease** of 0.07 grams per dL in average **haemoglobin levels**.
2. This is the first study to have been carried out in India, where an association between exposure to PM 2.5 and anaemia in children under the age of 5 years has been examined and established, even as numerous other studies have looked at other detrimental health impacts of particulate matter.
3. The study is important because so far anaemia has been looked at through the prism of nutrition deficiency, specifically that of iron.
4. If government programmes like **Poshan Abhiyan** were strengthened, till air pollution is curtailed or exposure of children to PM 2.5 is brought down, anaemia is likely to continue to persist.



Paris climate agreement

CONTEXT:

1. New President of the United States signed an order to restore America's participation in the United Nations Paris Agreement on climate change.

ABOUT:

1. This decision will take effect on 19 February 2021. In 2001, the U.S., under George W. Bush, had pulled out of the previous pact, the Kyoto Protocol.
2. Joining the Paris Agreement meant that the U.S. is now bound by its national pledge made under the pact: to achieve an economy-wide reduction of its GHG emissions by 26%-28% below the 2005 level in 2025.
3. Earlier, with the withdrawal from the Paris Agreement, America also stopped its contribution to the UN's Green Climate Fund, to which it had pledged \$3 billion, after transferring an estimated \$1 billion.
4. US has promised an "enforcement mechanism to achieve net-zero emissions no later than 2050", including a target no later than the end of his term in 2025, aided by a planned federal investment that will total \$1.7 trillion over ten years, besides private investments.
5. The plan revolves around 10 million well-paying clean energy jobs with a focus on solar and wind power.
6. This year's UN climate conference in Glasgow will see the new administration engaging UNFCCC member-nations to raise global ambition.

Top Emitters	Joined Paris Agreement	National Climate Target
1. China	✓	✓
2. United States	✓	✓
3. European Union	✓	✓
4. India	✓	✓
5. Russia	✗	✗
6. Japan	✓	✓
7. Brazil	✓	✓
8. Indonesia	✓	✓
9. Mexico	✓	✓
10. Iran	✗	✗
11. South Korea	✓	✓
12. Australia	✓	✓
13. Saudi Arabia	✓	✓
14. South Africa	✓	✓
15. Turkey	✗	✗

Note: Russia, Iran, and Turkey have put forward intended national climate targets, but because they have not joined the Paris Agreement their targets are not yet legally enshrined

New ant species

CONTEXT:

- Two new species of a rare ant genus have been discovered in India. The species of the ant genus *Ooceraea* found in Kerala, and Tamil Nadu add to the diversity of this rare genus. They differ from others of the same genus on the basis of the number of antennal segments.

ABOUT:

- One of them found in the Periyar Tiger Reserve of Kerala, has been named *Ooceraea joshii*, in honour of Prof. Amitabh Joshi, a distinguished evolutionary biologist from **Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR)** an autonomous institute of the Department of Science & Technology (DST), Government of India.
- New species are typically named after some distinguishing attribute or location but are often named after scientists as a means of honouring their research contributions to biology, especially in the fields of evolutionary and organismal biology, ecology or systematics.
- The two new species, the first ones spotted with ten-segmented antennae among this rare genus, were discovered.
- The genus is currently represented by 14 species of which eight possess nine-segmented antennae, while five possess eleven-segmented antennae and one species has recently been reported with eight-segmented antennae.
- In India, the genus was so far represented by two species with nine- and eleven-segmented antennae respectively.
- The newly discovered ant species with ten segmented antennae discovered, establish an old world lineage that contains a species emerging as the only model organism among the ant subfamily.



Fig 3. *Ooceraea joshii* sp. nov. Body in dorsal view [Bharti H. et al. 2021. Two new species of *Ooceraea* (Hymenoptera, Formicidae, Dorylinae) from India with ten-segmented antennae. *ZooKeys* 1010: 165-183]

Sunderbans

CONTEXT:

- According to a recent publication (Birds of the Sundarban Biosphere Reserve) of the Zoological Survey of India (ZSI), the Indian Sunderbans, which is part of the largest mangrove forest in the world, is home to 428 species of birds.

ABOUT:

- The Indian Sunderbans, which covers 4,200 sq. km, also includes the Sunderban Tiger Reserve of 2,585 sq. km — home to about 96 royal Bengal tigers (as per the last census in 2020). It is a world heritage site and a Ramsar site (a wetland site designated to be of international importance).
- 428 birds listed, some, like the masked finfoot and the Buffy fish owl, are recorded only from the Sunderbans.
- The area is home to nine out of 12 species of kingfishers found in the country as well rare species such as the Goliath heron and the spoon-billed sandpiper.
- India has over 1,300 species of birds and if 428 species of birds are from the Sunderbans, it means that one in every three birds in the country is found in the unique ecosystem.
- Sunderbans are the most diverse of natural landscapes and accounts for 60% of all mangrove forests in the country.
- The mudflats exposed in the low tides, rich in microorganism deposited during tidal activity, are ideal feeding for migratory birds.

7. The mudflats and wetlands of the Sunderbans act as a stopover site for migratory flight south [southwards] and back.

S-400 training

CONTEXT:

1. The first Indian group of military specialists will soon depart for Moscow (Russia) to undergo training courses on the S-400 Triumf missile defence system.

WHY?

1. Despite objections from the US and the threat of sanctions under Countering America's Adversaries Through Sanctions Act (CAATSA), India signed a 5.43 billion USD deal with Russia for the S-400 Triumf missile system in October 2018.

S-400 TRIUMF MISSILE SYSTEM:

1. A mobile, surface-to-air missile system (SAM) designed by Russia.
2. Engage all types of aerial targets including aircraft, unmanned aerial vehicles (UAV) and ballistic and cruise missiles within the range of 400km, at an altitude of up to 30km.
3. Track 100 airborne targets and engage six of them simultaneously.

SIGNIFICANCE:

1. Most dangerous operationally deployed modern long-range SAM (MLR SAM) in the world
2. Considered much ahead of the US-developed Terminal High Altitude Area Defense system (THAAD)
3. India's acquisition is crucial to counter attacks in a two-front war, including even high-end F-35 US fighter aircraft.

Ensure scientific management of e-waste, environmental crimes as serious as assault: NGT to CPCB

Biomedical waste sites must get authorisation: NGT

CONTEXT:

1. National Green Tribunal (NGT) has recently ordered central and all state pollution control boards that scientific disposal of e-waste should be ensured as per rules citing huge gaps in compliance of electronic waste-management rules.
2. NGT has directed biomedical waste management facilities in the country to obtain authorisation from State pollution control boards to ensure compliance from the biomedical waste management facilities due to regular fines being imposed on various healthcare facilities and biomedical waste treatment facilities.

ABOUT ORDER RELATED TO E-WASTE MANAGEMENT:

1. To reduce damage to the public health, environment and meaningful enforcement of rule of law, all the state pollution control boards need to identify the hotspots by constant vigil and to coordinate with the District Administration at local levels.
2. Large number of accidents takes place in residential areas due to unscientific handling of e-waste, which needs special attention for constant vigilance in such hotspots.
3. Further steps should be taken for scientific enforcement of E-Waste Management Rules, 2016 (EWMR) in the light of the reports of the CPCB.

BIO-MEDICAL WASTE GUIDELINES

1. CPCB: Ensure strict compliance of biomedical waste management rules and scientific disposal of the waste.
2. The Chief Secretaries of all the States/UTs to oversee compliance and ensure that authorisation is secured by every health care facility in their respective jurisdiction and there is adherence to the norms.
3. Groundwater contamination does not take place while permitting deep burials.

4. Hazardous bio-medical waste is not mixed with the general waste.
5. Frequent Violation of Rules: The direction came as a result of
6. Differentiation of COVID-19 biomedical waste from general garbage is a must to avoid further contamination adversely affecting public health.

RBI: Cost of green bonds issuance high in India

CONTEXT:

1. A study by Reserve Bank of India (RBI) noted that the cost of issuing green bonds has generally remained higher than other bonds in India, largely due to asymmetric information.

ABOUT:

1. The average coupon rate for green bonds issued since 2015 with maturities between 5 to 10 years have generally remained higher than the corporate and government bonds with similar tenure.
2. For the US dollar-denominated green bonds with tenure of more than or equal to 10 years, the coupon rate was, however lower than the corporate bonds.
3. It may be mentioned that most of the green bonds in India are issued by the public sector units 17 or corporates with better financial health.
4. It is evident from the fact that the private sector issuers of green bonds, on average, reported lower debt-to-assets ratio compared to the non-issuers of green bond.
5. Green bonds constituted only 0.7percen to fall the bonds issued in India since 2018, and bank lending to the non-conventional energy constituted about 7.9 percent of outstanding bank credit to the power sector, as of March 2020.
6. High borrowing cost has been perhaps the most important challenge and analysis indicates that it could be due to the asymmetric information
7. Therefore, developing a better information management system in India may help in reducing maturity mismatches, borrowing

costs and lead to efficient resource allocation in this segment.

India's Ultraviolet Imaging Telescope Spots Rare UV-bright Stars

CONTEXT:

1. Rare hot Ultra Violet (UV)-bright stars have been spotted by astronomers with the help of India's first multi-wavelength space satellite AstroSat in the massive intriguing globular cluster in the Milky Way Galaxy called NGC 2808.

ABOUT:

1. Scientists combined data of Ultraviolet Imaging Telescope (on board AstroSat) with observations made using other space missions like the Hubble Space Telescope and the Gaia telescope along with ground-based optical observations.
2. **Hot UV-bright stars** have been differentiated from the **relatively cooler red giant and main-sequence stars**.
3. One of the UV-bright stars was about **3000 times brighter** than the Sun with a surface temperature of about **1,00,000 K**.
4. Most of the stars were found to have evolved from a solar stage called the **horizontal branch stars** with hardly any outer envelope.
5. Thus, they were bound to skip the last major phase of life called the **asymptotic giant phase (it is one of the last major phases in the life of stars)** and directly become dead remnants or white dwarfs.

RBI moots scale-based tighter regulatory framework for NBFCs

CONTEXT:

1. The Reserve Bank of India (RBI) has suggested a tougher regulatory framework for the non-banking finance companies' (NBFC) sector to prevent recurrence of any systemic risk to the country's financial system.

ABOUT:

1. The banking regulator released a discussion paper on the revised regulatory framework which is formulated on a scale-based approach.
2. It will be based on a four-layered structure — the base layer (NBFC-BL), middle layer (NBFC-ML), upper layer (NBFC-UL) and the top layer.
3. If the framework is visualised as a pyramid, the bottom of the pyramid, where least regulatory intervention is warranted, can consist of NBFCs currently classified as non-systemically important NBFCs (NBFC-ND), NBFCP2P lending platforms, NBFCAA, NOFHC and Type I NBFCs.
4. Moving up, the next layer may comprise NBFCs currently classified as systemically important NBFCs (NBFC-ND-SI), deposit-taking NBFCs (NBFC-D), HFCs, IFCs, IDFs, SPDs and CICs.
5. The regulatory regime for this layer shall be stricter compared to the base layer. Adverse regulatory arbitrage vis-à-vis banks can be addressed for NBFCs falling in this layer in order to reduce systemic risk spill-overs, where required.
6. The next layer may consist of NBFCs identified as 'systemically significant'. This layer will be populated by NBFCs having a large potential of systemic spill-over of risks and the ability to impact financial stability.
7. The extant regulatory framework for NBFC-NDs will now be applicable to base layer NBFCs, while the extant regulatory framework applicable for NBFC-NDSI will be applicable to middle layer NBFCs. NBFCs residing in the upper layer will constitute a new category.
8. The revisions applicable to lower layers of NBFCs will automatically be applicable to NBFCs in the higher layers, unless there is a conflict or otherwise stated.
9. The current threshold for systemic importance, which is ₹500 crore now, is proposed to be revised to ₹1,000 crore.
10. As per the proposals, the extant NPA classification norm of 180 days will be reduced to 90 days. The regulatory framework for NBFCs needs to be reoriented to keep pace with changing realities in the financial sector.

NITI index

CONTEXT:

1. The Innovation Index has been released by the NITI Aayog.

ABOUT:


1. These rankings were part of NITI Aayog's India Innovation Index Report 2020. The exercise was initiated in 2019 and is on the lines of the Global Innovation Index (GII), which ranks countries annually.
2. The framework of the index includes globally considered parameters for measuring innovation, such as the percentage of GDP spent on research and development, while keeping them specific to the Indian economy.
3. The indicators that the survey uses includes the level and quality of education especially in research, number of PhD students, enrolment in engineering and technology, number of highly skilled professionals, investment in R&D, FDI inflows, internet subscribers, knowledge intensive employment, number of patents and trademark applications filed, business environment, and safety and legal environment, among others.

GII: The Gender Inequality Index (GII)

1. In 2015, India ranked 81 among 141 countries in the GII. By 2020 it ranked 48 among 131 countries.
2. There were a number of areas in which India needed to improve to meet global competitiveness in innovation, including increased expenditure in R&D by the private sector.
3. The Indian government is a major spender in R&D, while the investment of the private sector is very low.
4. Compare this to Israel where private companies account for 70 percent of private investment in R&D, In 2017-18, the Indian government had the lion's share of investment in R&D at 41 per cent.
5. India also spends only 0.7per cent of its GDP on R&D, much lower than the top spenders such as Israel (4.95 per cent).

PERFORMANCE OF STATES:

1. The Innovation Index is divided in to three categories—major states, Union Territories, and hill and North East states.
2. Karnataka has been ranked the most innovative among major states by the NITI Aayog with a score of 42.5 for the second year running.
3. As states become more innovative, they have higher per capita GDP. The state's success has been attributed to a high number of venture capital deals, registered GIs and ICT exports, and high FDI inflow.
4. Delhi has scored the highest on the index in the country with a score of 46.6, while Lakshwadeep has the lowest score at 11.7. Delhi recorded the highest number of trademark and patent applications, along with the establishment of new start-ups and companies in the last financial year.
5. Delhi also stood out as the top performer among both states and UTs.
6. The Index pointed out a North-South divide in the findings of the report, with the southern states having fared much better.
7. Maharashtra follows with a score of 38, while Bihar finishes last at 14.5. Four southern states – Karnataka, Tamil Nadu, Telangana and Kerala –occupy the top positions on the index, apart from Maharashtra.
8. Amongst North East and hill states, Himachal Pradesh has the highest score of 25.

<div>Best performers</div> <div>Four of the five highest scoring major States in the India Innovation Index are from the south</div> 	Rank	Major States	Score
	1	Karnataka	42.5
	2	Maharashtra	38.03
	3	Tamil Nadu	37.91
	4	Telangana	33.23
	5	Kerala	30.58
	6	Haryana	25.81
	7	Andhra Pradesh	24.19
	8	Gujarat	23.63
	9	Uttar Pradesh	22.85
	10	Punjab	22.54

Centre nod for Chenab hydel project despite Pak objections

CONTEXT:

1. The Centre decided to go ahead with the long pending 850 megawatt Ratle hydroelectric power project for the Rs 5,822 crore on the **river Chenab in** Jammu and Kashmir's Kishtwar district, despite objections raised by the Pakistan government over the same.

BACKGROUND:

1. The Project to be built near Drabshalla village in Kishtwar, the then Prime Minister had laid the foundation stone for the project on June 25, 2013.
2. However, the Pakistan government had objected to the construction of the dam, claiming that it was not in conformity with the Indus Water Treaty.
3. In August 2017, the World Bank allowed India to construct the dam and the following year, the erstwhile state government approached the Centre with a proposal to resume construction.
4. An MoU was signed between the National Hydel Power Corporation (NHPC) and the Jammu and Kashmir State Power Development Corporation Limited (JKSPDCL) at Vijaypur in Samba district on February 3, 2019 and work on the project began in December 2019.

ABOUT:

1. The project will be a joint venture between the NHPC and the JKSPDC having an equity of 51 per cent and 49 per cent, respectively, and will be completed in five years.
2. The JKSPDCL equity will be paid by the Centre.
3. The power share of J&K from the project will start from 8 per cent and increase to 12 per cent in the 12th year. It will be the first hydel power project in the country from which we will start getting power from the day it gets commissioned.
4. If calculated in terms of money, Jammu and Kashmir will get electricity worth Rs 5,289 crore free of cost and the Union Territory will also get water usage charges worth Rs 9,581 crore over a period of 40 years.

5. The project will generate direct and indirect jobs for 4,000 people in addition to the 2,000 jobs created directly and indirectly in the commissioning of the 540 MW K war hydroelectric power project on the Chenab.

SC upholds IBC's Section 32A

CONTEXT:

1. The Supreme Court held that the successful bidders for a corporate debtor under the Insolvency and Bankruptcy Code (IBC) would be immune from any investigations being conducted either by any investigating agencies such as the Enforcement Directorate (ED) or other statutory bodies such as Securities and Exchange Board of India (SEBI).

WHAT DID THE SUPREME COURT SAY IN ITS JUDGMENT?

1. The apex court upheld the validity of Section 32A of IBC as it was important for the IBC to attract bidders who would offer reasonable and fair value for the corporate debtor to ensure the timely completion of corporate insolvency resolution process (CIRP).
1. Such bidders, however, must also be granted protection from any misdeeds of the past since they had nothing to do with it.
2. Such protection must also extend to the assets of a corporate debtor, which form a crucial attraction for potential bidders and helps them in assessing and placing a fair bid for the company, which, in turn, will help banks clean up their books of bad loans.
3. The extinguishment of the criminal liability of the corporate debtor is apparently important to the new management to make a clean break with the past and start on a clean slate.
4. As far as protection afforded to the property is concerned there is clearly a rationale behind it.
5. The protection to successful bidders and the assets of a corporate debtor are provided by the rules under Section 32A of the IBC. Such immunity would be applicable only if there is an approved resolution plan, and a change in the management control of the corporate debtor.

6. The new management cannot be the disguised avatar of the old management. It cannot even be the related party of the corporate debtor.
7. The new management cannot be the subject matter of an investigation which has resulted in material showing abetment or conspiracy for the commission of the offence and the report or complaint filed thereto.

Why is the SC upholding Section 32A important?

1. Since the IBC came into being in 2016, the implementation of resolution plan of several big ticket cases has been delayed because of various challenges mounted by its own agencies and regulators.
2. With the Supreme Court upholding the validity of Section 32 A, the delayed cases are expected to be completed soon. This will give confidence to other bidders to proceed with confidence while bidding on such disputed companies and their assets.

'Too big to fail' list: SBI, ICICI Bank, HDFC Bank

CONTEXT:

1. The Reserve Bank of India (RBI) has retained State Bank of India (SBI), ICICI Bank and HDFC Bank as Domestic Systemically Important Banks (D-SIBs) or banks that are considered as "too big to fail".

ABOUT:

1. Some banks, due to their size, cross-jurisdictional activities, complexity, lack of substitutability and interconnectedness, become Systemically Important Banks, which are perceived as 'Too Big To Fail (TBTF)'.
2. D-SIB framework is based on the assessment conducted by the national authorities, who are best placed to evaluate the impact of failure on the local financial system and the local economy.

3. In case a foreign bank having branch presence in India is a Global Systemically Important Bank (G-SIB).
4. The RBI had issued the framework for dealing with D-SIB in 2014.
5. The D-SIB framework requires the Reserve Bank to disclose the names of banks designated as D-SIBs starting from 2015 and place these banks in appropriate buckets depending upon their Systemic Importance Scores (SISs).

Exercise Desert Knight-21

CONTEXT:

1. Indian Air Force (IAF) and French Air and Space Force conducted a bilateral Air exercise, Exercise Desert Knight-21 at Air Force Station Jodhpur from 20 to 24 January 2021.

ABOUT:

1. Unique exercise as it includes fielding of Rafale aircraft by both sides.
2. Indicative of the growing interaction between the two premier Air Forces.
3. Presently, the French detachment for Ex Desert Knight-21 is deployed in Asia as part of their 'SKYROS Deployment'.

Lok Sabha, Rajya Sabha to have 5-hour sessions with Question Hour, Zero Hour

CONTEXT:

1. Budget session of Parliament is going to start on 29 January 2021, Lok Sabha Speaker said both Houses will have five-hour sessions each with Question Hour and Zero Hour.

QUESTION HOUR:

1. The first hour of every parliamentary sitting is slotted for the Question Hour.
2. In 2014, it was shifted in the Rajya Sabha from 11 am to 12 noon.
3. Members of Parliament (MPs) ask questions to ministers and hold them accountable for the functioning of their ministries.

Questions can also be asked to the **private members**.

4. The **presiding officers of the both Houses** (Rajya Sabha and Lok Sabha) are the **final authority** with respect to the conduct of Question Hour.
5. It is regulated according to **parliamentary rules**.

ZERO HOUR:

1. It is an **Indian parliamentary innovation**. It is not **mentioned in the parliamentary rules book**.
2. MPs can raise matters **without any prior notice**.
3. Starts immediately after the question hour and lasts until the agenda for the day

In 2020, Rajya Sabha sat for just 33 days in 2020, its lowest-ever tally of sittings in a year. The Budget and the monsoon sessions had to be cut short as COVID-19 positive cases even in supporting staff kept spiralling. The winter session was cancelled, which was last done 36 years ago in 1984.

- There are only three other occasions when the Rajya Sabha met for fewer than 50 sittings in a year — 48 in 1999 and 46 each in 2004 and 2008.
- In overall parliamentary history, there have been only three instances in 1979, 1975 and 1984 when the winter session was cancelled.
- As per an analysis by the Rajya Sabha Secretariat, the limited number of sittings did not hurt the productivity. “During the year 2020, the annual productivity has been 82.7%, the highest annual productivity during the last 11 years.” A total of 39 Bills have been passed by the House during 2020, including 12 during the Budget session and 27 during the monsoon session. The list of legislation includes the three controversial farm laws.
Source: The Hindu News Page: In 2020, RS saw lowest number of sittings ever.

‘Explore crowdfunding to help two children with rare disease’

CONTEXT:

1. Delhi High Court (HC) has ordered the Ministry of Health and Family Welfare to explore “crowdfunding” to help two children, who are suffering from a Rare Disease known as Duchenne Muscular Dystrophy.
2. HC also give a specific timeline to the Ministry in respect of the finalisation and notification of the Draft Health Policy for Rare Diseases, 2020. The draft policy has a section where the government proposed crowdfunding for treatment of high-cost Rare Diseases.

WHAT IS CROWDFUNDING?

1. **Method of raising capital through the collective effort** of a large pool of individuals, primarily online via social media and crowdfunding platforms and leverages their networks for greater reach and exposure.
2. The 3 primary types are donation-based, rewards-based, and equity crowdfunding.
3. Donation-based crowdfunding – Any crowdfunding campaign in which there is no financial return to the investors or contributors.
4. Rewards-based crowdfunding – Any crowdfunding campaign that involves individuals contributing to business in exchange for a “reward,” typically a form of the product or service your company offers.
5. Equity-based crowdfunding – Any crowdfunding campaign that allows contributors to become part-owners of your company by trading capital for equity shares.

RARE DISEASE:

1. There is **no universally accepted definition of rare diseases** and the definitions usually vary across different countries.
2. 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.

3. **Duchenne Muscular Dystrophy :** Genetic disorder characterized by progressive muscle degeneration and weakness due to the alterations of a protein called dystrophin that helps keep muscle cells intact.

What is 5G and how prepared is India to adapt to this tech?

CONTEXT:

1. The Department of Telecommunications (DoT) has sought inputs from telcos and other industry experts on the sale and use of radio frequency spectrum over the next 10 years, including the 5G bands.

WHAT IS 5G TECHNOLOGY AND HOW IS IT DIFFERENT?

1. 5G or fifth generation is the latest upgrade in the long-term evolution (LTE) mobile broadband networks.
2. 5G mainly works in 3 bands: (all of which have their own uses as well as limitations)
 - a) Low band spectrum has shown great promise in terms of coverage and speed of internet and data exchange, the maximum speed is limited to 100 Mbps (Megabits per second). This means that while telcos can use and install it for commercial cellphone users who may not have specific demands for very high speed internet, the low band spectrum may not be optimal for specialised needs of the industry.
 - b) The mid-band spectrum offers higher speeds compared to the low band, but has limitations in terms of coverage area and penetration of signals. Telcos and companies, which have taken the lead on 5G, have indicated that this band may be used by industries and specialised factory units for building captive networks that can be moulded into the needs of that particular industry.
 - c) The high-band spectrum offers the highest speed of all the three bands, but has extremely limited coverage and signal penetration strength. Internet speeds in the high-band

spectrum of 5G has been tested to be as high as 20 Gbps (giga bits per second), while, in most cases, the maximum internet data speed in 4G has been recorded at 1 Gbps.

WHERE DOES INDIA STAND IN THE 5G TECHNOLOGY RACE?

1. India had, in 2018, planned to start 5G services as soon as possible, with an aim to capitalise on the better network speeds and strength that the technology promised.
2. All the three private telecom players, Reliance Jio Infocomm, Bharti Airtel and Vi, have been urging the DoT to lay out a clear road map of spectrum allocation and 5G frequency bands, so that they would be able to plan the roll out of their services accordingly.
3. One big hurdle, however, is the lack of flow of cash and adequate capital with at least two of the three players, namely Bharti Airtel and Vodafone Idea.
4. Reliance Jio plans to launch an indigenously built 5G network for the country as early as the second half of this year. The company is said to have a complete end-to-end 5G solution prepared by the company itself that is ready for deployment once the networks are in place. This solution can also be deployed by other telecom operators as a complete managed service.

WHAT IS THE GLOBAL PROGRESS ON 5G?

1. More than governments, global telecom companies have started building 5G networks and rolling it out to their customers on a trial basis. In countries like the US, companies such as AT&T, T-mobile, and Verizon have taken the lead when it comes to rolling out commercial 5G for their users.
2. While some such as AT&T had started testing and deploying the technology as early as 2018, other companies such as Verizon have followed suit, expanding their 5G ultra-wide broadband services to as many as 60 cities by the end of 2020. In other countries such as China, some of the telcos such as China Unicom had started 5G trials as early as 2018, and have since rolled out the commercial services for users.
3. South Korean company Samsung, which had started researching on 5G technology

way back in 2011, has, on the other hand, taken the lead when it comes to building the hardware for 5G networks for several companies.

G7 summit

CONTEXT:

1. British Prime Minister invited the Indian Prime Minister to the UK for the G7 summit in June 2021.

ABOUT:

1. The proposed summit will be the first in-person G-7 summit in almost two years, as it will be held in the English region of Cornwall from June 11 to 13.
2. Besides India, Australia and South Korea have also been invited as guest countries as a testament to UK's commitment to ensuring multilateral institutions better reflect today's world.
3. G7 PLUS India, Australia and South Korea is seen as a gathering of D-10 — 10 leaders who represent over 60% of people living in democracies around the world. This is also seen as a signal to China.
4. India had attended the G-7 summit in Biarritz in France in August 2019 and was also invited for the 2020 summit hosted by the US — which could not take place due to the pandemic.
5. This is expected to be second G-7 summit in the tenure of present PM; his predecessor had attended the G-8 summit (it became G-7 from G-8 with the expulsion of Russia in 2014) five times between 2005 and 2009.
6. G7 is the most prominent grouping of democratic countries, and it has long been the catalyst for decisive international action to tackle the greatest challenges. From cancelling developing world debt to our universal condemnation of Russia's annexation of Crimea, the world has looked to the G7 to apply our shared values and diplomatic might to create a more open and prosperous planet.
7. The G7, which includes UK, Canada, France, Germany, Italy, Japan, the USA and the EU, is the only forum where the world's most influential and open societies and advanced economies gather for discussions.

8. The summit itself will be held in the coastal town of Carbis Bay, supported by neighbouring St. Ives and other towns across the Cornwall region.
9. In February, UK will assume the Presidency of the UN Security Council, and, later this year, it will host the COP26 climate summit in Glasgow and a global education conference.

Rare earth metals

CONTEXT:

1. A [survey](#) done by United Nations University (UNU) and the World Health Organisation (WHO) on the impact e-waste has on child health, raised concerns around chemical burns, cancer and stunted growth.
2. Eradicating these substances from discarded products is difficult and costly, which is why much of the e-waste exported to the developing world under the pretence of being reused or refurbished ends up being dumped.
3. Naturally abundant wind, geothermal, solar, tidal and electric energy are being hastened as the future of the planet's energy needs. And rare earth elements are used in a bevy of technologies to generate this cleaner, renewable energy like wind turbine magnets, solar cells, smartphone components, cells used in electric vehicles, among others.

ABOUT:

1. Rare earth metals, they comprise seventeen chemical elements — 15 lanthanides (lanthanum, cerium, praseodymium, neodymium, promethium, samarium, europium, gadolinium, terbium, dysprosium, holmium, erbium, thulium, ytterbium, and lutetium), scandium and yttrium.
2. Despite the name, rare earth elements are found abundantly in the Earth's crust. They are widely dispersed and found in low concentrations that are not economically exploitable.

3. Extraction and mining of rare earth metals involves similar land-use exploitation, environmental damage and ecological burden as any other mining operation. They are mined using extremely energy-intensive processes, spewing carbon emissions into the atmosphere and toxins into the ground.
4. Many of these metals, which include mercury, barium, lead, chromium and cadmium, are extremely damaging to the health of several ecosystems, including humans.

GLOBAL SCENARIO:

1. Until 1948, India and Brazil were the world's primary producers of rare earth metals.
2. The countries with the most rare earth metals currently are China (the largest reserves in the world), the United States, Brazil, India, Vietnam, Australia, Russia, Myanmar, and Indonesia.
3. Due to ambitious renewable energy initiatives resulting from many nations pursuing renewable technologies, there is a need for caution.
4. Especially when the largest reserves in the world, the largest users and the country which is involved in a majority of the supply chains is China.

Bike ambulances

CONTEXT:

1. Defence Research and Development Organisation (DRDO) hands over Motor Bike Ambulance 'Rakshita' to Central Reserve Police Force (CRPF).

ABOUT:

1. Rakshita is handed by the Institute of Nuclear Medicine and Allied Sciences (INMAS), Delhi based DRDO laboratory, to CRPF.
2. Rakshita is a bike-based casualty transport emergency vehicle and is fitted with a customized reclining Casualty Evacuation Seat (CES), which can be fitted in and taken out as per requirement.

3. The bike ambulance will help in overcoming the problems faced by Indian security forces and emergency healthcare providers.
4. It will provide life-saving aid for evacuation of injured patients from low intensity conflict areas.
5. This bike ambulance is useful not only for the paramilitary and military forces but has potential civil applications too.

Old pig painting

CONTEXT:

1. Archaeologists have discovered the world's oldest known cave art — a life-sized picture of a wild pig that was painted at least 45,500 years ago in the limestone cave of Leang Tedongnge in South Sulawesi, Indonesia.

ABOUT:

1. The cave painting consists of a figurative depiction of a warty pig, a wild boar that is endemic to this Indonesian island.
2. The finding also represents some of the earliest archaeological evidence for modern humans in the region.
3. The cave is in a valley that is enclosed by steep limestone cliffs, and is only accessible by a narrow cave passage in the dry season, as the valley floor is completely flooded in the wet season.
4. It shows a pig with a short crest of upright hairs and a pair of horn-like facial warts in front of the eyes, a characteristic feature of adult male Sulawesi warty pigs.
5. Painted using red ochre pigment, the pig appears to be observing a fight or social interaction between two other warty pigs.
6. These pigs were the most commonly portrayed animal in the ice age rock art of the island, suggesting they have long been valued both as food and a focus of creative thinking and artistic expression.
7. The previously oldest dated rock art 'scene' at least 43,900 years old, was a depiction of hybrid human-animal beings hunting Sulawesi warty pigs and dwarf bovids.
8. It was discovered by the same research team at a nearby limestone cave site.

9. Rock art produced in limestone caves can sometimes be dated using Uranium-series analysis of calcium carbonate deposits ('cave popcorn') that form naturally on the cave wall surface used as a 'canvas' for the art.

Lumpy skin disease

CONTEXT:

1. Lumpy skin disease (LSD) has prevailed over the village of Kammana in Kerala's Wayanad district since the beginning of the year.

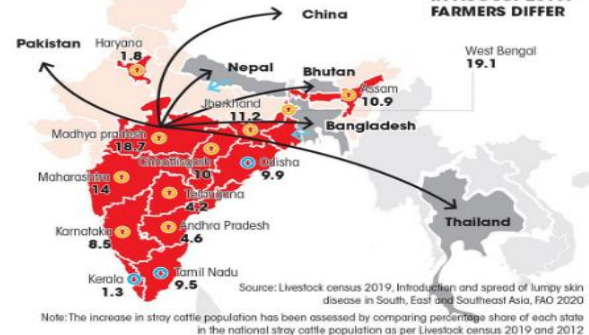
ABOUT:

1. A viral illness that causes prolonged morbidity in cattle and buffaloes. It appears as nodules of two to five centimetre diameter all over the body, particularly around the head, neck, limbs, udder and genitals.
2. The lumps gradually open up like large and deep wounds. In some cases — under 10 per cent according to the Food and Agriculture Organization (FAO) — the infected animal succumbs to the disease.
3. While the LSD virus easily spreads by blood-sucking insects like mosquitoes, flies and ticks and through saliva and contaminated water and food, no treatment is available for the disease, that is being **reported for the first time in India.**

15 states in 16 months

Stray cattle population has increased significantly in most states that have reported lumpy skin disease outbreaks

- Cattle trade flow between India and neighbours
 - Live cattle and buffaloes import to India
 - Increase in stray cattle between 2012-19
 - Decrease in stray cattle between 2012-19
 - Cattle population (in million)
- OFFICIALS SAY 30 TO 40 CASES HAVE BEEN REPORTED FROM EACH AFFECTED STATE SINCE OUTBREAK BEGAN IN AUGUST 2019. FARMERS DIFFER**



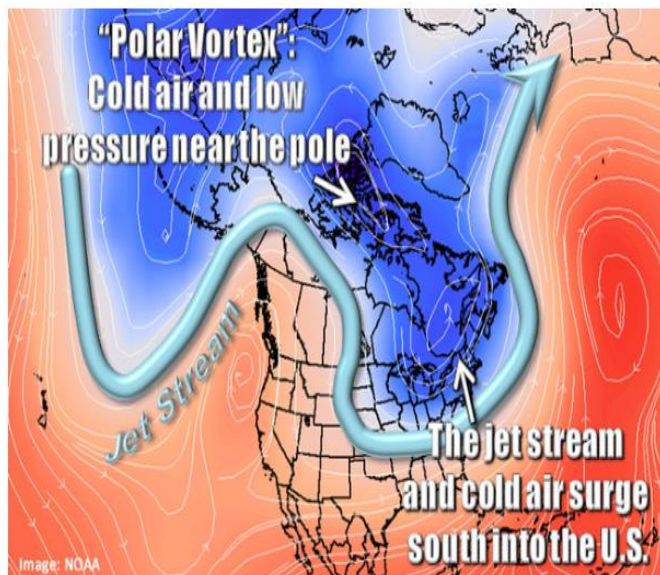
Polar Vortex

CONTEXT:

1. Polar vortex is splitting into two and swirling southward and this will lead to a chilling deep freeze in the US and European countries. Earlier, such vortex developed in 2014.

WHAT IS POLAR VERTEX?

1. The polar vortex is a large area of low pressure and cold air surrounding both of the Earth's poles. It ALWAYS exists near the poles, but weakens in summer and strengthens in winter.
2. The term "vortex" refers to the counter-clockwise flow of air that helps keep the colder air near the Poles.
3. Many times during winter in the northern hemisphere, the polar vortex will expand, sending cold air southward with the jet stream.
4. This is not confined to the United States. Portions of Europe and Asia also experience cold surges connected to the polar vortex.
5. By itself, the only danger to humans is the magnitude of how cold temperatures will get when the polar vortex expands, sending Arctic air southward into areas that are not typically that cold.



IMPLICATIONS:

1. Polar vortex is losing stability and its splitting causes dramatic, extreme weather implications across the western nations like the US and Europe.
2. With a 'disrupted' polar vortex in 2021, the colder air is expected to spill out of

the Arctic and result in the onset of extremely harsh winters.

NCAVES India Forum 2021

CONTEXT:

1. The Ministry of Statistics & Programme Implementation is conducting three live sessions of "Natural Capital Accounting and Valuation of Ecosystem Services" (NCAVES) India Forum 2021 are scheduled to be held on January 14, 21 and 28, 2021 in collaboration with United Nations Statistics Division (UNSD), European Union and UN Environment.
2. It aims to disseminate the activities taken up by the Ministry under the Project and to highlight the uses to which natural capital accounts can be put, especially in the areas of decision making and policy analysis.

ABOUT:

1. The first session of the event on 14 January 2021 was dedicated to the discussions on the efforts made by India and the international agencies in the domain of natural capital accounting and valuation of the ecosystem services.
2. Through the forum, the Ministry targets to showcase Government's efforts in making environment a key dimension in our policy paradigm and welcomes active participation of all stakeholders in the NCAVES India Forum 2021.

BACKGROUND:

1. In 2017, the European Union initiated a project, NCAVES in 2017 to help nations advance the **knowledge on environmental-economic accounting**, in particular **ecosystem accounting** that can help in **ensuring sustainable economic growth**.
2. The NCAVES Project is being implemented in five countries – India, Brazil, China, Mexico and South Africa - by the United Nations Statistics Division (UNSD), United Nations Environment Programme (UNEP) and the Secretariat of the Convention of Biological Diversity (CBD).
3. The Ministry of Statistics & Programme Implementation has taken up several initiatives under the NCAVES Project during the past three years.

Army inks \$20 mn deal with idea Forge for UAV

CONTEXT:

1. The Indian Army has signed a \$20-million contract with ideaForge, a player in unmanned aerial vehicle (UAV) technology, to procure undisclosed quantities of a high-altitude variant of SWITCH UAV, an indigenous system used in surveillance operations.

ABOUT:

1. SWITCH UAV is an indigenous system built to cater to the most demanding surveillance operations of the Indian forces.
2. This fixed-wing vertical take-off and landing UAV can be deployed at high altitudes and under harsh environments for day and night surveillance.
3. UAV player ideaForge has been awarded this one-year contract after it qualified the operational requirements in an evaluation done in real-world conditions.
4. The contract marks a strategic shift in the Indian defence procurement process.

83 Tejas fighters

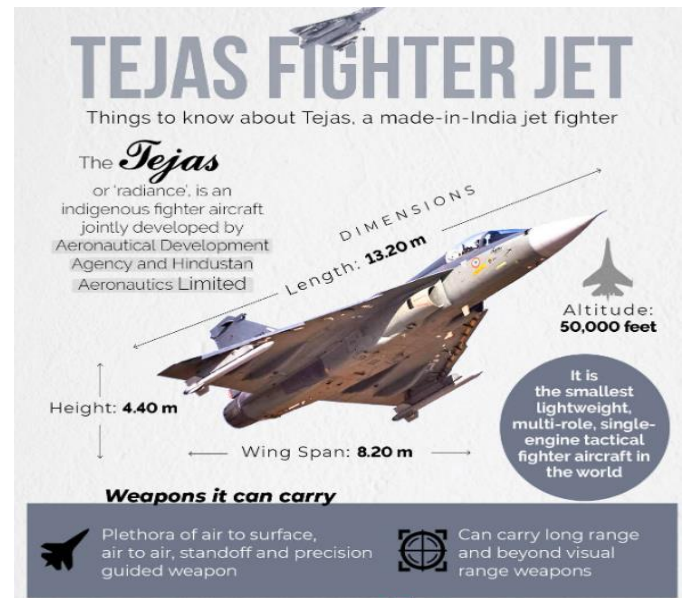
CONTEXT:

1. The Cabinet Committee on Security (CCS) cleared a deal worth nearly Rs 48,000 crore for the acquisition of 83 Tejas Light Combat Aircraft for the Indian Air Force

TEJAS Mk-1A MULTIROLE LIGHT FIGHTERS:

1. Designed by the Aeronautical Development Agency under the Department of Defence Research and Development
2. Manufactured by state-owned Hindustan Aeronautics Limited (HAL)
3. It will be an improvement over the Mk-1 version.

4. The indigenous content of the aircraft is 50 per cent and will be enhanced to 60 per cent.



Vietnam buys Indian rice for first time in decades

CONTEXT:

1. Vietnam purchased Indian Rice for first time in decades. In December 2020, China started buying Indian rice for the first time in at least three decades.

ABOUT:

1. Vietnam, the world's third biggest exporter of rice, has started buying the grain from rival India for the first time in decades due to limited domestic supplies and high prices.
2. The purchases highlight tightening supplies in Asia, which could lift rice prices in 2021 and even force traditional buyers of rice from Thailand and Vietnam to switch to India - the world's biggest exporter of the grain.
3. The shrinking supplies will heighten concerns about food insecurity with sub-Saharan Africa among the areas where import demand has been increasing due partly to population growth.
4. Robust demand from Asian and African countries has also been lifting Indian prices

but they are still very competitive due to COVID ample stocks.

5. In December 2020, the world's biggest rice importer China started buying Indian rice for the first time in at least three decades due to tightening supplies from Thailand, Myanmar and Vietnam and an offer of sharply discounted prices. In 2020 India exported a record 14 million tonnes of rice.

More wildlife in Aravallis at Faridabad, Gurgaon

CONTEXT:

1. According to a recent study, the wildlife corridor of the **Aravallis in Gurgaon and Faridabad harbours a richer “variety of mammals”** than the **Asola Wildlife Sanctuary**.

ABOUT:

1. The study — a **“systematic assessment”** of mammals in the wildlife corridor formed by the Aravalli hills in Gurgaon and Faridabad with the Asola Wildlife Sanctuary (WLS) in Delhi — has been carried out.
2. **Conducted over two seasons in 2019, the study is “supported” by WWF-India Small Grants Programme and CEDAR.**

FINDINGS:

1. In comparison to Asola WLS, both **Gurgaon and Faridabad Aravallis were found to harbour extremely rich variety of mammals** — despite the fact that Asola is a wildlife sanctuary and has more legal protection.
2. This can be attributed to **“the attitude of tolerance to wildlife”** amongst the local population, **“general low density of people”,** and **“subsistence agricultural practices”** prevalent in the two districts.
3. The study indicated that the hotspot of wildlife in this corridor is actually between **Damdama and Mangar Bani,** and **wildlife moves from there to Asola through the Aravalli in Faridabad.**
4. This indicates that **Asola will survive as long as the Aravalli region of Gurgaon and Faridabad survives.** If this finishes,

Asola will automatically finish as well. It is, hence, critical to protect this region.

5. The **density of leopards and other endangered species, including striped hyena,** is approximately double in Gurgaon Aravallis of what it is in Faridabad and Asola.

THREAT TO WILDLIFE:

1. **Highways, especially the Gurgaon-Faridabad Expressway,** and increasing construction are a “major threat” to the wildlife corridor. This expressway poses a major barrier to movement of wildlife between the Aravallis of Delhi and Haryana.
2. **Land use change** and protect the wildlife corridor and **habitat from further fragmentation, construction and deforestation** are other threats.

30th National Energy Conservation Awards

CONTEXT:

1. Ministry of Power, in association with Bureau of Energy Efficiency (BEE), organised the 30th National Energy Conservation Awards (NECA) function as a Hybrid event due to the COVID pandemic.
2. During the event, the **Standards and Labelling Programme for Air Compressors and Ultra High Definition (UHD) TV on voluntary basis** was initiated; **SAATHEE (State-wise Actions on Annual Targets and Headways on Energy Efficiency) – A portal for State Designated Agency for state level activities** was also launched.
3. During the award ceremony, it was specifically mentioned that the impact of PAT Cycle II achieved emission reduction of 61 million ton of CO₂.

ABOUT:

1. The event included a virtual exhibition on achievements on Energy Efficiency. The awards were presented to the winners from different industries and sector establishments.
2. Energy Efficiency is not only good for the world but also for companies and industries themselves.
3. Despite this the country has made ambitious commitments to meet the global challenge posed by climate change. **Our country has target to reduce the emission intensity to 33-35% by 2030 compared to 2005 level, as part of commitments made during COP 21.**

NATIONAL ENERGY CONSERVATION AWARDS PROGRAMME:

1. It was launched by the Ministry of Power in 1991, to provide national recognition to those industries and establishments which have taken special efforts to reduce energy consumption while maintaining their production.
2. The awards were given away for the first time on 14th December, 1991, which was declared as the **'The National Energy Conservation Day'**. It recognizes the energy efficiency achievements in 56 sub-sectors across industry, establishments and institutions.

STANDARDS AND LABELLING PROGRAMME FOR AIR COMPRESSORS AND ULTRA HIGH DEFINITION (UHD) TV:

1. **Aim:** To enhance the level of energy conservation, this can then be used for a different purpose in the home or workplace. Besides saving energy, this programme could also facilitate reducing energy bills.
2. It is to be carried out on a voluntary basis.

SAATHEE PORTAL:

1. BEE has developed a **Management Information System (MIS) portal called SAATHEE for the State Designated Agency (SDA)** for state level activities.
2. Useful in capturing the physical and financial status/ progress of Energy Efficiency activities being implemented by States/ UTs across the country. Thus, it will facilitate Real Time Monitoring.
3. Help in decision making, coordination, control, analysis, and implementation and enforcement of the compliance process for various energy consumers at the pan India level.

Third South Asia multilateral meet

CONTEXT:

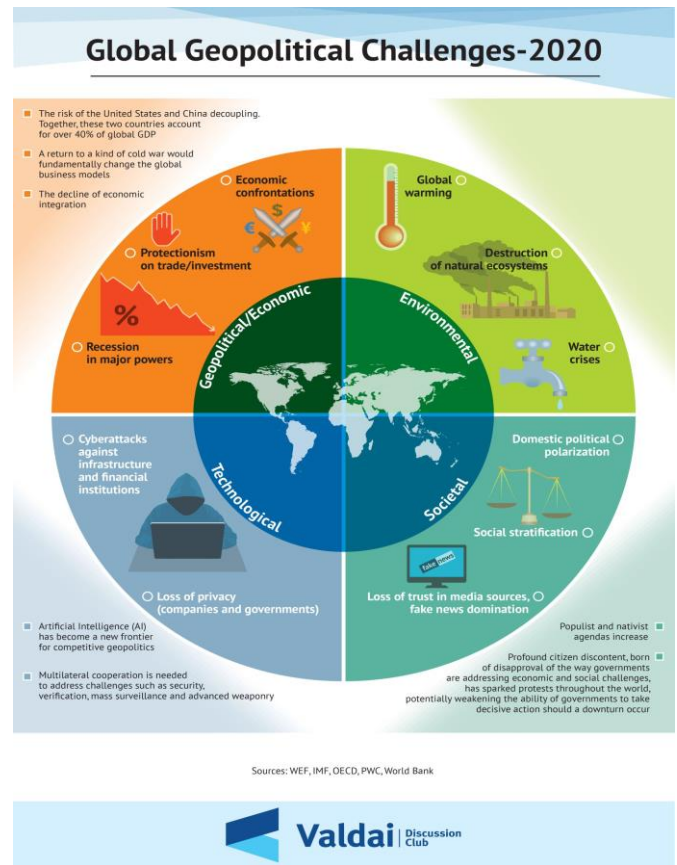
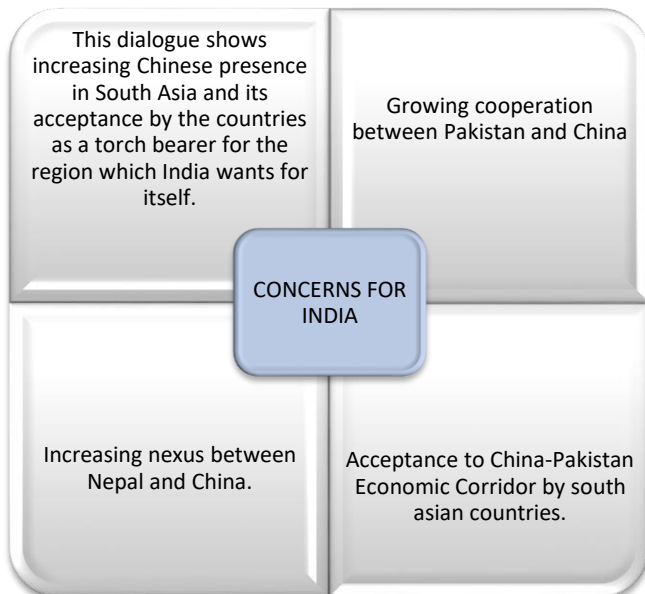
1. China has held its third multilateral dialogue virtually with 5 countries from South Asia (Pakistan, Nepal, Afghanistan, Sri Lanka and Bangladesh) except India, Bhutan and the Maldives.
2. All three dialogues have been attended by Pakistan and Nepal.

ABOUT:

1. It aims to take forward closer cooperation on fighting COVID-19 and coordinating their economic agendas, reflecting a new approach in China's outreach to the region.
2. It brought together every country in the region barring, and was aimed at "anti-epidemic cooperation and poverty reduction cooperation".
3. The two virtual meets appear part of China's growing engagement in the region, in the wake of the global pandemic.
4. The arising geopolitical turbulence is unpredictable. There is a transition from multilateralism to unilateralism, from cooperation to competition.

CHINA INITIATIVES IN SOUTH ASIA:

1. In July 2020, at quadrilateral dialogue with Afghanistan, Nepal and Pakistan, China proposed to extend the China-Pakistan Economic Corridor (CPEC) to Afghanistan.
2. It also proposed taking forward an economic corridor plan with Nepal, called the Trans-Himalayan Multi-dimensional Connectivity Network.
3. China is the largest overseas investor in the Maldives, Pakistan, and Sri Lanka. According to the American Enterprise Institute's China Global Investment Tracker, it has committed around 100 billion USD in Afghanistan, Bangladesh, the Maldives, Pakistan, Nepal and Sri Lanka.
4. China was a part of the **trilateral China-Pakistan-Afghanistan** foreign ministers dialogue to facilitate Afghan domestic political reconciliation, enhancing regional connectivity, and improving regional common development.
5. China and Bangladesh pledged to deepen "defense industry and trade, training, equipment and technology" areas together.
6. Sri Lanka handed over Hambantota port (geostrategically located on the Indian Ocean) on a 99-year lease to China to repay its loan back to China.



Looking for lithium toehold, India finds a small deposit in Karnataka

CONTEXT:

1. Recently, the **Atomic Minerals Directorate for Exploration and Research (AMD)**, an arm of the Department of Atomic Energy, has shown the **presence of 1,600 tonnes of lithium resources in the igneous rocks** of the Marlagalla-Allapatna region of **Karnataka's Mandya district**.
2. The find in Mandya is **extremely small in quantitative terms**, but it is an initial success in the attempt to **domestically mine the silver-white metal** by way of **hard-rock extraction of the ore**.

ABOUT:

1. India has initiated a **concerted domestic exploration push** for the alkali metal, a vital ingredient of the lithium-ion rechargeable batteries that power electric vehicles (EVs), laptops and mobile phones.
2. AMD is carrying out **surface and sub-surface exploration for lithium** in potential geological domains of the country. **India currently imports all its lithium needs.**
3. The domestic exploration push, which also includes exploratory work to extract **lithium from the brine pools of Rajasthan and Gujarat and the mica belts of Odisha and Chhattisgarh**, comes at a time when India has stepped up its economic offensive against China, a major source of lithium-ion energy storage products being imported into the country.

FINDINGS:

1. The Marlagalla-Allapatna area, along the **Nagamangala Schist Belt**, which exposes mineralised complex pegmatites (igneous rocks), is seen as among the most promising geological domains for potential exploration for lithium and other rare metals.
2. There are, however, two caveats. First, the new find is categorised as “**inferred**”, one of the three categories into which mineral resources are subdivided, in order of increasing geological confidence.
3. The ‘inferred’ mineral resource is the part of a resource for which quantity, grade and mineral content are estimated only with a low level of confidence based on information gathered from locations such as outcrops, trenches, pits, workings, and drill holes that may be of limited or uncertain quality, and also of lower reliability.
4. Second, **the lithium find is comparatively small**, considering the size of the proven reserves in Bolivia (21 million tonnes), Argentina (17 million tonnes), Australia (6.3 million tonnes), and China (4.5 million tonnes).

LITHIUM IN INDIA

1. **Lithium can be extracted** in different ways, depending on the type of the deposit – it is **generally done either through solar evaporation of large brine pools or by hard-rock extraction of the ore.**
2. In India, alongside the rock mining at Mandya, there is some potential for recovering lithium from the brines of Sambhar and Pachpadra in Rajasthan, and Rann of Kachchh in Gujarat.
3. The major mica belts in Rajasthan, Bihar, and Andhra Pradesh, and the pegmatite belts in Odisha and Chhattisgarh apart from Karnataka, are the other potential geological domains.

INDIA-ARGENTINA INITIATIVE :

1. In the middle of 2020, India, through a newly-floated state-owned company, had signed an agreement with an Argentinian firm to jointly prospect lithium in the **South American country** that has the third largest reserves of the metal in the world.
2. The new company, **Khanij Bidesh India Ltd**, was incorporated in August 2019 by three state-owned companies, NALCO, Hindustan Copper, and Mineral Exploration Ltd, with the specific mandate to acquire strategic mineral assets such as lithium and cobalt abroad. The company is learnt to be also exploring options in Chile and Bolivia.
3. India is seen as a late mover in attempts to enter the lithium value chain, coming at a time when EVs are predicted to be a sector ripe for disruption.
4. 2021 is likely to be an inflection point for battery technology – with several potential improvements to the li-ion technology, and alternatives to this tried-and-tested formulation in advanced stages of commercialisation.
5. Over 165 crore lithium batteries are estimated to have been imported into India between 2016-17 and 2019-20 (up to November 30, 2019), at an estimated import bill of upwards of \$3.3 billion.

Vanadium source

CONTEXT:

1. Recently, Geological Survey of India (GSI) has carried out an exploration in **palaeo-proterozoic carbonaceous phyllite rocks in the Depo and Tamang areas of Papum Pare district in Arunachal Pradesh** and placed this eastern Himalayan State on the vanadium map of the country. Now, this state likely to become India's **prime producer of vanadium**.
2. It is recovered as a by-product from the slag collected from the processing of vanadiferous magnetite ores (iron ore).

ABOUT:

1. This was the first report of a primary deposit of vanadium in India, with an average grade of 0.76% V₂O₅ [vanadium pentoxide].
2. **India is a significant consumer of vanadium, but is not a primary producer of the strategic metal.**
3. India consumed 4% of about 84,000 tonnes of vanadium produced across the globe in 2017.
4. The largest deposits of vanadium of the world are in **China, followed by Russia and South Africa.**
5. **China, which produces 57% of the world's vanadium, consumed 44% of the metal in 2017.**

METAL:

1. **Vanadium** is a chemical element with the symbol V and **atomic number 23**. It is a **hard, silvery-grey, malleable transition metal**.
2. The elemental metal is **rarely found in nature**. It is recovered as a by-product from the slag collected from the processing of vanadiferous magnetite ores (iron ore).
3. Vanadium is a **high-value metal used in strengthening steel and titanium**.

Equalisation levy

CONTEXT:

1. Recently, the Office of the United States Trade Representative (USTR) Section 301 has said that the digital taxation regime in India, Italy and Turkey is not in sync with US companies such as Google, Facebook, Apple and Amazon.com, referred to as the GAFA tax and are inconsistent with international tax principles.
2. The issues of contention are the application of taxation to revenue rather than income, extraterritorial application, and failure to provide tax certainty.

ABOUT:

1. USTR is responsible for **developing and coordinating US international trade**, commodity, and direct investment policy, and overseeing negotiations with other countries. **It** is an agency of professionals dealing with trade issues.
2. The Section 301 report (US Trade Act), a flagship publication of USTR, gives the USTR broad authority to investigate and respond to a foreign country's action which may be unfair or discriminatory as well as negatively affect US commerce. It also allows the US President to impose tariffs or other curbs on foreign nations.

WHAT IS DIGITAL SERVICES TAXES (DSTs)?

1. It is a tax on selected gross revenue streams of large digital companies. Each country's proposed or implemented DST differs slightly. All DSTs have domestic and global revenue thresholds, below which companies are not subject to the tax.
2. The OECD is currently hosting negotiations with over 130 countries that aim to adapt the international tax system. One goal is to address the tax challenges of the digitalization of the economy.

India's Digital Service Tax

- **It** imposes a 2% tax on revenue generated from a broad range of digital services offered in India, including digital platform services, digital content sales, digital sales of a company's own goods, data-related services, software-as-a-service, and several other categories of digital services.
- India's DST explicitly exempts Indian companies—only “non-residents” must pay the tax.

VIEWS OF INDIA:

India has described the 2% equalisation levy **as a fair, reasonable and non-discriminatory tax** against U.S. companies aimed at all offshore digital economy firms accessing the local market. It applies uniformly across all non-resident e-commerce operators.

- According to the Commerce and Industry Ministry, the intention of imposing such a levy is to create an ecosystem that fosters fair competition and reasonableness.
- It also aims to exercise the sovereign right of the government to tax businesses that have a close nexus with the Indian market through their digital operations.

WAY AHEAD:

1. There needs to be **international consensus on taxation on a digital economy**.
2. **2% DST should be negotiated to avoid any hurdles** in its implementation.

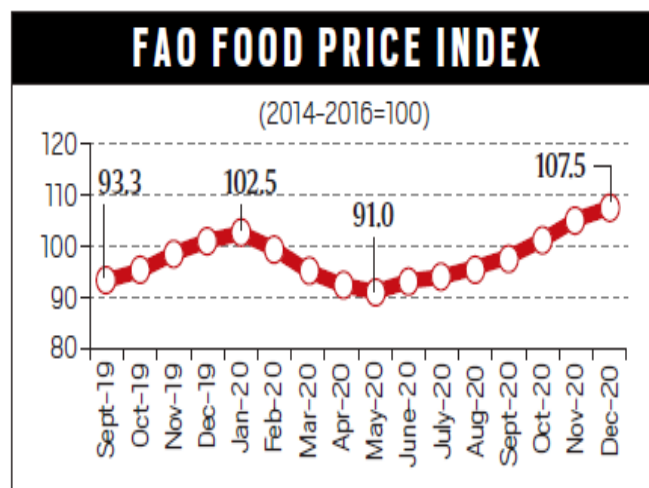
Growth silver lining but food inflation may be dark cloud

CONTEXT:

1. United Nations (UN) Food and Agriculture Organization (FAO) released its latest Food Price Index (FPI) number for December 2020.
2. This index – reflecting international prices of a basket of food commodities against a base year (2014-16) value of 100– averaged 107.5 points for the month. It was the highest since November 2014. This marks the seventh month of consecutive increase.

HIGHLIGHTS:

1. FPI has soared since May 2020. From falling to a four year low of 91 points then, it has hit a more than six-year high in December.
2. This extreme global price volatility can be seen across farm commodities.
3. There are three main reasons for international agri-commodity prices firming up in the past few months.
4. The first is a steady normalization of demand as most countries, including India, have unlocked their economies after May 2020. Even as demand has gradually recovered, restoration of supply chains post-Covid is taking time. Dry weather in major producing countries such as Thailand, Brazil, Argentina and Ukraine, plus a shortage of shipping containers, has only aggravated the supply- demand imbalances.
5. The second reason is stockpiling by China, which has stepped up imports of everything – from corn, wheat, soyabean and barley to sugar and milk powder– to build strategic food reserves amid rising geopolitical tensions and pandemic uncertainties.
6. The third reason may have to do the ultra-low global interest rates and floodgates of liquidity opened by major central banks. This money, which has already flowed into equity markets, could well find a home next in agri-commodities– more so, in a scenario of tightening world supplies.



FOOD PRICE INDEX:

1. **Introduced in 1996** as a public good to assist in monitoring developments in the **global agricultural commodity markets**.
2. **It is a measure of the monthly change in international prices of a basket of food commodities like cereals, oilseeds, dairy products, meat and sugar.**
3. **Base Period:** 2014-16.

FAO:

1. It is a specialized UN agency which takes international efforts against hunger, **based in Rome (Italy).**
2. It was founded on 16 October 1945 and on the same day World food Day is also celebrated every year around the world. On 75th Anniversary of FAO i.e., in 2020, India released a **commemorative coin of Rs. 75 denomination** to mark its 75th Anniversary.
3. **Sister bodies: International Fund for Agricultural Development (IFAD) and World Food Programme**

H1B visa rules

CONTEXT:

1. US administration has once again amended its H-1B visa regime to give priority to higher wages and skills instead of the prevailing lottery system for selection of candidates looking to work in the country.

ABOUT:

1. US Citizenship and Immigration Services (USCIS) will first select registrations where the “proffered wage equals or exceeds” the prevailing level in that area of employment.
2. The proffered wage is the wage that the employer intends to pay the beneficiary. The wage level ranking will occur first for the regular cap selection and then for the advanced degree exemption.
3. Every year, the US administration issues 85,000 H-1B work permits. Of these, 65,000 are for people with specialty occupations, while the rest are reserved for

- foreign workers who have earned a Master's or a higher university degree in the US.
4. Until now, the selection of H-1B work visas was done by a randomized lottery system, which did not take into account factors such as wage, experience or any other requirements and demands.
5. Since the number of applications from Indian companies as well as individuals is much higher than any other nationality, a lion's share of these work visas is cornered by Indians.
6. The constant changes in H-1B visa approval systems have been opposed by Google, Microsoft, Facebook and Twitter. Though Indian companies have gradually reduced their dependency on these work permits, many giant tech corporations still look to hire from the pool of H-1B workers.

Delhi Konkani language academy

CONTEXT:

1. Delhi Government approved the setting up of a Konkani language academy in the capital.

ABOUT:

1. The academy will seek to facilitate the growth and promotion of the Konkani language and culture in the city.
2. Currently, there are eight functional language academies in Delhi covering Urdu, Sanskrit, Punjabi, Hindi, Maithili-Bhojpur, Garhwali-Kumaoni-Jaunsari, Sindhi and Tamil. Tamil was notified recently.

KONKANI LANGUAGE AND CULTURE

1. Konkani is the official language of India's western and coastal state, Goa. However, the language is spoken widely across four states- Maharashtra, Goa, Karnataka and Kerala, albeit in different dialects, its use is somewhat limited to coastal regions only. It is the only Indian language written in five different scripts - Devnagari, Roman, Kannada, Malayalam and Persian-Arabic.
2. Though Konkani was recognized as the official language of Goa on January 4, 1987, it was only after five more years, on August 20, 1992, it was given status of a national language in India, through the 71st Amendment to the Eighth Schedule of the

Constitution of India. Konkani now features in the 15 languages in which the value is printed on Indian Rupee currency notes.

3. However, a lot of ambiguity, sometimes controversial, exists over the origin of Konkani. While Konkani stands classified as language of Indo-Aryan origin, doubts persist over these claims.
4. Generally, Konkani is called as a colloquial version of Marathi, the official language of Maharashtra state.

Bird flu

CONTEXT:

1. Bird flu (avian influenza) was confirmed in Kerala, Rajasthan, Madhya Pradesh, Haryana, and Himachal Pradesh, high alert has been announced in Maharashtra. Several states witnessed deaths of birds, including crows and migratory species, and are scrambling to test the samples for the virus.
2. This time, most infections have been reported either in wild birds, crows or migratory birds.

ABOUT THE INFECTION:

1. Bird flu or avian influenza is the name used to describe a viral infection that is reported mostly in birds, but has the potential to affect humans and other animals.
2. The most common strain of the virus that causes severe respiratory disease in birds is H5N1; various other strains like H7, H8 too, cause infection.

BACKGROUND:

1. The virus was first reported in geese in China in 1996. Since then, outbreaks have been reported periodically across the world. India reported the presence of the virus in Nandurbar, Maharashtra, in 2006, which led to large-scale culling of poultry birds.
2. Between 2006 and December 31, 2018, India reported 225 epicenters of bird flu infection, which led to the culling of 83.49 lakh birds, with farmers being paid Rs 26.37 crore in compensation.
3. Interestingly, Maharashtra which was the first state to report the infection, has not seen an outbreak since 2006. Odisha, Tripura, and West Bengal are among the

states that have reported repeated outbreaks of the infection in both domesticated and wild birds.

4. Since 2006, the poultry industry has developed bio safety zones around farms, which has stopped commercially reared birds from coming in contact with any foreign feed or bird.

HUMAN TRANSMISSION:

1. The H5N1 virus can jump species and infect humans from the infected bird. The first case of H5N1 infection in humans was reported in Hong Kong in 1997, when a poultry farm worker caught the infection from infected birds.
2. The high mortality rate in humans — almost 60 per cent — is the main cause of concern about the spread of bird flu. In its present form, human-to-human infection is not known — human infections have been reported only among people who have handled infected birds or carcasses.
3. The chances of the H5N1 virus infecting humans is comparatively low in India as compared to South East Asian countries, mainly because of the difference in culinary habits.
4. The virus dies immediately if exposed to temperatures over 70 degrees Celsius. Unlike in South East Asian countries, both meat and eggs in India are eaten well cooked, which sees them being exposed to over 100 degrees Celsius. Thus, the chances of humans contracting the virus from eating chicken and eggs is extremely rare.

PANDEMIC IMPACT ON POULTRY INDUSTRY IN INDIA:

1. India consumes 30 crore poultry birds and 900 crore eggs per month on average.
2. At the start of the Covid-19 pandemic, the poultry industry suffered a downfall after unsubstantiated rumours related to the spread of the disease with consumption of chicken and eggs.
3. After it, the industry suffered losses of around \$ 1 billion, as people kept away from eggs and poultry meat. After lifting restrictions on movement, the industry has managed to get back on its feet, but production remains low.

NIXI offers free Domain in local Indian languages

CONTEXT:

1. The National Internet Exchange of India, NIXI, will offer a free Internationalized Domain Name, IDN, in any of the preferred 22 official Indian language along with every IN domain booked by the registrant.

ABOUT:

1. Applicant will also get a free email in local language. This offer is valid for new .in users who register up to 31st of January. This offer is also extended to those existing in users who renew their domain in the month of January 2021.
2. NIXI is a not for profit organization.
3. It is working since 2003 for spreading the internet technology to the citizens of India through the activities like Internet Exchanges through which the internet data is exchanged amongst ISPs and between ISPs and CDNs, managing and operating Internet protocol IPv4 or IPv6 etc.

SIGNIFICANCE:

1. This offer has been created to stimulate the adoption of भारत IDN domain name and proliferation of local language content.

India to chair three-key subsidiary bodies of UNSC

CONTEXT:

1. Recently, it was announced by the Permanent Representative of India at the United Nations Security Council that India will be chairing three-key subsidiary bodies of the United Nations Security Council (UNSC).

ABOUT:

1. **Panels:** Counter-Terrorism Committee (for 2022), Taliban Sanctions Committee, and Libya Sanctions committee.
2. India will chair the Counter-Terrorism Committee of UNSC in 2022. Chairing of this committee has a special resonance for India. This committee is at the forefront of fighting terrorism especially cross border terrorism and it is also been one of its biggest victims of terrorism.

3. Taliban Sanctions Committee has a strong interest and commitment to peace, security, development, and progress of Afghanistan.
4. India will be assuming the chair of the Libya Sanctions Committee at a critical juncture when there is an international focus on Libya and on the peace process.

Longitudinal Ageing Study of India (LASI) Wave-1

CONTEXT:

1. Union Ministry for Health & Family Welfare released INDIA REPORT on Longitudinal Ageing Study of India (LASI) Wave-1 today on the virtual platform.

ABOUT:

1. LASI is a full-scale national survey of scientific investigation of the health, economic, and social determinants and consequences of population ageing in India.
2. The National Programme for Health Care of Elderly, Ministry of Health & Family Welfare has undertaken the Longitudinal Ageing Study of India, through International Institute for Population Sciences, (IIPS), Mumbai in collaboration with Harvard School of Public Health, University of Southern California, USA, Dte.GHS, United Nations Population Fund (UNFPA) and National Institute on Ageing.
3. It is India's first and the world's largest ever survey that provides a longitudinal database for designing policies and programmes for the older population in the broad domains of social, health, and economic well-being.
4. The LASI has embraced state-of-the-art large-scale survey protocols and field implementation strategies including representative sample of India and its States, socioeconomic spectrum, an expansive topical focus, a longitudinal design, and the use of Computer Assisted Personal Interviewing (CAPI) technology for data collection, quality control, and Geographic Information System (GIS).
5. A unique feature of LASI is the coverage of comprehensive biomarkers. No other survey in India collects detailed data on health and biomarkers together with information on family and social network, income, assets, and consumption.

6. It collects detailed data on health and biomarkers together with information on family and social network, income, assets, and consumption.

CENSUS DATA:

1. In 2011 census, the 60+ population accounted for 8.6% of India's population, accounting for 103 million elderly people. Growing at around 3% annually, the number of elderly age population will rise to 319 million in 2050. 75% of the elderly people suffer from one or the other chronic disease.
2. 40% of the elderly people have one or the other disability and 20% have issues related to mental health.

FINDINGS OF REPORT:

1. Around 23 per cent of the elderly population (age 60 years and above) have multi-morbidities; elderly women are more likely to have multi-morbidity conditions.
2. The results of the survey encapsulated data from more than 42,000 households, covering over 72,000 older adults across all states and union territories except Sikkim.
3. Self-reported presence of major chronic health conditions and multi-morbidities among those aged 45 and above increased with age.
4. The chronic health conditions are pronounced among those aged 75 and above and are dominated by cardiovascular diseases (CVD) and hypertension.
5. The percentage of people without morbidity consistently declined with age. About 73 per cent of the population below age 45 are found to be having no morbid conditions and this share is reduced to 44 per cent in the age group 75 and above. The decline, however, is slower from age 60 onward.
6. One fifth of the population below 45 years had a single morbid condition and amongst the oldest old, one out of every three possessed a morbid condition.
7. A tenth of the people in the age group 45-49 had multi-morbidity while 26 per cent among the elderly of age 70-74 have these conditions. However, this reduced by two percentage points for the next age group of 75-79.
8. Cardiovascular diseases (CVD) are the most prominent among those above 45.

9. Bone or joint diseases and diabetes are also observed to be high among the elderly.
10. Chronic lung diseases show a fluctuating pattern with rise in age. Neurological or psychiatric conditions constitute small part of the morbid conditions found among the elderly and the rate sees a noticeable rise after age 74.
11. Share of people living with cancer was only around 0.7 per cent among the senior citizens. The prevalence of high cholesterol and stroke among the same demographic is about 2.5 and 2.7 per cent respectively.
- 12. By 2030, 45 per cent of the total burden of diseases, majorly non-communicable, is expected to be borne by the old-age population. Adequate investment in elderly healthcare and efficacious policies and their timely management are thus imperative.**

Greenhouse gas emissions from man-managed grasslands similar to global croplands

CONTEXT:

1. A new study shows that emissions of methane (CH₄) and nitrous oxide (N₂O) from grasslands increased by a factor of 2.5 since 1750 mainly due to increased emissions from livestock. This has more than compensated for reduced emissions from the shrinking number of wild grazers.

ABOUT:

1. The net carbon sink effect of grasslands (the ability of grasslands to absorb carbon and pack it in the soil) worldwide was estimated to have intensified over the last century but mainly in sparsely-grazed, natural grasslands.
2. Over the last decade, grasslands intensively managed by humans have become a net source of greenhouse gas emissions. In fact, it has greenhouse gas emission levels similar to those of global croplands, which represent a large source of greenhouse gases.
3. The recent trends seen towards the expansion of pasture land and higher livestock numbers lead to expect that global

grasslands will accelerate climate warming if better policies are not put in place to favour soil carbon increases, stop deforestation for ranching, and develop climate-smart livestock production systems.

CONCLUSION:

1. In the face of climate change and increased demand for livestock products, these findings highlight the need to use sustainable management to preserve and enhance soil carbon storage in grasslands.
2. Full greenhouse gas reporting for each country could facilitate the assessment of progress towards the goals of the Paris Agreement and better link national greenhouse gas budgets to the observed growth rates of emissions in the atmosphere.
3. In the context of low-warming climate targets, the mitigating or amplifying role of grasslands will depend on a number of aspects. This includes future changes in grass-fed livestock numbers, stability of accumulated soil carbon in grassland and whether carbon storage can be further increased over time or if it will saturate, as observed in long-term experiments.

Antarctic ozone hole

CONTEXT:

1. According to World Meteorological Organization (WMO), the annually occurring ozone hole over the Antarctic had rapidly grown from mid-August and peaked at around 24 million square kilometres — one of the largest so far — in early October 2020.

ABOUT:

1. The expansion of the hole was driven by a strong, stable and cold polar vortex and very cold temperatures in the stratosphere. The same meteorological factors also contributed to the record 2020 Arctic ozone hole, which has also closed.
 - A polar vortex is a wide expanse of swirling cold air, a low pressure area, in polar regions. During winters, the polar vortex at the North Pole

expands, sending cold air southward.

- An ozone hole is the thinning of the ozone layer boosted in size by colder temperatures.
2. As the temperatures high up in the stratosphere starts to rise, ozone depletion slows, the polar vortex weakens and breaks down. By the end of December, ozone levels return to normal. This time around, however, the process took longer.
 3. The formation of ozone hole in the Antarctic has been an annual occurrence and has been recorded for the last 40 years.
 4. Human-made chemicals migrate into the stratosphere and accumulate inside the polar vortex. It begins to shrink in size as warmer temperatures dominate.
 5. The 2020 Antarctic hole was unprecedented as the polar vortex kept the temperature of the ozone layer cold, preventing the mixing of ozone depleted air above Antarctica with ozone rich air from higher latitudes.
 6. There is a need to enforce the Montreal Protocol banning emissions of ozone depleting substances (OSD).

Pregnancy losses

CONTEXT:

1. According to a modelling study published in **The Lancet Planetary Health journal**, pregnant women in South Asia like India, Pakistan, Bangladesh are exposed to poor air quality, and may be at higher risk of stillbirths and miscarriages.

ABOUT:

1. **Air pollution could be a major contributor to pregnancy loss in south Asia**, so controlling air pollution is vital for improving maternal health.
2. The study was unable to distinguish between natural pregnancy loss and abortions, which may have led to an underestimation of the effect of air pollution on natural pregnancy loss.
3. This is the first study to **quantify the burden in south Asia**, which is the most populous region in the world and has the highest rate of pregnancy loss. Therefore, understanding the risk factors for

pregnancy loss in south Asia is crucial to improving maternal health regionally and globally.

HIGHLIGHTS OF STUDY:

1. **South Asia has the highest burden of pregnancy loss globally** and is one of the most PM_{2.5} polluted regions in the world. Poor air quality could be responsible for a considerable burden of pregnancy loss in the region.

Why air pollution can cause pregnancy loss?

- Fine particles cross the blood placenta barrier and harm the embryo directly. Exposure to poor air quality can cause disorders such as inflammation, oxidative stress and blood pressure elevation, which can act as factors to increase the risk of pregnancy loss.
2. Losing a pregnancy can have knock-on mental, physical and economic effects on women, including increased risk of postnatal depressive disorders, infant mortality during subsequent pregnancy, and increase the costs related to pregnancy, such as loss of labour. Therefore, reducing pregnancy loss may also lead to knock-on improvements in gender equality.
 3. The increase in **risk was greater for mothers from rural areas** or those who became pregnant at an older age, compared to younger mothers from urban areas.
 4. Pregnancy loss associated with air pollution was more common in the Northern plains region in India and Pakistan. Although the total burden of pregnancy loss was predominantly borne by rural women aged under 30 years old in recent years, the burden attributable to PM_{2.5} also affected older mothers (aged 30 years or over) in rural areas because of their high susceptibility to the adverse effects of PM_{2.5}.
 5. Although WHO's guidelines aims for a safer level of air pollution, India's standard is a more realistic target level, given the high average levels of air pollution in the region and there is a need to balance practical governance and public health.

Caracal

CONTEXT:

1. The National Board for Wildlife approved a recovery program for the caracal, which is now a critically endangered species. **The caracal is found only in Gujarat and Rajasthan.**

ABOUT:

1. Including the species in the recovery programme will mean the species will have a separate conservation programme.
2. The semi-arid region of Kutch is one of only two homes of this cat species in India. According to a research report, the caracal's presence has been noted in only three states, with just two possible viable populations. These are in the marshy areas of Kutch district, the higher areas closer to Kalo Dungar with grassy scrubland; and in Rajasthan's Sawai Madhopur, Karoli, and Dholpur districts.
3. **The International Union for Conservation of Nature (IUCN) lists caracals as a species of 'least concern', mainly due to their large numbers in Africa. But in India they are 'endangered'.**
4. According to the study 'Historical and current extent of occurrence of the Caracal in India', in Gujarat 19 sightings were reported, all in Kutch district.
5. **The caracal ranges across Africa and the Middle East to India.** It is keenly adapted to the potentially harsh environments of savanna, semi-desert, dry woodland, arid hilly steppe, and dry mountains.
6. The caracal's place in the cat family tree is somewhat muddled, but it is believed that it is closely related to the serval and golden cat.
7. **The word caracal is from a Turkish word that means "black-eared."**

How horizontal, vertical quotas work?

CONTEXT:

1. The Supreme Court, recently, clarified the position of law on the interplay of vertical and horizontal reservations. This ruling dealt with issues arising from the way different classes of reservation were to be applied in the selection process to fill posts of constables in the state.

What are vertical and horizontal reservations?

1. Reservation for Scheduled Castes, Scheduled Tribes, and Other Backward Classes is referred to as **vertical reservation**. It applies separately for each of the groups specified under the law.
2. **Horizontal reservation** refers to the equal opportunity provided to other categories of beneficiaries such as women, veterans, the transgender community, and individuals with disabilities, cutting through the vertical categories.

How are the two categories of quotas applied together?

1. The horizontal quota is applied separately to each vertical category, and not across the board. For example, if women have 50% horizontal quota, then half of the selected candidates will have to necessarily be women in each vertical quota category — i.e., half of all selected SC candidates will have to be women, half of the unreserved or general category will have to be women, and so on.
2. The interlocking of the two types of reservation throws up a host of questions on how certain groups are to be identified.
3. The court ruled that if a person belonging to an intersection of vertical-horizontal reserved category had secured scores high enough to qualify without the vertical reservation, the person would be counted as qualifying without the vertical reservation, and cannot be excluded from the horizontal quota in the general category.
4. A similar question had arisen in the case of vertical reservations in the past, and the law had been settled similarly: If a person in the SC category secures a higher score than the cut-off for the general category, the person

would be counted as having qualified under the general category instead of the SC quota.

5. The court concluded that if both vertical and horizontal quotas were to be applied together — and consequently, a high-scoring candidate who would otherwise qualify without one of the two reservations is knocked off the list — then the overall selection would have candidates with lower scores.
6. On the other hand, if a high-scoring candidate is allowed to drop one category, the court found that the overall selection would reflect more high-scoring candidates. In other words, the “meritorious” candidates would be selected.
7. The ruling strikes at the heart of the debate on “merit versus reservation”, where reservation is sometimes projected as being anti-merit.

Middle East crisis

CONTEXT:

1. Gulf states signed a ‘solidarity and stability’ deal at the 41st Gulf Cooperation Council (GCC) summit held in Al Ula, Saudi Arabia.
2. Members of the GCC signed a deal in Al-Ula, Saudi Arabia to remove all the sanctions over Qatar and re-open their land, sea and air borders to Qatar.

Riyadh-Doha break

1. In 2017, Saudi Arabia led an Arab transport blockade against Qatar, ostensibly to pressurize Qatar into reducing diplomatic and economic relations with Iran, Saudi Arabia's great rival in the region.
2. Coalition countries put 13 demands as conditions to resume relations, including shutting news organisations such as Al Jazeera, closing a Turkish military base in the country, and downgrading ties with Tehran.
3. Qatar called the embargo a violation of international laws and instead, strengthened ties with Iran and Turkey.

4. **Gulf Co-operation Council (GCC) members Kuwait and Oman broke ranks with the Saudi group, and Kuwait sought to assume the role of mediator between the coalition and Qatar.**

Qatar in the Middle East

1. Due to the presence of large gas reserves contributing significantly in helping Qatar to become an influential player in the region's politics.
2. Qatar has also used its wealth and influence on the wider global stage.
3. Qatar shares a huge gas field with Iran, which is an incentive for it to retain good relations with the Shiite regime in Tehran. This is a strong irritant for Sunni Saudi Arabia, which seeks to control the geopolitics of the Middle East.
4. Qatar's support for the Palestinian Hamas in Gaza, Muslim Brotherhood in Egypt, and Islamist groups in Syria are also major areas of contention. However, Qatar has denied backing al-Qaeda and Islamic State.

India's Relation with Gulf Region

1. The friendly relation between India with GCC has been reflected in the bilateral trade of around USD 121 billion and remittances of USD 49 billion from a workforce of over nine million.
2. GCC suppliers account for around 34% of India's crude imports.
3. India has always shared a friendly relationship with Iran. Due to the USA's pressure (abandoned the nuclear deal (Joint Comprehensive Plan of Action)) which has politico-economic impacts led to complex phase in India and Iran relations.
4. India shares a friendly relation with Qatar (India's External Affairs Minister met the top leaders of Qatar) and even at the time of sanctions on Qatar, India maintained a cordial relation with the oil rich nation.
5. India never participated in local or regional disputes in the region. India depends on Gulf for energy and thus, their trading relation is marked by growing volumes of energy imports into India. There is also substantive investments from the Gulf into the Indian hydrocarbon sector.

6. Number of Indian workers work in Gulf Countries. Gulf Partners and India are also taking steps towards defence cooperation.



Using God's name to sell articles illegal

CONTEXT:

1. The Aurangabad bench of the Bombay High Court has declared that advertisement of any article using the name of any God and claiming that it has supernatural qualities, is "illegal" and falls under the Maharashtra Prevention and Eradication of Human Sacrifice and other Inhuman, Evil and Aghori Practices and Black Magic Act.

HIGHLIGHTS OF ORDER:

1. Telemarketers change the names of companies, Gods and Babas to show that each was a different Yantra.
2. With the representation that these articles have special, miraculous and supernatural properties and that they will help people to become happy, make progress in business, see advancement in career, show improved performance in education, recover from disease etc., is illegal.
3. The court directed the State and Vigilance Officers to register such crimes, giving reports against persons who make such advertisements and sell such articles.
4. The court also directed the State and Central governments to create separate cells in Mumbai to ensure that no such features were telecast, either as advertisement or in the name of programmes, in Maharashtra.

‘New Anubhava Mantapa’

CONTEXT:

1. Karnataka CM laid the foundation stone for the ‘New Anubhava Mantapa’ in Basavakalyan, the place where 12th century poet philosopher Basaveshwara lived for most of his life.

ABOUT:

1. It is a ₹500 crore project and will be completed within two years on a 7.5 acre area.
2. This project highlights the teachings of Basaveshwara (an icon of the Veerashaiva Lingayat community).
3. The Project was first proposed back in 2016. Basavakalyan, an important pilgrim centre for Lingayats.
4. The New Anubhava Mantapa, as envisaged now, will be a six floor structure.
5. It will showcase the 12th Century Anubhava Mantapa (often referred to as the “first Parliament of the world”) established by him in Basavakalyan, where philosophers and social reformers held debates.
6. The building will adopt the Kalyana Chalukya style of architecture.



An artist's rendition of the New Anubhava Mantapa.

India and Japan on Partnership in "Specified Skilled Worker"

CONTEXT:

1. The Union Cabinet has approved the signing of a Memorandum of Cooperation between the Government of India and Government of Japan, on a Basic Framework for Partnership for Proper Operation of the System Pertaining to "Specified Skilled Worker".
2. Under this MOC, a Joint Working Group will be set up to follow up the implementation of this MOC.

SIGNIFICANCE:

1. It would set an institutional mechanism for partnership and cooperation between India and Japan on sending and accepting skilled Indian workers, who have qualified the required skill and Japanese language test, to work in fourteen specified sectors in Japan.
2. These Indian workers would be granted a new status of residence of "Specified Skilled Worker" by the Government of Japan.
3. The Memorandum of Cooperation (MOC) would enhance people-to-people contacts, foster mobility of workers and skilled professionals from India to Japan.

BENEFICIARIES

1. Skilled Indian workers from fourteen sectors viz. Nursing care; Building cleaning; Material Processing industry; Industrial machinery manufacturing industry; Electric and electronic information related industry; Construction; Shipbuilding and ship-related industry; Automobile maintenance; Aviation; Lodging; Agriculture; Fisheries; Food and beverages manufacturing industry and Food service industry would have enhanced job opportunities to work in Japan.

Chattergala tunnel

CONTEXT:

1. The new Director General, Border Road Organisation (BRO) briefed about the Chattergala tunnel.

ABOUT:

1. The proposed Chattergala tunnel in Jammu & Kashmir will connect district Kathua with district Doda to enroute the new Highway via Basohli-Bani through Chattergalla to touch Bhaderwah and Doda.
2. It is going to be a 6.8 Km long tunnel.
3. The tunnel is likely to take about 4 years for completion after the execution work starts and its construction cost is around Rs. 3,000 crore.
4. This is going to be a historic landmark project providing all-weather alternate road connectivity between the two distant regions and reducing the travel time from Doda to Lakhanpur on the Punjab border to just around four hours.

“UDYOG MANTHAN” BEGINS

CONTEXT:

1. The Department for Promotion of Industry and Internal Trade, Ministry of Commerce & Industry, Government of India is organizing ‘Udyog Manthan’ from January 4, 2021 to March 2, 2021 in association with Quality Council of India, National Productivity Council, and Industry bodies.

ABOUT:

1. Udyog Manthan is a marathon of focused sector-specific webinars for promoting Quality and Productivity in Indian Industry.
2. The webinar series comprising 45 sessions will cover various major sectors in manufacturing and services. Udyog Manthan will identify challenges, opportunities; draw upon solutions and best practices.
3. Participants will include representatives from industry, testing and standardization bodies. The discussions will be live

streamed on YouTube for all those interested in following the sessions.

Earthquake monitoring and delineation of subsurface structures

CONTEXT:

1. A geophysical survey, namely, Magneto-telluric (MT) is being conducted over the Delhi region.

ABOUT:

1. The National Capital Region of Delhi experienced 4 small earthquakes during April – August 2020.
2. These earthquakes were followed by a dozen of micro-events ($M < 3.0$) including, a few aftershocks.
3. All these events were located by the National Seismological Network (NSN), being operated and maintained by National Seismological Centre (NCS), Ministry of Earth Sciences.
4. Subsequently, NCS initiated the Magneto-telluric (MT), a geophysical survey over the Delhi region in collaboration with Wadia Institute of Himalayan Geology (WIHG), Dehradun.

Magneto-telluric (MT)

1. It is a geophysical method which uses natural time variation of the Earth's magnetic and electric fields to understand geological (underground) structure and processes.
2. These measurements are conducted across three major seismic sources, namely Mahendragarh-Dehradun Fault (MDF), Sohna Fault (SF) and Mathura Fault (MF).
3. These measurements will ascertain the presence of fluid, which generally enhances the possibility of triggering of earthquakes.

National Metrology Conclave

CONTEXT:

1. Prime Minister has inaugurated the National Metrology Conclave 2021.
2. He also laid the foundation stone of National Environmental Standards Laboratory through a video conference.
3. National Atomic Time Scale and Bharatiya Niradeshak Dravya Pranali were also dedicated to the nation.

ABOUT CONCLAVE:

1. It was organised by Council of Scientific and Industrial Research-National Physical Laboratory (CSIR-NPL), New Delhi, on its 75th year of inception.
2. The theme of the conclave is 'Metrology for the Inclusive Growth of the Nation'.

Metrology is defined by the **International Bureau of Weights and Measures (BIPM)** as "the science of measurement, embracing both experimental and theoretical determinations at any level of uncertainty in any field of science and technology".

BHARTIYA NIRDESHAK DRAVYA PRANALI (BND):

1. It would help the industry to make quality products in **every manufacturing and consumer sector** like Heavy metals, Pesticides, Pharma and Textiles by providing **SI traceable measurements** and drafting a 'Certified Reference Material System'.
2. These are Indian reference materials developed by CSIR-NPL.
3. It will boost the "Make in India" program and harmonize the quality infrastructure of the country.

NATIONAL ATOMIC TIME SCALE:

1. It generates Indian Standard Time with an accuracy of 2.8 nanoseconds.
2. This will help organizations like Indian Space Research Organisation who are working with cutting edge technology. Banking, railways, defense, health, telecom, weather forecast, disaster management, Industry 4.0 and many similar sectors will also be benefited.

COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH–NATIONAL PHYSICAL LABORATORY (CSIR–NPL)

1. It is the measurement standards laboratory of India. It maintains standards of SI units in India and calibrates the national standards of weights and measures.
2. It is authorized (by an act of Parliament) to realize and maintain the Indian Standard Time (IST).
3. It is strengthening the national timing infrastructure, where a very rough estimate shows an economic impact of more than 10% of GDP.
4. 'It is on a mission to synchronize all the clocks in the nation to IST for securing digital infrastructure and reducing cyber crime.'

Sagarmala Seaplane Services Project With Potential Airline Operators

CONTEXT:

1. The Ministry of Ports, Shipping and Waterways is starting the ambitious Project of Sagarmala Seaplane Services (SSPS) with potential airline operators.

ABOUT:

1. A seaplane is a fixed-wing aeroplane designed for taking off and landing on water.
2. The project is being initiated under a Special Purpose Vehicle (SPV) framework through prospective airline operators.
3. The project execution and implementation would be through Sagarmala Development Company Ltd (SDCL), which is under the administrative control of the Ministry of Ports, Shipping and Waterways.
4. Airline operators will be invited to form a SPV with SDCL.
5. The routes may be operated under the government's subsidised udesh ka aam nagrik (UDAN) scheme.

SIGNIFICANCE:

1. The seaplanes services will provide a supplementary means of faster and comfortable transportation in India.
2. It will provide infrastructure enhancements at the places of operations.
3. It will provide air connectivity to various remote religious/tourist places.
4. It will save travel time and stimulate localized short distance travelling especially in the hilly regions or across the rivers/lakes etc.
5. It will generate employment opportunities.
6. It will boost tourism for domestic and international holiday makers.



Ministry of Ports, Shipping and Waterways starts Project of Sagarmala Seaplane Services (Photo: PIB)

Faceless tax scheme

CONTEXT:

1. The faceless tax assessment scheme of Government of India has managed to deliver about 24,000 final orders since August 2020.

ABOUT FACELESS TAX SCHEME:

1. The introduction of scheme of faceless e-assessment was proposed by the Finance Minister in the Union Budget 2019.
2. This scheme removes individual tax officials' discretion and potential harassment for income tax payers.

3. The main objective is to remove physical interaction as much as possible.
4. It also allows for appropriate cases where a certain hearing is necessary, so then after following protocols, a hearing is given.

Global Economy to Expand by 4% in 2021

CONTEXT:

1. The World Bank highlighted in its **January 2021 Global Economic Prospects** that the global economy is expected to expand 4% in 2021 after shrinking 4.3% in 2020.
2. Although global economic output is recovering from the collapse triggered by COVID-19, it will remain below pre-pandemic trends for a prolonged period. The pandemic has exacerbated the risks associated with a decade-long wave of global debt accumulation. It is also likely to steepen the long-expected slowdown in potential growth over the next decade.

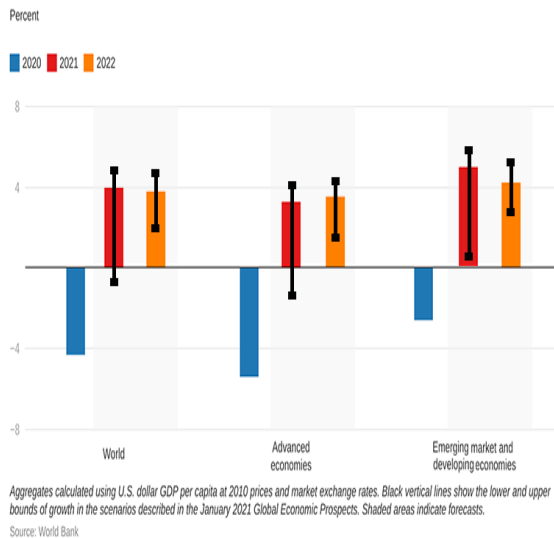
HIGHLIGHTS OF REPORT:

1. It also warned that rising COVID-19 infections and delays in vaccine distribution could limit the recovery to just 1.6% in 2021.
2. The World Bank showed the collapse in activity due to the coronavirus pandemic was slightly less severe than previously forecast, but the recovery was also more subdued and still subject to considerable downside risk.
3. With successful pandemic control and a faster vaccination process, global growth could accelerate to nearly 5%.
4. Shallower contractions in advanced economies and a more robust recovery in China helped avert a bigger collapse in overall global output, but disruptions were more acute in most other emerging market and developing economies.
5. Aggregate gross domestic product in emerging markets and developing economies - including China - is expected to grow 5% in 2021 after a contraction of 2.6% in 2020.
6. Excluding China, emerging market and developing economies were seen expanding 3.4% in 2021 after shrinking 5% in 2020.
7. Per capita incomes have dropped in 90% of emerging market and developing economies, tipping millions back into poverty, with reduced investor confidence,

increasing unemployment and loss of education time seen dampening prospects for future poverty reduction.

8. The crisis also triggered a surge in debt levels among emerging market and developing economies, with government debt up by 9 percentage points of GDP - the largest one-year spike since the late 1980

Possible scenarios of global growth



5. It will be operational for a period of three years from January 01, 2021, and maybe extended for two more years, depending upon the progress.
6. The objective of PIDF is to increase the number of acceptance devices multi-fold in the country. The Scheme is expected to benefit the acquiring banks/non-banks and merchants by lowering overall acceptance infrastructure cost.
7. The fund is also in line with the measures proposed by the vision document on payment and settlement systems in India 2019-2021.

On Nile, a Grand Dam divides African nations

CONTEXT:

1. Recently, Ethiopia, Sudan and Egypt agreed to resume negotiations to resolve their decade-long complex dispute over the **Grand Renaissance Dam hydropower project** in the Horn of Africa.
2. Egypt and Sudan are concerned about the filling and the operation of the dam. Ethiopia continues to insist that the dam is required to meet the needs of its population and downstream water supplies will not be adversely affected.

WHAT IS THE DISPUTE ABOUT?

1. The Nile, which is Africa's longest river, has been at the center of a decade-long complex dispute involving Ethiopia, Sudan and Egypt that are dependent on the river's waters.
2. It passes through 11 countries. The current distribution of its waters is limited to only two — Egypt and Sudan — under the 1959 Nile Agreement.
3. The main waterways of the Nile run through Uganda, South Sudan, Sudan and Egypt, and its drainage basin runs through several countries in East Africa, including Ethiopia, the portion where Grand Renaissance Dam is being constructed.
4. The Nile River has two main tributaries. The White Nile originates from the Nile equatorial lakes region and the source of the Blue Nile is from the highlands in Ethiopia.

PIDF scheme

CONTEXT:

1. The Reserve Bank operationalised Payments Infrastructure Development Fund to create 30 lakh new touch points every year for digital payments in Tier-3 to Tier-6 centres.

ABOUT:

1. In June 2020, the RBI had announced the creation of Payments Infrastructure Development Fund (PIDF).
2. The fund intended to subsidise deployment of payment acceptance infrastructure like Points of Sale (PoS) machines in Tier-3 to Tier-6 centres, with special focus on the north-eastern states.
3. The POS machines allow businesses to accept e-payments, thereby reducing the need to deal in cash.
4. An Advisory Council (AC) has been constituted to govern the PIDF but it will be managed and administered by the RBI..

5. Grand Renaissance Dam hydropower project is 145-meter-tall (475-foot-tall) and Spearheaded by Ethiopia. When completed, it will be Africa's largest dam.
6. The construction of the dam was initiated in 2011 on the Blue Nile tributary of the river that runs across one part of Ethiopia.
7. The Nile is a necessary water source in the region and Egypt has consistently objected to the dam's construction, saying it will impact water flow.

WHY CAN THE DAM CAUSE CONFLICT?

1. **Ethiopia:** Dam would allow it to gain control of the flow of the river's waters. Ethiopia's goal is to secure electricity for its population and to sustain and develop its growing manufacturing industry. Ethiopia may be hoping to sell surplus electricity to neighbouring nations like Kenya, Sudan, Eritrea and South Sudan, which also suffer from electricity shortages, to generate some revenue.
2. **Egypt:** It lies further downstream and is concerned that Ethiopia's control over the water could result in lower water levels within its own borders. Egypt had strongly objected since 2019 When Ethiopia had announced that it planned on generating power using two turbines. Egypt proposed a longer timeline for the project over concerns that the water level of the Nile could dramatically drop as the reservoir fills with water in the initial stages.
3. **Sudan:** Its location between Egypt up north and Ethiopia down south has caused it to become an inadvertent party to this dispute. Sudan too is concerned that if Ethiopia were to gain control over the river, it would affect the water levels Sudan receives.

Transgender to contest polls from women's category

CONTEXT:

1. The Bombay High Court has allowed a transgender to contest village panchayat polls in women's category; as such persons have the right to "self-perceived gender identity".

ABOUT:

1. Union government has introduced the Transgender Persons (Protection of Rights) Act, 2019 and has permitted a transgender person to have a right to self-perceived gender identity.

PROVISIONS OF THE ACT

1. It defines a transgender person as one whose gender does not match the gender assigned at birth. It includes transmen and trans-women, persons with intersex variations, gender-queers, and persons with socio-cultural identities, such as kinnar and hijra.
2. It seeks to ensure the fundamental rights of those who do not conform to the binary notions of gender identity.
3. It seeks to provide rights of health facilities to transgender persons including separate HIV surveillance centres, and sex reassignment surgeries.
4. It states that the government shall review medical curriculum to address health issues of transgender persons, and provide comprehensive medical insurance schemes for them.
5. It calls for establishing a National Council for Transgender persons (NCT).
6. The Act is progressive in that it allows self perception of gender identity, but regresses by mandating that each person would have to be recognised as 'transgender' on the basis of a certificate of identity issued by a district magistrate, rejecting the recommendation from the 2016 Standing Committee to have a screening committee.

Pros and cons

SALIENT FEATURES	COMMUNITY'S RESPONSE
• Definitions do not differentiate between transgenders, transsexuals, intersex persons and genderqueer	• Community differentiates between transgender, transsexual and intersex persons and dismisses the 'one-solution fits all' idea
• Prohibition against discrimination in education, employment, healthcare, public facilities etc. Also prevents forced labour	• Lack of enforceability dilutes provision. Lived experiences riddled with discrimination
• Certificate of identity can be obtained at the DM's office and a revised certificate is to be obtained if sex is changed	• Shuns provision as impinging on their right to self-determination. Fear it'll lead to bureaucratic discrimination
• Government welfare measures and provisions of healthcare, including HIV surveillance centres, and sex reassignment surgeries	• Step forward but medical community lacks knowledge of transgender bodies
• Transgender persons may only change their first name	• Prefer to take Guru's name since many have severed ties with their birth family
• Setting up of a National Council for Transgender persons (NCT), including various Ministers and five transgender persons	• Desire greater representation in decision making that affects them directly

SOURCE: PIB, INDIA

Kochi-Mangaluru natural gas pipeline

CONTEXT:

1. Prime Minister inaugurated the 450-km Kochi-Koottanad-Mangaluru LNG (liquified natural gas) pipeline. Moreover, 10,000 more CNG (compressed natural gas) stations would be opened and several lakh PNG (piped natural gas) household connections will be given to make India a natural gas-based economy

ABOUT:

1. It has been built by GAIL (India) Ltd
2. It has transportation capacity of 12 million standard cubic metres per day
3. It will carry natural gas from the liquefied natural gas (LNG) regassification terminal at Kochi to Mangaluru
4. Laying of the pipeline was an engineering challenge as the route of the pipeline necessitated it to cross water bodies at more than 100 locations. This was done through a special technique called horizontal directional drilling method.
5. The pipeline will supply environment friendly and affordable fuel to households, transportation sector and to commercial and industrial units across the districts along the pipeline.

WAY AHEAD:

1. The government has a concrete plan to move towards a gas-based economy that would be cheaper, convenient and environment-friendly.
2. The government would make substantial investments in coal and gas sectors. The plan was to increase the share of natural gas in the energy sector from the present 6% to 15% by 2030.
3. The government had definite plans for the future to make the country energy-sufficient and reduce expenditure on foreign exchange through diversification of energy requirement.
4. Focus was being given to increase ethanol production so as to increase ethanol content in petrol to 20% from the present 5%.
5. The world's largest hybrid energy plant (wind and solar) was coming up in Gujarat. The electric mobility sector too was being encouraged. Through these, alternative, cheap and pollution-free fuel and energy would be made available to people.

"Toycathon"

CONTEXT:

1. The government launched "Toycathon" -- a hackathon for students, teachers, experts and startups to crowdsource ideas for developing innovative toys and games based on Indian culture and ethos.
2. The ministries of education; women and child development (WCD); textiles; commerce and industry; MSME; information and broadcasting; and the All India Council for Technical Education have jointly launched Toycathon-2021.

ABOUT:

1. India imports most of its toys and the government is working towards promoting the indigenous toy industry for making the country self-reliant in the sector.
2. The size of the toy market in India is about USD 1 billion but unfortunately 80 per cent of the toys are imported.
3. The launch of Toycathon is an endeavour by the government to create an ecosystem for the domestic toy industry and the local

manufacturers, tapping the untapped resources and utilising their potential.

4. This Toycathon is aimed to conceptualize innovative toys based on the Indian value system which will inculcate the positive behaviour and good values among the children.
5. The Toycathon is based on nine themes -- Indian culture, history, knowledge of India and ethos; learning, education and schooling; social and human values; occupations and specific fields; environment; divyang ; fitness and sport; out-of-the-box, creative and logical thinking and rediscovering traditional Indian toys.
6. The Toycathon will have three levels -- junior, senior and startup.

SIGNIFICANCE:

1. While this will greatly help India develop into a global hub for toys and games, it will also help our children to understand the ethos and values of Indian culture as envisaged in the National Education Policy 2020.
2. National Education Policy-2020 also lays emphasis on innovation and research in learning, starting from primary education.
3. Aligned with the goals of National Education Policy, the Toycathon aims to capture innovative prowess of 33 crore students across the country.
4. The collaboration with the Ministry of Education paves the way for the participation of students, faculties from all schools, colleges and universities with regards to needs of the MSME industry.
5. This is the first time when school children will innovate, design and conceptualise toys also for specially-abled "divyang children".

CONCLUSION:

1. This is the high time to utilise brightest creative minds and carve out games based on our Indian culture, tradition and heritage and stories of ancient India showcasing the beliefs and traditions of people.

CEPI Centralized network lab

CONTEXT:

1. The Ministry for Science & Technology, Health & Family Welfare and Earth Sciences inaugurated one of the seven labs of the world called as the centralized network lab of Coalition for Epidemic Preparedness Innovations (CEPI) established at Translational Health Science & Technology Institute (THSTI), Faridabad.

ABOUT:

1. THSTI is an institute of the Department of Biotechnology (DBT). This is the only laboratory of such kind in India and is also accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL).
2. The CEPI laboratory will be a great addition to the ability of THSTI to enhance quality of services towards making the vaccine and its acceptability at Global level.
3. CEPI is an innovative partnership between public, private, philanthropic, and civil organizations, launched at Davos in 2017, to develop vaccines to stop future epidemics.
4. The Department of Biotechnology, Ministry of Science & Technology, Government of India is implementing the Ind-CEPI mission titled 'India Centric Epidemic Preparedness through Rapid Vaccine Development: Supporting Indian Vaccine Development Aligned with the Global Initiative of the Coalition for Epidemic Preparedness Innovations (CEPI)'.
5. Ind-CEPI Mission aims to strengthen the development of vaccines for the diseases of epidemic potential in India as well as build coordinated preparedness in the Indian public health system and vaccine industry to address existing and emergent infectious threats in India.
6. The major focus at present is to help evaluating new Covid-19 vaccines, using standard analysis and same reagents in all labs so that vaccine produced has global acceptance and repeatability of the results, for global use.

Confiscation of animals

CONTEXT:

1. The Supreme Court asked the Centre to amend the Prevention of Cruelty to Animals (Care and Maintenance of Case Property Animals) Rules, 2017 and Prevention of Cruelty to Animals (Regulation of Livestock Markets) Rules, 2017.

ABOUT:

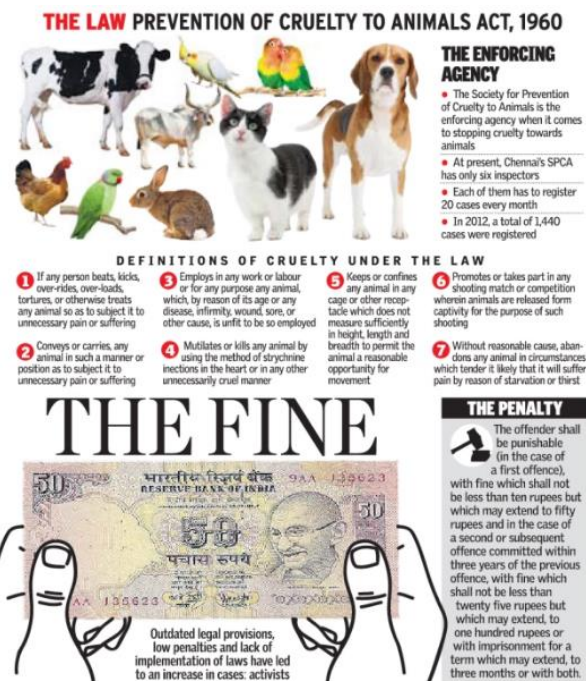
1. These rules of 2017 allow the confiscation of the animals of traders and transporters during the pendency of trials in cases under The Prevention of Cruelty to Animals Act, 1960. In other words, these rules allow confiscation of animals before the accused is convicted under the legislation.
2. This shows that the contrary nature of the Rules, 2017 as compared to the provisions of the Act, 1960 as provisions of the very law allow such confiscation only in case of conviction.

HIGHLIGHTS:

1. Animals are a source of livelihood. People live on the basis of their animals.
2. The 2017 rules allow a magistrate to forfeit the cattle of an owner facing trial under the Act and send them to infirmaries, gaushalas etc.
3. Section 29 of the Act says that a person tried for an offence under the Act can be deprived of the ownership of the animal only upon conviction.

ARGUMENTS IN FAVOUR:

1. The Rules 2017 were being used to forcibly deprive even legitimate owners of cattle and that it had emboldened “anti-social elements” to take matters into their own hands and loot cattle traders.
2. Such incidents act as “triggers for communal polarisation of society”.



DoE circular asks teachers to check weight of school bags

CONTEXT:

1. The Directorate of Education has issued a circular asking schools to follow the new 'School Bag Policy, 2020' released by the National Council of Educational Research and Training (NCERT).

ABOUT CIRCULAR:

1. Schoolteachers should inform the students in advance about the books and notebooks to be brought to school on a particular day and frequently check their bags to ensure that they are not carrying unnecessary material.
2. Heavy school bags are a serious threat to the health and well-being of students. The heavy school bag has severe/adverse physical effects on growing children which can cause damage to their vertebral column and knees.
3. The weight of the school bags, as per the policy, should be:
 - (a) 1.6 to 2.2 kg for students of Classes I and II
 - (b) 1.7 to 2.5 kg for Classes III, IV and V
 - (c) 2 to 3 kg for Classes VI and VII
 - (d) 2.5 to 4 kg for Class VIII

- (e) 2.5 to 4.5 kg for Classes IX and X
- (f) 3.5 to 5 kg for Classes XI and XII
- 4. Teachers should take the responsibility of checking the weight of school bags of the students every three months on a day selected for the whole class and any information about heavy bags should be communicated to the parents.
- 5. **DRINKING WATER FACILITY:** It is the duty and the responsibility of the school management to provide quality potable water in sufficient quantity to all the students in the school so that they do not need to carry water bottles from their homes.

40th Indian scientific expedition to Antarctica

CONTEXT:

1. India launched the 40th scientific expedition to Antarctica. It was flagged off from Goa on January 5, 2021.

ABOUT:

1. This expedition consists of 43-member team embarking upon the Russian ice-class vessel MV Vasilii Golovnin.
2. It comes amidst the logistical challenges posed by COVID-19, and marks four decades of the country's scientific endeavour to the southern continent.
3. The chartered ice-class vessel MV Vasilii Golovnin will make this journey and will reach Antarctica in 30 days. After leaving behind a team of 40 members, it would return to India in April 2021. On return, it will also bring back the winter team of the preceding trip.

BACKGROUND:

1. The Indian Antarctic expeditions began in 1981, comprised of a team of 21 scientists and support staff led by Dr SZ Qasim.
2. The Indian Antarctic programme has now credited to have built three permanent research base stations in Antarctica—named Dakshin Gangotri, Maitri, and Bharati. As of

today, India has two operational research stations in Antarctica named Maitri and Bharati.

3. The National Centre for Polar and Ocean Research (NCPOR), Goa, manages the entire Indian Antarctic program.

Tide–Rainfall Flood Quotient

CONTEXT:

1. A team from the Indian Institute of Technology Bombay devised a new metric or measure called the Tide–Rainfall Flood Quotient to understand if a coastal city is more prone to floods caused by tidal events or extreme rainfall.
2. Using the past rainfall data, tidal data, and topography of the region this framework can be applied to pinpoint the major factor at play.

ABOUT:

1. The new method helped classify these regions into 'storm-tide dominated' or 'pluvial (rainfall) dominated' regions.
2. Three geographically diverse flood-prone coastal regions has been selected to test their new metric by the team:
 - (a) Mithi Catchment in Mumbai, Maharashtra,
 - (b) Jagatsinghpur District in Odisha, and
 - (c) Greater Chennai Corporation in Tamil Nadu.

SIGNIFICANCE:

1. The metric can help disaster management experts in framing better flood risk management systems directed towards long term planning.

Community fishing banned at Assam Ramsar site

CONTEXT:

1. The Kamrup (Metropolitan) district administration has prohibited community fishing at Deepor Beel, a wetland on the south-western edge of Guwahati and Assam's only Ramsar site.

ABOUT:

1. The order was necessary to prevent fishing, excavation and construction in and around the wetland that has been shrinking over the years.

WIDE RANGE OF SPECIES:

1. **Deepor Beel** was designated a Ramsar site in 2002 for sustaining a range of aquatic life forms besides 219 species of birds.
2. A **Ramsar site is a wetland designated to be of international importance** under the Convention on Wetlands on February 2, 1971, in the Iranian city of Ramsar on the Caspian Sea shore.
3. According to hydrological experts, the area of the wetland was about 6,000 hectares in the late 1980s. Satellite imagery has revealed that its area has shrunk by at least 35% since 1991.
4. Deepor Beel officially has an area of 4,014 hectares or 15.5 square miles.
5. One of the reasons the wetland is in a precarious state is that it is losing connectivity with small rivers like Kalmoni, Khonajan and Basistha that used to flow via the Mora Bharalu channel through Guwahati.
6. Expansion of the city, encroachment upon the natural channels through Guwahati and from the hills around, and a municipal waste dump at Boragaon almost on the edge of the wetland were the other factors, he added.
7. Assam had 3,513 wetlands and a majority of them had water with low turbidity.

Eye on China, India looks at lithium reserves in Argentina, Chile and Bolivia

CONTEXT:

1. India in the recent years started reaching out to the 'Lithium Triangle' in South America. In 2019, Khanij Bidesh India Ltd inked a pact with an Argentine firm to jointly prospect lithium in the South American country.

ABOUT:

1. South American country has the third largest reserves of the silver- white alkali metal— a crucial building block of the lithium ion rechargeable batteries that power electric vehicles (EVs), laptops and mobile phones.

COMPANY:

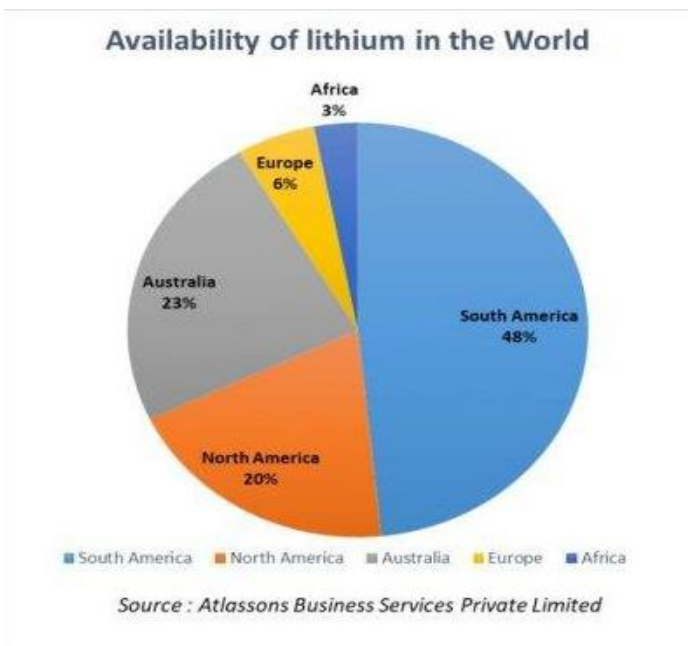
1. The new company, Khanij Bidesh India Ltd was incorporated in August, 2019 with a specific mandate to acquire strategic mineral assets such as lithium and cobalt abroad.
2. It is a consortium of three PSU companies including: National Aluminum Company (NALCO), Hindustan Copper (HCL) and Mineral Exploration Corp Ltd., (MECL).
3. The Consortium that has been formed by the Ministry of Mines, Government of India, for identifying, exploring, acquiring, developing and processing strategic minerals overseas.

LITHIUM EXPLORE:

1. Now, India is exploring options in Chile and Bolivia, two other top lithium-producing countries.
2. Currently, India is heavily dependent on import of these cells and the move to ink sourcing pacts for lithium is seen as another economic offensive against China, which is a key source of both the raw material and cells.
3. India is seen as a late mover as it attempts to enter the lithium value chain, coming at a time when EVs are need of an hour and India has set a target on achieving an all-electric car fleet by 2030.
4. 2021 is likely to be an inflection point for battery technology, with several potential improvements to the Li-ion technology, and alternatives to this tried- and-tested formulation, under advanced stages of commercialisation.
5. Li-ion batteries are commonly used in portable electronic devices, solar power plants as well as electric vehicles due to their high energy density and high charge and discharge rate capabilities, as compared with other type of batteries such as Ni-MH or Lead Acid.



Attracting investors to the "lithium triangle" that overlays Argentina, Bolivia and Chile
Source : Atlassons Business Services Private Limited



Chinese firm to build stretch of Delhi-Meerut RRTS corridor

CONTEXT:

- Shanghai Tunnel Engineering Company will build a 5.6-km underground stretch of the upcoming Delhi-Meerut RRTS project between New Ashok Nagar and Sahibabad.

ABOUT:

- The National Capital Region Transport Corporation (NCRTC) is executing the country's first Delhi-Ghaziabad-Meerut Regional Rapid Rail Transit System (RRTS) project.
- The 82-km-long Delhi-Ghaziabad-Meerut RRTS corridor is being funded by the Asian Development Bank (ADB) and procurement is governed by the guidelines of the bank and the government.
- The 17-km priority corridor of the Delhi-Meerut RRTS from Sahibabad to Duhai will be operational in 2023 and the entire corridor will be operational in 2025.
- The cost of the entire corridor has been pegged at Rs 3,0724 crore out of which, the UP government's share will be Rs 6,500 crore. Once completed, trains with an average speed of 100kmph will cover the 82km distance in 55 minutes



Delhi-Meerut RRTS, Ghaziabad stretch to get started by 2023

Deaths due to lightning strikes dip by 37%: report

CONTEXT:

- According to a report published by the Climate Resilient Observing Systems Promotion Council (CROPC), the number of deaths due to lightning strikes reduced by nearly 37 per cent.

ABOUT:

1. The deaths have been reduced from 2,800 deaths between April 1, 2018 to March 31, 2019 to 1,771 during the same period in 2019-20.
2. The report has pointed out several loopholes in the government's approach towards the problem while praising certain measures taken by the authorities.
3. According to the report, lightning-linked fatalities formed 33 per cent of total deaths in natural disasters, according to data for the corresponding period in 2019-20.

SITUATION IN STATES:

1. More than 60 per cent of deaths in lightning incidents in 2019-20 were reported from Uttar Pradesh (293), Madhya Pradesh (248), Bihar (221), Odisha (200) and Jharkhand (172). Despite the casualties, the Centre has not notified lightning as a disaster.

CROPC

1. CROPC is a non-profit organisation that works closely with India Meteorological Department.

WAY AHEAD

1. Early lightning warning to farmers, cattle grazers, children and people in open areas is key.
2. Implementing a local lightning safety action plan like installing Lightning Protection Devices.
3. It is important to bring out lightning fatalities as a disaster to prevent losses.

CONCLUSION:

1. NDMA has issued comprehensive guidelines for action plans to states, but a large number of losses show that the implementation needs a more "scientific and focused community-centric approach", besides convergence of various departments.
2. Lightning being the biggest killer and having severe impact on infrastructure, it is time that lightning is notified as a disaster.

DRDO facility develops Quantum Random Number Generator

CONTEXT:

1. The DRDO Young Scientist Laboratory for Quantum Technologies (DYSL-QT), a DRDO facility based in Mumbai, has developed a fiber-optic branch path based Quantum Random Number Generator (QRNG).

Quantum Random Number Generator (QRNG):

1. It has the ability to detect random quantum events and convert those into a stream of binary digits.
2. It relies on the principle that if a single photon falls on a balanced beam splitter, it will take either of the beam-splitter output paths randomly. As the path chosen by the photon is random, the randomness is translated to a sequence of binary digits, also called bits.

ROLE OF RANDOM NUMBERS:

1. They have essential roles in various fields ranging from quantum communication, cryptography applications like key generation, key wrapping, authentication along with scientific simulations, lotteries and fundamental physics experiments.
2. The generation of perfect randomness is generally considered impossible with classical methodologies.
3. Quantum mechanics has the inherent potential of providing true random numbers and thus has become the preferred option for scientific applications requiring randomness.

SIGNIFICANCE:

1. Now, India enters the club of countries which have the technology to achieve the generation of random numbers based on the Quantum Phenomenon.

Govt. sets up academy to promote Tamil culture

CONTEXT:

1. The Department of Art, Culture & Language of the Delhi government set up and notified Tamil academy to promote Tamil language and culture.

ABOUT:

1. The Tamil language and culture have a long tradition in the history of Indian culture as well as in Delhi.
2. New academy will introduce various awards to promote and reward the good works of people in Tamil language and culture.
3. The government will also provide language courses through this academy.
4. The Delhi government will also celebrate and organise cultural festivals for the people of Tamil Nadu.

TAMIL CULTURE:

1. The culture of the Tamil people is rooted in several forms of expression such as dance, music, literature, folk arts.
2. Being the birthplace for one of the oldest civilisations, the Tamil identity and its culture is strongly centred around its language which is fondly referred to as the Tamilannai (The Tamil Mother).
3. The Tamil language is recognised as a classical language by the Indian government and a lot of Tamil literature is centuries old. Works of Kambar and Thiruvalluvar have gained an international reputation.
4. The most prominent visual art forms of the region are the Chola bronze sculptures and the Tanjore painting.
5. Most Tamil dance forms have origins in the older temple dances, which were performed by Devdasis and courtesans. One of such dance forms is Bharatanatyam, which is a modern form of the ancient dance of Catir Kacceri.
6. Some other important dances from the culture are Oliyattam, Puliyattam, Karakattam, and Koothu.

Banana grit for that good gut feeling

CONTEXT:

1. Scientists at the CSIR-National Institute for Interdisciplinary Science and Technology (NIIST) in Kerala introduced a new product, Banana Grit, developed from raw Nendran bananas.

ABOUT:

1. Banana Grit can be used for making a wide range of dishes. It bears a resemblance to 'rava' and broken wheat.
2. Nendran banana is consumed ripe and it also used in typical Kerala dishes such as 'avial' and 'thoran' The grit, or granules, can be used for making upma, or it can be mixed with banana powder for making porridge with milk or coconut milk for use as a health drink. Banana powder can be used in cake and bread preparation, along with refined wheat flour.

SIGNIFICANCE:

1. The concept was introduced to utilise the presence of resistant starch in bananas, which is reported to improve gut health. Hence, the dishes prepared with Banana Grit and its byproduct banana powder incline to the new focus on gut health.
2. Developing new uses for Nendran also comes as a boon to farmers who have often been struggling against falling prices.

FSSAI slashes limit for trans fat levels in foods

CONTEXT:

1. The Food Safety and Standards Authority of India (FSSAI) amended to the Food Safety and Standards (Prohibition and Restriction on Sales) Regulations. Now, it has capped the amount of trans fatty acids (TFA) in oils and fats to 3% for 2021 and 2% by 2022 from the current permissible limit of 5% through an amendment.

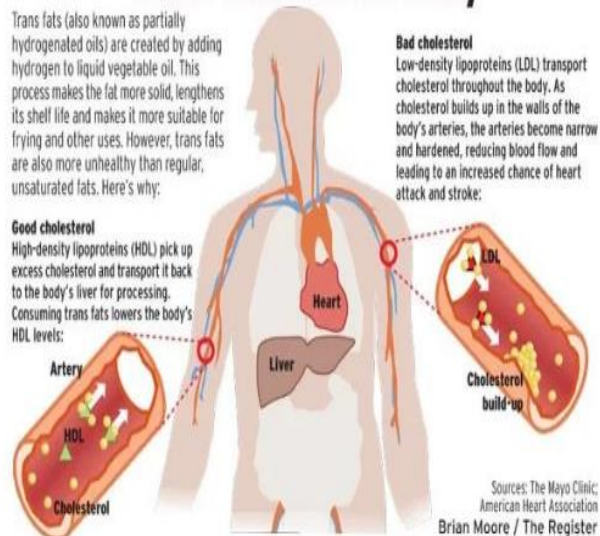
ABOUT:

1. FSSAI, in 2020, issued a draft on the subject for consultation with stakeholders. The revised regulation applies to edible refined oils, vanaspati (partially hydrogenated oils), margarine, bakery shortenings, and other mediums of cooking such as vegetable fat spreads and mixed fat spreads.
2. While the regulation comes into effect immediately, industry players were made to take a pledge back in 2018 that they would comply with WHO's call for action to reduce TFA by 3% by 2021 allowing them three years to comply with the latest regulation.
3. It was in 2011 that India first passed a regulation that set a TFA limit of 10% in oils and fats, which was further reduced to 5% in 2015.

TRANS FATS:

1. These are the most harmful type of fats which can have much more adverse effects on our body than any other dietary constituent.
2. Trans fats are associated with increased risk of heart attacks and death from coronary heart disease. As per the World Health Organisation (WHO), approximately 5.4 lakh deaths take place each year globally because of intake of industrially produced trans fatty acids. The WHO has also called for global elimination of trans fats by 2023.
3. WHO has also warned India, Pakistan, Bangladesh, Nepal and Bhutan as they were among countries that need to act urgently against trans-fat.
4. FSSAI launched two initiatives for reducing consumption of trans fat i.e. Eat Right Movement and Heart Attack Rewind mass media campaign.
5. The Ministry of Health & Family Welfare is the administrative Ministry for the implementation of FSSAI.

Trans fats and the body



SIGNIFICANCE:

1. The FSSAI rule comes at the time of a pandemic where the burden of non-communicable diseases has risen. Cardiovascular diseases along with diabetes are proving fatal for COVID-19 patients.


WAY AHEAD:

1. The regulation must not be restricted to oils and fats, but must apply to all foods. FSSAI will probably address this as well before January 2022 to eliminate chemical trans fatty acids from the Indian platter.

my health news daily
www.MyHealthNewsDaily.com

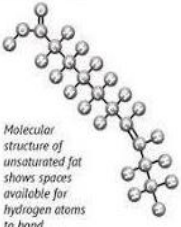
Different Kinds of Fat

Fatty acids, which are the building blocks of fat, are long chains of carbon and hydrogen atoms. Essential fatty acids are those needed by the human body that can only be obtained through food. Some fats are harmful, however.




UNSATURATED FATS

The so-called "good" fats can be found in nuts, avocados and other vegetables. The molecular structure of unsaturated fat causes it to be lower in calories than other fats.

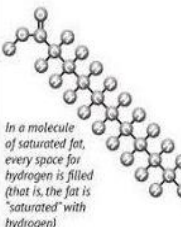


Molecular structure of unsaturated fat shows spaces available for hydrogen atoms to bond




SATURATED FATS

These fats are found mostly in animal products. It is recommended that people reduce their consumption of saturated fats in order to stay healthy.

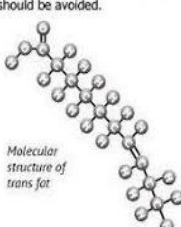


In a molecule of saturated fat, every space for hydrogen is filled (that is, the fat is "saturated" with hydrogen)



TRANS FATS

Trans fats are unsaturated (good) fats which have been partially saturated with hydrogen to extend their shelf life. Unfortunately, these trans fats are found to elevate "bad" cholesterol and should be avoided.



Molecular structure of trans fat

SOURCES: UC-CLERMONT COLLEGE; ALLIANCE FOR A HEALTHIER GENERATION; DREAMSTIME
KARL TATE / © MyHealthNewsDaily.com

- Each of these parameters have sub-parameters which, in turn, consist of various measurable indicators.

Draft S&T policy

CONTEXT:

- The government of India has proposed an 'open science policy' in the draft Science, Technology and Innovation Policy (STI). The final policy would be approved by the government in the first half of 2021 and it will replace the STI policy of 2013.

BACKGROUND:

- The world's best scientific journals are expensive, and sometimes even one article can cost several tens of dollars to access. Even top institutions have to be selective in subscribing to these journals.
- Publicly-funded research is carried out through taxpayers' money. And the taxpayer need not have to pay to access the results or data generated by this research.

ABOUT:

- The government has proposed to buy bulk subscriptions of all important scientific journals across the world, and provide everyone in India free access to them.
- This has not been tried in any country so far. Hence, in India, the '**One Nation, One Subscription**' policy for scientific journals is a radical move that could be a game changer for the scientific community and individual researchers.
- '**One Nation, One Subscription**' policy is proposed as part of a new Open Science Framework that will ensure free access to scientific data for all.
- Towards this objective, the Ministry of Science and Technology, which has drafted the new policy, has proposed to set up a Science, Technology and Innovation Observatory that will serve as the central repository of all kinds of data generated from scientific research in the country.
- From this Observatory, all data and information related to publicly-funded research would be made freely accessible to everyone under "**FAIR (Fair, Accessible, Interoperable and Reusable) terms**".

RBI's digital payments index

CONTEXT:

- The Reserve Bank of India (RBI) has constructed a composite **Digital Payments Index (DPI)** to capture the extent of digitization of payments across the country.

ABOUT:

- The RBI-DPI has been constructed with March 2018 as the base period.
- The DPI for March 2019 and March 2020 work out to 153.47 and 207.84 respectively, indicating appreciable growth.
- The RBI-DPI comprises five broad parameters, including Payment Enablers, Payment Infrastructure – Demand-side factors and Supply-side factors, Payment Performance and Consumer Centricity.
- These parameters would enable measurement of deepening and penetration of digital payments in the country over different time periods.

AIMS:

1. To make scientific knowledge and data available to all.
2. To ensure that the results of, and information generated by, all publicly-funded research is freely accessible by everyone.
3. To buy access to between 3,000 and 4,000 high-impact scientific journals, and the government could end up spending an estimated Rs 2,000 crore to 3,000 crore on the bulk subscriptions every year.

ALTERNATIVES:

1. In situations where some data cannot be made available to all due to reasons of privacy, national security, or intellectual property rights, "suitably anonymised and/or redacted data" will be made accessible.
2. If some data cannot be released to the general public due to these or other reasons, genuine researchers would definitely have access.

INCLUSION OF MARGINALIZED GROUPS IN SCIENCE:

1. In a chapter on inclusion and equity in the draft Science, Technology and Innovation Policy, there is also proposal that atleast 30 per cent representation be ensured for women in all decision- making bodies.
2. More importantly, partners of people from the LGBTQ+ community working in the sector are entitled to spousal benefits "irrespective of their gender".
3. It aims to tackle discrimination and providing equal opportunities in science.
4. LGBTQ+ community should be included in all conversations related to gender equity, and provisions be made to safeguard their rights and promote their representation and retention in the science and technology sector.
5. This policy also focuses on removal of bars on married couples being employed in the same department or laboratory. As of now, married couples are not posted in the same department, leading to cases of loss of employment or forced transfers when colleagues decide to get married.

6. Dual recruitment policy will be encouraged in all governing bodies, funding agencies, so that couples do not face the challenge of 'choosing' a spouse's career over theirs. The aim is to bring gender neutrality through such interventions.
7. The policy also focuses for age-related cut-offs in matters relating to selection, promotion, awards or grants, the "academic age" and not the biological age would be considered. This would help women who often have to take a break from careers for family reasons and to raise children.
8. Child-care benefits are proposed to be made gender-neutral, and flexible work timings and adequate parental leave are to be offered to cater to maternity, child birth and childcare.
9. All publicly-funded research institutions and universities will be asked to provide day-care centre for children of employees, and also have a provision for elderly care.
10. There will be equal opportunity in academics for women, along with candidates from rural and remote areas, marginalized communities, differently abled groups, irrespective of their caste/creed/religion/race.
11. For the benefit of people with disabilities, all publicly-funded scientific institutions need to make "structural and cultural changes" to support their inclusion.
12. Academic and professional organisations will be encouraged to conduct gender audits and social audits, to propel the organizations to proactively promote gender-neutral recruitment and retention of employees, for ensuring equitable, not necessarily equal, representation.

CONCLUSION:

1. It aims to achieve technological self-reliance and position India among the top three scientific powerhouses of the world over the next decade.
2. It hopes that government and private expenditure on research and development would double every five years.

Kerala govt announces digital media literacy programme

CONTEXT:

1. The Kerala Government announced a digital media literacy programme called 'Satyameva Jayate' (Truth alone triumphs).

ABOUT:

1. The programme would be taught at schools and colleges, which would be encourage to develop curriculum on digital media literacy.
2. The Satyameva Jayate programme would cover five points –
 - a) What is wrong information?
 - b) Why they are spreading fast?
 - c) What precautions have to be adopted while using the content of social media?
 - d) How those who spread fake news make profit?
 - e) What steps can be initiated by citizens?
3. Smartphone and internet penetration is much higher in Kerala than any other state. Large number of people is now depending upon social media for news updates.
4. The chances for the spread of lies and wrong information through social media, which do not have any editorial supervision, have widened.
5. Hence, people should understand the laws and benchmarks which control social media and the internet. It is important to distinguish between truth and untruth.

Loan by ADB

CONTEXT:

1. Recently, the Asian Development Bank (ADB) and the Government of India signed a \$ 231 million loan to augment **electricity generation capacity in the state of Assam** through construction of a 120 megawatts (MW) hydroelectric power plant that will enhance availability of electricity for households.
2. Simultaneously, both also signed a \$10 million project readiness financing (PRF) to help finance piloting activities, and design and capacity building for an ensuing project

that aims to expand **horticulture production and farm household income in the hill state of Himachal Pradesh.**

POWER GENERATION CAPACITY IN ASSAM:

1. This is the third tranche loan for the ongoing Assam Power Sector Investment Programme that was approved by the ADB Board in July 2014.
2. The programme, including its two previous tranches, focuses on enhancing capacity and efficiency of the energy generation from clean hydroelectric source and distribution systems in Assam to improve electricity service to end users.
3. This will also improve living conditions, promote business expansion, and increase employment opportunities in the state beside reducing greenhouse gas emissions.
4. The proposed hydroelectric project is run-of-the-river project over Kopili river which will help increase electricity supplied from clean energy by 469 gigawatt-hour (GWh) by 2025 and reduce greenhouse gas emissions of carbon dioxide annually.
5. A \$2 million grant from Japan fund for poverty reduction (JFPR) is also associated with the project to finance equipment and consulting services to improve capacity for resource management and community resilience.

HORTICULTURE IN HIMACHAL PRADESH:

1. The ensuing project, to be designed by the PRF, will support development of subtropical horticulture, including cultivation of fruits and vegetables, in the state's southern region which is currently lagging due to limited access to perennial water sources, crops losses due to wild animal encroachment and limited access to high value markets.

ABOUT ADB:

1. ADB is committed to achieving a prosperous, inclusive, resilient, and sustainable Asia and the Pacific, while sustaining its efforts to eradicate extreme poverty.
2. Established in 1966, it is owned by 68 members—49 from the region.

"Ginger" Processing Plant

CONTEXT:

1. North East's first-ever specialised "Ginger" Processing Plant at district Ri-Bhoui in Meghalaya is being revived and is likely to become functional in the beginning of 2021.

ABOUT:

1. The only Ginger Processing Plant of North East India was established around the year 2004 but has remained non-functional for many years.
2. The NERAMAC has now undertaken the responsibility of reviving it and initiated steps to operationalize the closed Plant through PPP mode.
3. Plant located at the Export Promotion Industrial Park (EPIP), Raja Bhagan, ByrnihatHatt will not only process ginger but also help in preparing products like waxed ginger, ginger paste, ginger powder, ginger flakes, ginger oil etc.
4. Significantly, ginger has attained a place of prominence in recent months because of its reported properties as an immunity booster against COVID-19 Virus.
5. The ginger products being prepared from this Plant will not only be available for domestic consumption but will also have a wider demand and this will also be in keeping with India's calls for "Vocal for Local".
6. For the PPP mode, an Operation and Maintenance Operator was selected through the tendering process and the work on setting up and reviving the Plant is under progress.
7. North Eastern Region of India produces about 450,000 Metric Ton of high-quality ginger every year but most of it is sold at a lower price due to lack of processing and

cold storage facilities. The Plant at Meghalaya will give the much-needed facility to the ginger growers and they will be able to use their capacities and at the same time optimally utilize the natural resources.

IFSCA becomes associate member of the global lobby group IOSCO

CONTEXT:

1. International Financial Services Centres Authority (IFSCA) has become an associate member of the International Organization of Securities Commissions (IOSCO).

IOSCO:

1. The IOSCO works closely with the G20 nations and the Financial Stability Board (FSB), in setting up the standards for strengthening the securities markets.
2. The IOSCO Objectives and Principles of Securities Regulation have been endorsed by FSB as one of the key standards for sound financial systems.

IFSCA:

1. The first IFSC has been set up at the Gujarat International Finance Tec-City (GIFT) in Gandhinagar.
2. To regulate such institutions, the government established IFSCA on 27 April 2019 with its head office is in Gandhinagar.
3. In December 2019, Parliament passed a bill to set up a unified authority for regulating all financial activities at IFSCs in the country.

SIGNIFICANCE:

1. The membership of IOSCO will provide the IFSCA a platform to exchange information at the global level, and even at the regional level, on areas of common interests.
2. Further, the IOSCO platform will enable the IFSCA to learn from the experiences and best practices of the regulators of other well established financial centres.

Laser Dazzlers

CONTEXT:

1. **Bharat Electronics Limited (BEL)** has signed a contract with **Indian Navy** for initially supply 20 **Light Amplification by Stimulated Emission of Radiation Dazzlers** (Laser Dazzlers). These would be manufactured by BEL, Pune plant.
2. Also, Ministry of Defence (MoD) has signed a contract with Bharat Electronics Limited (BEL) for procurement of 10 Lynx U2 Fire Control systems for frontline warships of Indian Navy.

ABOUT LASER DAZZLERS:

1. It is used as a **non-lethal method** for warning and stopping suspicious vehicles/boats/aircrafts/UAVs/pirates etc. from approaching secured areas during both day and night.
2. It **suppresses the person's/optical sensor's actions with disability** glare in case of non-compliance to orders.
3. It **disorients/ confuse/blind a person temporarily**. It also dazzles and distracts aircraft/UAVs.
4. It is a **portable, shoulder operated and ruggedized for military use** in adverse environmental conditions.
5. Laser dazzler technology was **developed by Defence Research and Development Organisation (DRDO)**.
6. This unique product is **indigenously designed and developed for first time for the Armed Forces**. It will support the '**Atmanirbhar Bharat**' initiative.

Fewer kids under 3 breastfed

CONTEXT:

1. Recently, the National Family Health Survey (NFHS) released the data for 17 states and five Union territories (UT), the number of women breastfeeding their newborns within an hour declined in the last five years.
2. Significant changes in the last five years were seen in Meghalaya and Lakshadweep as well as Sikkim, Dadra and Nagar Haveli and Daman and Diu and Assam.

3. Marked differences were observed in Dadra and Nagar Haveli and Daman and Diu, Manipur and Meghalaya.

STATES RECORDED A DIP:

1. The women in urban regions of **Daman and Diu and Dadra and Nagar Haveli along with Bihar, Gujarat, Sikkim, Telangana and Tripura** in the practice.
 - **Dadra and Nagar Haveli and Daman and Diu** showed the least percentage of children under three years and who were breastfed within an hour of birth.
2. This was followed by **Bihar, Sikkim, Tripura, Telangana and Gujarat**.
3. Sikkim was followed by Dadra and Nagar Haveli and Daman and Diu and Assam in this context.
4. The percentage of children under three who were breastfed within one hour of birth in Telangana remains almost unchanged.

STATES RECORDED A HIGH

1. It is registered in **Meghalaya, followed by Lakshadweep, Kerala and Mizoram**.
2. Lakshadweep showed a sharp increase in the percentage of children under three years and who were breastfed within one hour of birth.
3. Only 10 states as well as UTs — Andaman and Nicobar Islands, Andhra Pradesh, Himachal Pradesh, Jammu and Kashmir, Lakshadweep, Meghalaya, Nagaland, Telangana and West Bengal — of 22 showed increase in the percentage of children that were breastfed.

RURAL-URBAN

1. In 13 states and UTs, **the percentage of children in rural areas breastfed within an hour of birth was greater than urban areas**.
2. This was seen mostly in Dadra and Nagar Haveli and Daman and Diu, Andaman and Nicobar Islands, Andhra Pradesh, Assam, Goa, Gujarat, Himachal Pradesh, Jammu and Kashmir, Maharashtra, Manipur, Meghalaya, Nagaland and Sikkim.

3. **Rural women tend to stick with traditions and breast fed their newborns.** But the same is not the case for urban women.

CONCERNS:

1. Increased breastfeeding reduces the chances of child being obese. This practice is fading due to the increase in technologies.
2. Absence of breastfeeding increases the risk of illness in the infant from infectious diseases: 53 per cent hospitalisations occur due to diarrhea, 27 per cent low respiratory tract infection that can be reduced through breastfeeding.
3. Mothers who do not breast feed are also at risk: they gain weight, blood pressure, suffer from postpartum depression, cardiovascular diseases and bone health.
4. Oxygen saturation and body temperature were found to be lower in infants fed through bottles than infants who were breastfed. Long-term risks include asthma, childhood cancers and cognitive and brain development.

WAY AHEAD:

1. Supplementary foods or liquids for infants need to be done away with.
2. Healthcare centres and birth attendants should be well-equipped to educate new mothers on the importance of breastfeeding.
3. Fathers should actively participate and provide aid to the mothers during breastfeeding in hospitals.

CONCLUSION:

1. Overall, 16 per cent of the neonatal deaths can be saved if infants are breastfed from day one of birth and if 22 per cent of the breastfeeding starts within an hour of birth.
2. Research has shown that there are significant nutritional, psychological, developmental, immunologic, social and environmental benefits of breastfeeding on mothers and on their children.
3. The other important benefits include dip in post-partum bleeding and more rapid uterine involution, an earlier return to pre-pregnant weight, delay in resumption that causes increase in child spacing, reduced risk of ovarian and breast cancer.

MAINS

Jallikattu: pride & politics

GS 1: Indian culture

GS 2: Separation of powers between various organs dispute redressal mechanisms and institutions

CONTEXT:

1. In India, national parties like BJP and Congress have faced public anger for their stands on Jallikattu, which is the traditional bull-taming sport.
2. It is a controversial sport which has faced long legal battles over cruelty to animals, and which at the same time is a symbol of Tamil culture.

WHAT IS JALLIKATTU?

1. The bull-taming sport is popular in Madurai, Tiruchirappalli, Theni, Pudukkottai and Dindigul districts — known as the Jallikattu belt.
2. Jallikattu is celebrated in the second week of January, during the Tamil harvest festival, Pongal.
3. A tradition over 2,000 years old, Jallikattu is a competitive sport as well as an event to honour bull owners who rear them for mating.
4. It is a violent sport in which contestants try to tame a bull for a prize; if they fail, the bull owner wins the prize.
5. In an age when the farm sector is largely mechanised, there are no major monetary benefits for bull owners in breeding Jallikattu bulls other than the prizes they get during the Jallikattu events.
6. Jallikattu is considered a traditional way for the peasant community to preserve their pure-breed native bulls, which are otherwise used only for meat if not for ploughing.

LEGAL BATTLES:

1. In 1991, the Environment Ministry banned the training and exhibition of bears, monkeys, tigers, panthers and dogs, which was challenged by the Indian Circus Organisation in the Delhi High Court. In

1998, dogs were excluded from the notification.

2. Jallikattu first came under legal scrutiny in 2007 when the Animal Welfare Board of India and the animal rights group PETA moved petitions in the Supreme Court against Jallikattu as well as bullock cart races.
3. The Tamil Nadu government, however, worked its way out of the ban by passing a law in 2009, which was signed by the Governor.
4. In 2011, the Centre added bulls to the list of animals whose training and exhibition is prohibited.
5. In May 2014, the Supreme Court banned the bull-taming sport, ruling on a petition that cited the 2011 notification.

IS IT LEGAL OR BANNED NOW?

1. In January 2017, massive protests erupted across Tamil Nadu against the ban and thus, the Tamil Nadu government released an ordinance amending the central Act and allowing Jallikattu in the state; this was later ratified by the President. PETA challenged the state move, arguing it was unconstitutional.
2. In 2018, the Supreme Court referred the Jallikattu case to a Constitution Bench, where it is pending now. The main question to be resolved is whether the Jallikattu tradition can be protected as a cultural right of the people of Tamil Nadu which is a fundamental right.
3. The practice of jallikattu is violating the Prevention of Cruelty to Animals act, 1960. Article 29 (1) mandates that “any section of the citizens residing in the territory of India or any part thereof having a distinct language, script or culture of its own shall have the right to conserve the same”.
4. Also, Article 51A includes our fundamental duties and states that citizens should safeguard the wildlife and forests and have compassion for living creatures.
5. Like Tamil Nadu, Karnataka too passed a law to save a similar sport, called Kambala. A similar attempt by Maharashtra, too, was challenged in court, before it was passed as a law.
6. Except in Tamil Nadu and Karnataka, these sports remain banned in all other states

including Andhra Pradesh, Punjab and Maharashtra due to the 2014 ban order from the Supreme Court.

CONCLUSION:

1. In this sport, the human casualty list is higher, and even judicially determined that jallikattu constitutes a grave violation of animal rights and a perpetration of cruelty on them.
2. **Popular sentiment, political patronage and the cultural instinct** to preserve such practices contribute collectively to the continuance of the sport. Other virtues attributed to it include giving native breeds a good shot at survival and an opportunity to youth to develop a robust outlook even while earning rewards.
3. What should ultimately matter, above all, is that any activity that endangers participant and onlooker alike should be held under rigorously monitored regulations and restrictions. It is also time that appropriate protective gear is devised and made mandatory for participants.

Removing the creases in housework valuation .

The work women perform for the family should be valued equally with men's work during the continuance of marriage.

GS-1: Role of women and women's organization, population and associated issues, poverty and developmental issues, urbanization, their problems and their remedies.

CONTEXT:

1. Indian society deny Women equal rights, and under the latest Uttar Pradesh and Madhya Pradesh Ordinances.
2. The right to choose their spouses, the recognition of domestic work as work, recognition work of wives, is debatable issues of women's.
3. What have the legislative initiatives and judicial responses been in this regard?

About works of women's:

1. As in the 2011 Census, while 159.85 million women stated household work as their main occupation, a mere 5.79 men referred to it as their main occupation.
2. Globally, women perform 76.2% of total hours of unpaid care work, more than three times as much as men.
3. National Statistical Office, Government of India (published in September 2020) which says that on an average, while Indian women spend 299 minutes a day on unpaid domestic services for household members, men spend just 97 minutes.
4. 92% Indian women take part in unpaid domestic work; only 27% men do so.
5. India's domestic workers numbers around 5 million domestic workers of which around 3.5 million are women.
6. The number of female workers in the age group of 15-59 had increased by 17%. In cities, the increase was over 70% from 14.7 million in 2001 to 25 million in 2011.
7. Around 90% of the domestic help in India are women and children (predominantly girls) in the age group of 12 to 75. It is estimated that 25% of them are below the age of 14.
8. In India' (2009) had estimated the economic value of services by women to be to the tune of a whopping \$612.8 billion annually.

Acknowledged the contribution of the housewives by SC.

Arun Kumar Agrawal v. National Insurance Company (2010), the Supreme Court acknowledged the contribution of the housewives and also observed that it cannot be computed in terms of money. Her gratuitous services rendered with true love and affection cannot be equated with services rendered by others

1. **Justice A.K. Ganguly in *Arun Kumar Agrawal (2010)*** : referred to Census 2001 that is carried out under an Act of Parliament and had categorized those who perform household duties ,about 36 crore women in India ,as non-workers and clubbed them together with beggars, prostitutes and prisoners (who are not engaged in economically unproductive work).
2. **In case of *Rajendra Singh (2020)***,dealt with a limited question of compensation under the Motor Vehicles Act to calculate the compensation for the death of **homemakers**.

Issues related to women's:

1. While several legislations such as the **Unorganized Social Security Act, 2008**,
2. **Sexual Harassment against Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013**.
3. **Minimum Wages Schedules notified in various states**: refer to domestic workers, there remains an **absence of comprehensive**,
4. **Uniformly applicable, national legislation** that guarantees fair terms of employment and decent working conditions.
5. In 2010, The registration of the National Housewives Association as a trade union was **denied** as domestic work was treated as neither trade nor industry.
6. **Household Wage not recognized yet.**
7. **Makes Woman Autonomous and Controls Domestic Violence.**
8. **Redefines the Role of Women in society**

Current Challenges:

1. Cultural values, limited role as homemaker with status of mother, sister and wife,
2. Partnership and industries, not considered capable enough to handle it.
3. Gender equality studied in isolation, The crime against boys and men go unreported, even this group should be studied.
4. The laws made are gender biased rather than gender neutral laws.
5. Hardly any steps for political representation of women.
6. Gender exploitation in unorganized sector go unrecorded.
7. Study limited to women empowerment rather than youth empowerment.

Solution:

1. Legal status to domestic workers. It would facilitate recognition of part-time and full-time domestic help as “workers”
2. The right to register with the state labour department. It also plans to ensure minimum wages and equal remuneration to the domestic workers.
3. Put effective means to regulate working conditions, for example, through streamlined job descriptions which could be offered through standard contracts.
4. Clearly define various terms such as part time workers, full time workers, live in workers, employers and private placement agencies.
5. The United Nations’ Committee on the Elimination of Discrimination Against the Women, in 1991, had recommended measurement and quantification of unremunerated domestic activities of women and their recognition in GDP.
6. The **de facto** economic contribution of women is highlighted Matrimonial property laws.
7. The time has come to insist that the work women perform for the family should be valued equally with men’s work during the continuance of marriage.

A hierarchical structure (past and present):

1. The English common law of marital status was starkly hierarchical. Forget the recognition of a homemaker’s work as work; she had no right even in respect of her work outside home.
2. In fact till 1851, no country had recognized a wife’s right in earnings of any sort. If a housewife worked for pay in or out of the home, it was her husband’s prerogative to collect her wages.
3. Seventh century Islamic law clearly mandates husbands to pay wives if they decide to suckle their children and entitle them to spend certain portions of husband’s money without his consent.
4. The middle of the 19th century, some American States started reforming the common law of marital status by enacting the “Married Women’s Property Acts”. Some of these statutes exempted the wives’ real property from their husband’s debts.
5. By 1850, the era of “**earning statutes**” started which granted wives property rights in earnings from their “separate” or “personal” labour.

Separate spheres:

1. Women demanded a right to own themselves, their earnings, their genius. Accordingly, in 1851, at the Worcester Convention.
2. They finally achieved success when the equal rights of wives in the matrimonial property were recognized.
3. The Third National Women’s Liberation conference, in England in 1972, for the first time, explicitly demanded payment of wages for the household work.
4. In india, **Veena Verma** did introduce a private member Bill in 1994 entitled The Married Women (Protection of Rights) Bill, 1994.
5. This Bill provided that a married woman shall be entitled to have an equal share in the property of her husband from the date of her marriage and shall also be entitled to dispose of her share in the property by way of sale, gift, mortgage, will or in any other manner whatsoever.

Way forward:

1. Women should be **encouraged and helped to reach their full potential** through **quality education, access and opportunities of work**, gender-sensitive and harassment-free workplaces and attitudinal and **behavior change** within families to make household chores more participative.
2. If women become a little assertive, prenuptial marriage agreements can easily solve this problem with the insertion of the clause on wives' right in husband's earnings and properties being included.
3. **Gender equality should encompass** men and women both. There is a need of change in societal mindset. Men and women should respect each other. Real education begins at home. So it is even the duty of parents and teachers to incorporate healthy values right from the young age.

Don't ignore the women farmers.

GS 1- **Role of women and women's organization, population and associated issues, poverty and developmental issues,**

Salient Features of Indian Society, Role of Women, Issues Related to Women Gender gap

CONTEXT:

1. According to the agricultural census, **73.2% of rural women are engaged in farming activities but only 12.8% own landholdings.**
2. The problem of non-recognition and conveniently labels them as 'cultivators' or 'agricultural labourers' but not 'farmers'. Without any recognition, women
3. The India Human Development Survey reports that **83% of agricultural land in the country is inherited by male members of the**

family and less than 2% by their female counterparts.

FEMINIZATION OF AGRICULTURE:

1. Agriculture, contributing around 16% of the GDP, is increasingly becoming a female activity.
2. Agriculture sector employs 80% of all economically active women comprise 33% of the agricultural labour force and 48% of self-employed farmers.
3. Approx. 18% of the farm families in India, according to NSSO Reports are headed by women.

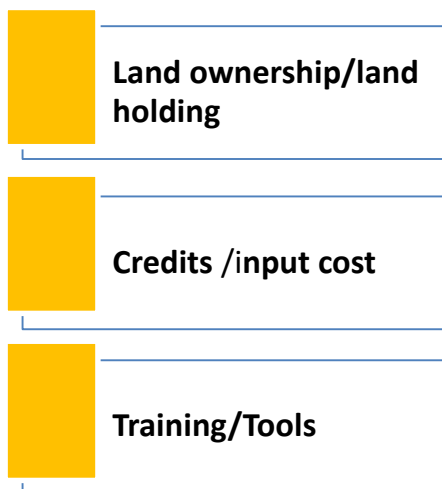
SCHEME BY GOVERNMENT:

1. **PM Mahila Kisan Sashaktikaran Pariyojana (MKSP):** It is a sub-component of Deendayal Antyodaya Yojana- National Rural Livelihood Mission under Ministry of Rural Development.
2. Upto 60% (90% for North Eastern States) of the funding support for such projects is provided by the government.
3. **At least 30% of the budget 2019-20 allocation has been earmarked for women beneficiaries.**
4. Government has **increased its focus on women self-help group (SHG) on food processing sector.**

CHALLENGE / ISSUE:

1. **Woman are not guaranteed the rights which they would otherwise be given if they were recognised as farmers.**
2. Woman have unequal access to rights over land, water and forests. There is gendered access to **support systems such as storage facilities, transportation costs, and cash for new investments or for paying off old dues or for other services related to agricultural credit**

3. The first is the lack of **any mention of MSP (minimum support price)** that protects farmers from exploitation.



WAY FORWARD

- **Provision of credit without collateral** under the microfinance initiative of the **National Bank for Agriculture and Rural Development** should be encouraged.
- Manufacturers should be incentivised to produce **tools and machineries suited to women's needs.**
- **Krishi Vigyan Kendras** in every district can be assigned an additional task to educate and train women farmers about innovative technology along with extension services.
- Government flagship schemes such as the National Food Security Mission, **Sub-mission on Seed and Planting Material** and the Rashtriya Krishi Vikas Yojana should include women-centric strategies and dedicated expenditure.

Scientist M.S. Swaminathan once said, "Some historians believe that it was women who first domesticated crop plants and thereby initiated the art and science of farming. While men went out hunting in search of food, women started gathering seeds from the native flora and began cultivating those of interest from the point of view of food, feed, fodder, fibre and fuel."

Caste, covid and the city: the problem of people

GS 1 Social empowerment

CONTEXT:

1. The year of 2020 was began with new public spaces which were a protest against citizenship law. Students, people from indigenous communities, women and Muslim community were involved in this protest. Moreover, in the same year, COVID-19 also witnessed new shifts in social spaces giving way to inequality.

CITIZENSHIP (AMENDMENT) ACT:

1. The Citizenship (amendment) act amended the Citizenship Act, 1955.
2. New amendment act provides Indian citizenship for refugees from Afghanistan, Bangladesh and Pakistan who are Hindus, Sikhs, Buddhists, Jains, Parsis or Christians, and arrived in India before the end of December 2014.
3. But this law does not grant such eligibility to Muslims from those three countries because they are Muslim majority countries.
4. This is the first time that religion had been used as a criterion for citizenship under Indian law.

EFFECT OF PANDEMIC:

1. History bears testimony to the fact that unlike most of the world, India is not new to the practice of social distancing in the light of caste system.
2. Maintaining social as well as physical distance has been historically entrenched in various forms of isolation by the upper castes in the Hindu social order ever since the Vedic times.
3. Based on the religion of Hinduism and its scriptures, social distancing, which today is

claimed to be the only curative measure for COVID-19, has always been used as a socially-sanctioned weapon of mass social disruption and collective discrimination against the lower castes and Dalits in the Indian subcontinent.

4. It has been a part of India's unjust history and continues to be a reality even in India's fight against corona.
5. Due to this lockdown in the wake of COVID-19, massive out-migration from cities of migrant workers was held.
6. This migration realises that this majority had been made invisible by the city.
7. The pandemic has changed the dynamic of untouchability in Indian society and brought a type of horizontal untouchability between bodies, which goes beyond caste and religion.
8. In recent months, India's government has boosted spending to revive the economy, launched employment schemes for those returning to villages, and allocated more funds to rural jobs programs. But nothing benefitted much.
9. The mistake of prescribing social distancing instead of physical distancing has led to its appropriation by the Brahmanical and Caste fundamentalists.
10. Claiming themselves to be the first ones to have coined this phenomenon in the ancient times, they have not just used the global recognition and acceptance of social distancing to legitimize and justify its use against the untouchables but have also called for its renewal.

OTHER PROBLEM FACED BY DALITS:

1. Beside this pandemic, Dalit communities experiencing many other problems also. There were continued reports of a steady rise in caste atrocities with the community.
2. There is an incident of the rape and assault of a Dalit woman from Hathras, Uttar Pradesh which who died in the heart of the capital.

3. As well as caste-based sexual violence is common in villages, but there was an attempt by dominant caste media to deny its caste dimension.

PICTURE OF DALIT THROUGH FILMS:

This year two films explore the situation of Dalits. They are:

1. **'Siri'- it is of Rajeve Kumar-** This movie is about the rural/urban agrarian crisis in Punjab.
2. **'The Discreet Charm of the savarnas' -** It is of Pa Ranjith and Rajesh Rajamani- This movie is a mirror to the dominant caste Indian society in which Dalits castes as wretched bodies.

PROBLEM AT ACADEMIC LEVEL:

1. The year of 2020 confirmed that progressive academic and discursive spaces are not free of the caste system. For example, Jadavpur University teacher's targeting on the mythical "merit question" was just one instance.
2. Earlier work reveals that caste gaps at higher levels of education have either remained static or widened over the last three decades. COVID-19 acted a catalyst to exacerbate these educational differences.
3. **Digital Divide:** The proportion of households with access to the Internet is 10% for SC households. Only 49% of SCs have bank savings.

EXAMPLE TO SHOW THEIR SITUATION:

1. Sanitation workers walked between daily humiliation and economic needs and their anger resulted to terrible killing and violence. Simultaneously, nation is also witnessing farmers' protest.

CONCLUSION:

1. Protests of Dalit mazdoors, of younger women, of migrant farmworkers, whose labour makes the country run is present in the whole country.
2. As Caste is integral to our society and body politic, we have to start such initiatives by whom article 14, 15 of the constitution become true in its implementation. Equality in the society can come with expanded education, employment and social security.
3. From the healthcare schemes to availing direct cash transfers, every other mechanism which seeks to address these social and economic 'have nots' ends up becoming yet another unaffordable luxury or inaccessible privilege for them.

The child in India?

GS 2: Issues of Poverty and malnutrition

CONTEXT:

1. Recently, the first-phase data of the National Family Health Survey-5 (NFHS-5) 2019-20 has been released by the Ministry of Health and Family Welfare.

ABOUT:

1. It provides new and reliable evidence to assess some dimensions of micro-development performance before COVID struck.
2. It provides an indicator for tracking 30 Sustainable Development Goals (SDGs) that the country aims to achieve by 2030.
3. The survey covers health, nutrition (of mother and child) and the overall quality of lives. It also includes some new topics, such as preschool education, disability, access to a toilet facility, death registration, bathing practices during menstruation, and methods and reasons for abortion.
4. The data illustrated significant gains achieved by the government in respect to its distinctive approach to redistribution and inclusion that called **New Welfarism**. This involved the subsidised public provision of

essential goods and services, normally provided by the private sector.

5. The New Welfarism was consciously driven by the Centre and it could, therefore, reasonably claim credit for its success. Many of the child-related outcomes are also determined by state-level implementation, therefore neither success nor failure can be attributed to one source.
6. Access to banks accounts (especially for women), clean fuel for cooking, toilets and power had increased and at a significantly faster pace since 2015 than before.

HEALTH AND NUTRITION OF THE CHILD IN INDIA:

1. The NFHS has 42 indicators related to child's health and nutrition (there is one indicator on school enrolment which falls outside the scope of this analysis).
2. Indicators fall into nine categories and each of these can be divided into outcomes and inputs. For example, neonatal, infant and under-5 mortality rates can be thought of as outcomes.
3. Similarly, all the nutrition indicators — stunting, wastage, excess wastage, underweight and overweight — as well as the prevalence of diarrhoea, acute respiratory illness (ARI) and anaemia can also be classified as outcomes.
4. In contrast, the post-natal care indicators, the provision of vaccinations and Vitamin A, and the extent and nature of feeding for the child can be classified as inputs.

Child Wasting

1. It reflects acute undernutrition and refers to children having low weight for their height.
2. India has always had a high level of child wasting.
3. Instead of reducing it, Telangana, Kerala, Bihar, Assam and Jammu-Kashmir witnessed an increase and Maharashtra and West Bengal have been stagnant.

Child Stunting

1. **It reflects chronic undernutrition, and refers to the percentage of children who have low height for their age. It is likely to have long-lasting adverse effects on the cognitive and physical development of**

a child.

2. **Telangana, Gujarat, Kerala, Maharashtra, and West Bengal saw increased levels of child stunting.**
3. **The reversals in child stunting are “hugely troubling” as normally, stunting levels do not increase because all the things that affect child growth tend to improve as stable democracies and economies move ahead.**

Share of Children Underweight:

1. **Gujarat, Maharashtra, West Bengal, Telangana, Assam and Kerala have seen an increase.**

Child Mortality Rate:

2. **Infant Mortality Rate (the number of deaths per 1000 live births for children under the age of 1) and Under 5 Mortality Rate data is mostly stagnant.**
3. **Between NFHS-3 (2005-05) and NFHS-4, there was progress on mortality reduction but NFHS-5 and NFHS-4 are about five years apart still there is very little progress in many states.**
4. **In Maharashtra, the under-5 mortality rate is basically the same in NFHS-4 and in Bihar, it reduced by just 3% over five years.**
5. **Over 60% of child mortality is explained by child malnutrition, which is the central problem and needs to be addressed.**

ANALYSIS:

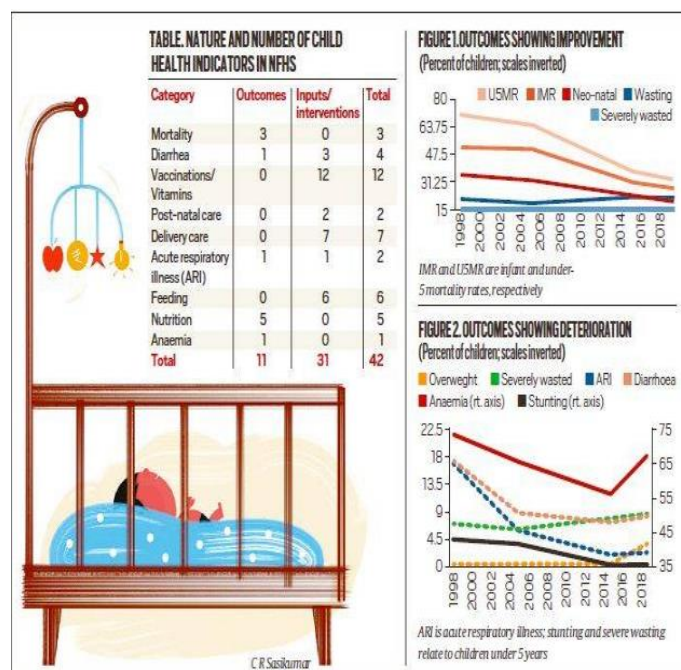
1. India continues to be successful in preventing child deaths, but the health and nutrition of the surviving, living child has deteriorated.
2. India continued to make progress in preventing child-related deaths (neonatal, infants and under-5). The pace of improvement in child mortality slowed down relative to the previous 10 years.
3. Several of the 22 states and UTs, showed an increase in childhood immunisation.
4. There has been a drop in neonatal mortality in 15 states, a decline in infant mortality rates in 18 states and an increase in the

female population (per 1,000 males) in 17 states.

5. Fertility rate decline and increase in contraceptive use were registered in almost all the states surveyed showing trends of population stabilization.
6. There has been an increase in stunting and wasting among children in several states, a rise in obesity in women and children, and an increase in spousal violence.
7. In several other development indicators, the needle has hardly moved since the last NFHS-4.

CONCLUSION:

1. NFHS provides data on child-related inputs. These need to be examined too. The government has made great strides in providing a number of basic needs to households such as toilets, clean cooking fuel, power and bank accounts. Those developments would also serve to aggravate the puzzle of why the health and nutrition of the child in India has deteriorated.
2. In the Economic Survey of 2015-16, perhaps the next big welfare initiative of the government, building on the considerable success of its New Welfarism, should be a mission-mode focus on the well-being of the early child (and of course the mother), from the womb to the first five years, which research shows is critical for realising its long run potential as an individual.



Reclaiming SAARC from the ashes of 2020

GS-2: International relations: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

CONTEXT:

1. The South Asian Association for Regional Cooperation (SAARC), appears to be all but dead in the water.

2. Reviving the SAARC spirit, potential and tool is necessary to deal with China.

About SAARC:

1. India is a founding member of the South Asian Association of Regional Cooperation (SAARC) that was **set up in 1985** as an organization to build a connected and integrated South Asia with the larger aim of promoting the development and progress of all countries in the region.

2. The regional intergovernmental organization and geopolitical union of states in South Asia. Its member states are Afghanistan, Bangladesh, Bhutan, India, the Maldives, Nepal, Pakistan and Sri Lanka.

3. India enjoys excellent bilateral relations with Afghanistan, Bangladesh, Bhutan, Maldives, Nepal and Sri Lanka. As per our **"Neighbourhood First" policy**

SAARC Current Challenges:

1. The shadows over the meets:

a.) Over the past years, **India-Pakistan issues have impacted other meetings of SAARC** as well, making it easier for member countries. Example, New Delhi to refuse to attend the SAARC summit in 2016 in Islamabad.

b.) The events of 2020, **particularly the novel coronavirus pandemic** and China's aggressions at the Line of Actual Control (LAC) shone a new spotlight and shadows for SAARC meeting.

c.) **Engaging with Nepal land claimed** over Indian Territory, despite Mr. K.P. Sharma Oli's decision to change Nepal's map and Constitution to include Indian territories.

2. Pandemic-caused challenges:

a.) Reviving SAARC is crucial to countering the common challenges brought about by the pandemic.

b.) The pandemic's impact on South Asian economies, an estimated 22% fall in revenue for migrant labour and expatriates.

c.) An expected loss of about 10.77 million jobs and \$52.32 billion in GDP in the tourism sector alone from the impact of COVID-19.

Solution:

1. Reviving SAARC and collective to set standards for labour from the region,

2. To promoting a more intra-regional, transnational approach towards tourism, trade and transportation solve the challenge of pandemic.

3. There will be a shift in **priorities towards health security**, food security, and job security, that will also benefit from an "all-of" South Asia approach.

4. Reviving SAARC to deal with China and Pakistan.

China's Factor in SAARC:

1. **SAARC members (minus Bhutan)**, all of whom **are Belt and Road Initiative (BRI)** partners of China will be hard placed to help individually.

2. Challenge from China too big, **both at India's borders and in its neighbourhood**, a **unified South Asian platform remains** India's most potent countermeasure.

3. Only a matter of time before China, it may hold a meeting of all SAARC countries (minus India and Bhutan). for they are all part of the BRI, and even that they will be invited to join RCEP, which India declined.

Solution:

1. India stepped up its health and economic diplomacy in the region, in SAARC meetings. It's may help India to counter China in SAARC.

2. These have been need of bilateral initiatives also, not a combined effort for South Asia. Like Bangladesh.

Objectives of SAARC:

1. To improve the quality of life of the peoples of South Asia
2. To accelerate economic growth and social progress the South Asian region
3. To provide all individuals with the opportunity to live in dignity
4. To strengthen collective self-reliance among the countries of South Asia
5. To promote active collaboration and mutual assistance in the economic, social, cultural, technical and scientific fields
6. To strengthen cooperation with other developing countries
7. To cooperate with similar organizations with similar goals

The world regional trade arrangements'

1. USA lead United States-Mexico-Canada Agreement, or USMCA (North America), the Southern Common Market, or MERCOSUR for its Spanish initials (South America), the European Union (Europe), the African Continental Free Trade Area, or AfCFTA (Africa), the Gulf Cooperation Council, or GCC (Gulf) and Regional Comprehensive Economic Partnership, or RCEP (South East Asia and Australasia including China), India's only regional trading agreement at present is the South Asian Free Trade Area, or SAFTA (with SAARC countries).

Indian contribution towards SAARC:

1. India's initiative of extending its **National Knowledge Network (NKN)** to the countries of South Asia has been extended to Sri Lanka, Bangladesh and Bhutan.
2. India launched a **South Asian Satellite (SAS)** in May 2017 from Sriharikota. and Demonstration terminals **of SAS have** been installed in Bhutan, Maldives, Afghanistan, Nepal, Bangladesh and Sri Lanka.
3. India major contribution in the SAARC framework, India is home **to South Asian University (SAU)**. It was established through an Inter-Governmental Agreement at the 14th SAARC Summit (April 2008).

4. India also hosts the Interim Unit of **SAARC Disaster Management Center (IU)** at the **Gujarat Institute of Disaster Management (GIDM)**, Gandhinagar.

5. India created a **COVID-19 Emergency Fund** with an initial offer of USD 10 million to meet the costs of immediate actions.

6. India has developed a 'SAARC COVID19 **Information Exchange Platform (COINEX)**' platform for use by all SAARC countries.



Source: slide share

Way forward:

1. The SAARC seeks to promote the welfare of the peoples of South Asia, **strengthen collective self-reliance, promote active** collaboration and mutual assistance in various fields, and cooperate with international and regional organizations.
2. All governments in South Asia have responded rapidly to the crisis, but their task is daunting.
3. Governments have imposed social-distancing measures, introduced relief packages to **secure access to food** and provided for delays in payments on taxes, rent, utilities and debt service,
4. Implement the SAARC Conventions relating to **Trafficking in Women & Children and Promotion of Child Welfare** and drug, in South Asia is big achievement of SAARC.

FOOD MATHS

GS 2: Issues relating to poverty and hunger

CONTEXT:

1. Food insecurity is haunting India due to no match between Procurement and distribution and production and consumption and it further got accelerated during the COVID-19 pandemic.
2. Procurement and production increased while on the other hand, distribution and consumption decreased which led to alarming situation of “hunger amidst plenty”.

ISSUES:

1. **COVID-19:** In 2020, On the one hand, the economic recession precipitated by the COVID-19 crisis and national lockdown exposed huge numbers of people to food insecurity and reduced food intake in both quantitative and qualitative terms. Food insecurity continued well after the lockdown.
2. **PROCUREMENT:** Procurement and distribution are driven by independent forces — procurement by minimum support prices (MSPs), distribution by the norms of the National Food Security Act (NFSA).
3. The **imbalance between procurement and distribution** was temporarily hidden in 2020 because additional PDS rations were provided to NFSA cardholders from April to November under the Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY).
4. This led to the release of an extra tonnes of rations, compared with normal levels. After reaching a peak in July 2020 (more than twice the buffer-stock norms), cereal stocks stopped growing. But with the recent discontinuation of PMGKAY, they are all set to grow again in 2021.
5. In the short-term, there is no simple way of closing the gap between procurement and distribution other than expanding distribution.
6. The case for expanding distribution arises not only from the lack of sensible alternatives but also from the need to

consolidate the food security net in this crisis situation.

7. With farmers demanding higher MSPs, procurement is unlikely to decline soon (except in years of bad harvest).
8. **Exports would require massive subsidies**, since MSPs tend to be higher than world prices — almost 50 per cent higher in the case of wheat today. So would the use of excess stocks as cattle feed.
9. Large subsidies for exports or cattle feed (not to speak of ethanol) would be hard to justify. Open-market sales would defeat the purpose of MSPs.
10. **Imbalance between production and consumption:** It reflects the excessive focus of subsidised procurement on rice and wheat. Cereal production is likely to cross 280 million tonnes this year. According to the second India Human Development Survey, average cereal consumption was a little below 12 kg per person per month 2011-12.

WAY AHEAD:

1. **Expanding the Antyodaya programme, updating the population figures used to calculate NFSA coverage, raising monthly cereal rations above the modest norm of 5 kg per person.**
2. **Universalising the PDS in rural areas and urban slums, among others** but in rural areas at NFSA rates (5 kg per person per month) it would require an extra allocation of about 15-20 million tonnes per year — barely half of the current gap between annual procurement and distribution.
3. Raise state-wise NFSA allocations by a fixed percentage (say 20 per cent), and let the states decide how to use the additional quotas within the PDS framework, but it is hard for them — especially the poorer states — to do it without central assistance.
4. Diversification of agriculture, especially towards nutritious crops such as millets, pulses, oilseeds and vegetables, is important not only for better nutrition but also to promote equity and sustainability.
5. This requires more balanced subsidies — for instance, higher MSPs for pulses, combined

with more active procurement and the inclusion of pulses in the PDS.

6. The feasibility of including pulses in the PDS was amply demonstrated in 2020 under the PMGKAY — this could work wonders for farmers, poor people, and the environment.
7. Diversification also calls for other forms of public support (such as marketing arrangements, credit facilities, scientific advice, effective insurance), especially for small farmers and deprived regions.

CONCLUSION:

1. The double imbalance in India's cereal economy (between procurement and distribution as well as between production and consumption) will need more than a short-term fix.
2. The need of the hour is to expand distribution under the PDS. Failing that, the country is heading towards another round of wasteful stock accumulation even as poor people struggle to feed their families.

AFTER THE OFFER LETTER

GS 2: Issues relating to development and management of Social Sector/Services relating to Education

Government policies and interventions for development in various sectors and issues arising out of their design and implementation

CONTEXT:

1. Indian education system is on its way to reconstruct itself. Several initiatives have been taken by the government to attract a large number of foreign scholars to study in Indian universities and enriching our system through ideas and diversity.
2. The National Education Policy-2020 (NEP-2020), the fourth since Independence, was rolled out in July 2020 and has led to intense discussion on school and higher education.
3. NEP-2020 aims to improve the quality of higher education. For the first time, internationalisation of higher education has been highlighted as an objective.

INTERNATIONALISATION:

1. NEP 2020 aims to invite the top 100 World Class Universities to open international branch campuses (IBCs) in India.
2. The underlying assumption is to raise the standard of research and teaching to international levels and slow down the out-bound mobility of Indian students.
3. Existing research and academic collaborations between foreign and Indian institutions would facilitate the entry of IBCs in India.
4. Internationalisation of higher education in India has a pre-history. India has an inspirational history of Nalanda, Takshashila and Vikramashila that served as the melting pot of scholars from across the world.
5. Many top foreign universities collaborate with Indian higher education institutions such as IITs and central universities for research and knowledge transfer.
6. The collaboration has been strengthened by government's schemes such as Global Initiative for Academic Networks (GIAN) and Scheme for Promotion of Academic and Research Collaboration (SPARC).

Global Initiative for Academic Networks (GIAN) IN HIGHER EDUCATION :

- Aimed at tapping the talent pool of scientists and entrepreneurs internationally to encourage their engagement with the institutes of Higher Education in India so as to augment the country's existing academic resources, accelerate the pace of quality reform, and elevate India's scientific and technological capacity to global excellence.
- GIAN is envisaged to catalyse higher education institutions in the country, and that it will initially include all IITs, IIMs, Central Universities, IISc Bangalore, IISERs, NITs and IIITs subsequently cover good State Universities where the spinoff is vast.

SPARC:

- The Ministry of Human Resource Development has launched the web portal of the Scheme "Scheme for Promotion of Academic and Research Collaboration (SPARC)".
- Indian Institute of Technology, Kharagpur is the National Coordinating Institute to

implement the SPARC programme.

- SPARC aims at improving the research ecosystem of India's higher educational institutions by facilitating academic and research collaborations between Indian institutions and the best institutions in the world from 28 selected nations to jointly solve problems of national and international relevance in the first phase.

EXPLORE THE POTENTIAL OF THE POLICY OF BRANCH CAMPUSES AND GAUGE THE MOOD OF TOP UNIVERSITIES' INTEREST IN INDIA

1. Top foreign universities are willing to respond positively provided there is sufficient clarity in areas essential for operationalisation of branch campuses in India.
2. Such universities are not looking forward to state sponsored infrastructure of the kind that the Dubai Knowledge Hub has offered — ready to move in campus, office space, and other facilities.
3. These campuses are driven by the desire to accumulate profit in the manner of business enterprises.
4. India will have to allow IBCs to repatriate income. The outflow of the money may not necessarily be 100 per cent of what these universities earn in India, but it will have to be a significant amount.
5. Compared to the science and business-oriented courses, foreign institutions demand more autonomy in framing and changing curriculum, daily functioning of the institution, the freedom to say no to industries, and even in the manner the institution is branded.

CHALLENGES:

1. The biggest challenge would be the inclination of top universities to establish a campus in India.
2. Not many such universities have such policies in place. At the same time, many universities are yearning to turn truly global and hold institutional mobility as a prerequisite.
3. A key issue in the internationalisation of higher education is the preference for subjects and the areas of research considered rewarding.

4. Social sciences and humanities do not generally figure in the imagination of decision makers — they are not seen as profitable ventures.

WAY AHEAD:

1. The international standards maintained by the IBCs would be attractive enough for international students to explore and experience Indian education and culture.
2. **Taking measures to allow foreign universities to set up campuses in India to increase inflow of foreign funding in India's Higher Education system and to reduce "Brain Drain" from India.**
3. Foreign universities expect to be treated on par with Indian institutions in matters of government funding and scholarships.
4. In return, they are willing to implement the Indian policy of social inclusion in higher education in their IBCs.
5. Enhancing investment in higher education, especially in research and development, is urgently required to raise the standard of higher education in India.

CONCLUSION:

1. A related aspect of internationalisation of higher education is India's keen interest on increasing the inflow of foreign students.
2. This will give exposure to multiple cultures, subjects and pedagogies as deemed to be an asset and part of cultural capital.
3. India is no doubt a potential destination for such initiatives although it must be admitted that it is not happening on a large scale.
4. The establishment of IBCs in India would get well with the Indian quest for the in-bound mobility of students and scholars.

NECESSARY, NOT ESSENTIAL

GS 2: Government policies and interventions for development in various sectors and issues arising out of their design and implementation

Issues and challenges pertaining to the federal structure

CONTEXT:

1. Times change and economies evolve. One can't hang on policies simply because of a historical legacy. Due to inclusion of more and more items in the essential commodity schedule led to the progressive tightening of the Essential Commodities Act (ECA) 1955.
2. This Government intervention often distorted agricultural trade while being totally ineffective in curbing inflation.

BACKGROUND:

1. Through the Essential Commodities Act (ECA) 1955, government could control over "essential" commodities, "essential" being defined as necessary and indispensable.
2. Act was used to curb inflation by allowing the Centre to enable control by state governments of trade in a wide variety of commodities.
3. Accordingly, there was first an ordinance and then an Act in 1946, the Essential Supplies (Temporary Powers) Act. The preamble and title indicated this was meant to be temporary from the commencement of the Constitution to 1955. Entry 33 in the Concurrent List was amended so that the ECA permanently entered the statute books.
4. Meanwhile, under Article 269, the Union government had powers to enact laws for items on the State List, as if they were on the Concurrent List.

ESSENTIAL VS NON-ESSENTIAL:

1. In 1973, a Planning Commission "Committee on Essential Commodities and Articles of Mass Consumption" concluded that the following were essential items — cereals, pulses, sugar, gur and khandsari; edible oils and vanaspati; milk, eggs and

fish; common clothing; standard footwear; kerosene oil and domestic fuels; common drugs and medicines; bicycles, bicycle tyres and tubes; matches, dry cells and hurricane lanterns; soaps and detergents; textbooks and stationery.

2. In the urban sector the requirement would be to make available one or two common types of footwear — called "Janta" shoes or chappals — at reasonable prices.
3. The distribution of "common clothing, standard footwear and soaps and detergents may be entrusted to the National Cooperative Consumers Federation".
4. Over time, in addition to those listed by Planning Commission, the essential products list included aluminium, art silk textiles, cement, cinema carbon, coarse grains, coconut husks, coir retting, cold storages, collieries, copper, cotton, drugs, dry batteries, electrical appliances, electrical cables and wires, ethyl alcohol, fertilisers, food grains, fruit, furnace oil, electric lamps, diesel oil, household electrical appliances, cars, maize, insecticides, iron and steel, jute and jute textiles, kerosene, linoleum, LPG, lubricating oils and grease, meat, molasses, mustard oil, newsprint, oil pressure stoves, paper, paraffin wax, petroleum products, plants, fruits and seeds, pulses and edible oils, groundnut oil, rice, salt, sugar and sugarcane, synthetic rubber, tea, textiles, tractors, two-wheelers, tyres and tubes, vegetable oil, wheat.
5. The ECA has a schedule (Section 2) of what is "essential" and if an item is in that schedule, it is axiomatically "essential".
6. But if an item is not in the schedule, under that same Section 2, when circumstances warrant, it can be put back on the schedule, sometimes for a limited period of six months.

ISSUE-BLACK MARKETING:

1. It is highly centralized law and infringe upon the States' powers, as they are not be able to regulate let say the menace of hoarding, black marketing etc.
2. Offences were made non-bailable and there were special courts.
3. There were Essential Commodities (Special Provisions) Act of 1981 or the 1980 Prevention of Black Marketing and

Maintenance of Supplies of Essential Commodities Act.

4. Hoarding has a negative nuance attached to it, though hoarders often perform a useful function of reducing price volatility.
5. In contrast, black marketing has a uniformly negative nuance. But black markets exist only when there is a shortage.

GOVERNMENT INTERVENTION- EXAMPLE:

1. Footwear may be essential, in the sense of being indispensable. That doesn't necessarily mean the government should "control the production, supply and distribution of, and trade and commerce" in footwear.
2. All previous included essential items in the Act were war-related shortages, there is no call for the government to intervene in the footwear market.
3. In fact, footwear subsequent shortage was created through industrial licencing.
4. Licencing led to entry barriers and shortages. Shortages led to price controls and government intervention.
5. In 1973, the Planning Commission also recognised this: "Assured supply of specific essential commodities and articles of mass consumption at reasonably stable prices will not be a practical proposition if domestic availability of these items does not expand in line with the growing demand." But, it didn't recommend an end to licencing.

CONCLUSION:

1. The ECA 1955 was brought when India was not self-sufficient in food grains production. But now India has become surplus in most agri-commodities, and the amendments in the ECA 1955 is an important step by the government to achieve its target of doubling farmers' income and also for ease of doing business.
2. When delicensing occurred, there was no longer any shortage of manufactured products and several items have progressively been removed from the essential items schedule.
3. Excluding cereals, pulses, oilseeds, edible oils, onions and potatoes from the schedule

made upset the people, but if necessary, they can always be put back, though temporarily.

4. More importantly, there is an issue of de-seasonalising prices of agricultural commodities, often subject to cycles. But the ECA doesn't solve that problem.
5. It is solved by ensuring storage and processing, allowing markets to function, not through limiting them.

OPTIMAL AGRI-FOOD POLICY

GS 2: Hunger and Malnutrition

CONTEXT:

1. India is facing multiple problems both at the production level and consumption level in the field of agriculture and in this scenario **framing an optimal agri-food policy in India is the need of the hour**. The policy should look at issues pertinent to not only the short run but also try to address medium to long-term challenges.

PRODUCTION LEVEL CHALLENGES:

1. UN population projections (2019) indicate that India is likely to be the most populous country by 2027. By 2030, the country is likely to have almost 600 million people living in urban areas, who would need safe food from the hinterlands.
2. Indian agriculture has an average holding size of 1.08 hectare (2015-16 data), while engaging 42 per cent of the country's workforce. Cultivable land and water for agriculture are limited and already under severe pressure.
3. India is unable to protect its natural resource endowments, especially water and soil. Free electricity for pumping groundwater and highly subsidised fertilisers, especially urea, are damaging groundwater levels and its quality, especially in the Green Revolution states of Punjab, Haryana and western Uttar Pradesh. This region is crying for crop diversification, especially reducing the area under rice by almost half, while augmenting farmers' incomes.
4. No policy related to income support policies linked to saving water, soil and air quality ,

resulting in excessive production of these three crops in the country.

5. Sugar and wheat are being produced at prices higher than global prices, and these crops can't be exported unless they are heavily subsidised. Excessive stocks of wheat and rice with the Food Corporation of India (FCI) are putting pressure on the agency's finances.
6. Rice remains globally competitive, but exporting rice leads to exporting massive amounts of precious water — almost 25-30 billion cubic meters, annually. This is the water that is pumped for rice cultivation, enabled by subsidized power supply.
7. The total value of purchases by government agencies at MSP of paddy, wheat, pulses, oilseeds and cotton, was just about 6 percent of the value of the total agriculture and allied sector.
8. In the marketing segment, for most of agri-commodities, costs remain high compared to several other developing countries due to poor logistics, low investments in supply lines and high margins of intermediaries. This segment has been crying for reforms for decades, especially with respect to bringing about efficiency in agri-marketing and lowering transaction costs.

CONSUMPTION LEVEL CHALLENGES:

1. Basic hunger has been more or less conquered, but the biggest challenge for next 10 years is that of malnutrition, especially amongst children. It is a multi-dimensional problem.
2. The public distribution of food, through PDS, that relies on rice and wheat, and that too at more than 90 per cent subsidy over costs of procurement, stocking and distribution, is not helping much. It is already blowing up the finances of FCI, whose borrowings have touched Rs 3 lakh crore.

WAY AHEAD:

1. Farmer's income needs to go up with access to best technologies and best markets in the country, and abroad.
2. On the production front, the best policy is to invest in R&D for agriculture, and its extension from laboratories to farms and

irrigation facilities. It is believed that developing countries should invest at least one per cent of their agri-GDP in agri-R&D and extension.

3. India invests about half. It needs doubling with commensurate accountability of R&D organisations, especially the ICAR and state agriculture universities to deliver.
4. Switch from the highly subsidised input price policy (power, water, fertilisers) and MSP/FRP policy for paddy, wheat and sugarcane, to more income support policies linked to saving water, soil and air quality.
5. From women's education, to immunisation and sanitation, to nutritious food, all have to be addressed on a war footing.
6. There is a need to put the full food subsidy bill in the central budget rather than putting it under the carpet of FCI borrowings.
7. Beneficiaries of subsidised rice and wheat need to be given a choice to opt for cash equivalent to MSP plus 25 per cent. The FCI adds about 40 per cent cost over the MSP while procuring, storing and distributing food. This cash option will save some money to the FM and also lead to supplies of more diversified and nutritious food to the beneficiaries.

CONCLUSION:

1. So, Optimal agri-food policy in India must have at least four touchstones:
 - a) It should be able to produce enough food, feed and fibre for its large population.
 - b) It should do so in a manner that not only protects the environment — soil, water, air, and biodiversity — but achieves higher production with global competitiveness.
 - c) It should enable seamless movement of food from farm to fork, keeping marketing costs low, save on food losses in supply chains and provide safe and fresh food to consumers.
 - d) Consumers should get safe and nutritious food at affordable prices.
2. Setting Agri-Food policies on a demand-driven approach, protecting sustainability and efficiency in production and marketing, and giving consumers more choice for nutritious food at affordable prices are much needed.

Vaccine route to healthy India

GS 2: Issues relating to development and management of Social Sector/Services relating to Health

CONTEXT:

1. India is facing its greatest challenge in averting the second wave of the COVID-19 pandemic but with the world's greatest vaccination drive, there is hope that it will stop the pandemic.
2. Unlike many European and Asian countries which are facing huge shortages of the Covid-19 vaccine, India's AtmaNirbhar policy ensured that two of the vaccines approved by the regulator are being produced in India.

MANAGING THE PROGRAMME:

1. India has already put in place two of the main factors in its vaccination drive: abundant access to vaccines, and a well formulated logistics and supply chain plan.
2. Managing the **logistics, cold chain, and training the required huge workforce** to roll out such a vaccination programme is a gigantic task.
3. The Government of India has issued a comprehensive set of vaccination guidelines that target 300 million people, including health and frontline workers, and people above the age of 50.

PRIORITY FOR THE VULNERABLE:

1. There is a need for the prioritization of people with co-morbidities during vaccination programme. Studies have shown that over 70% of mortalities from Covid-19 occur due to pre-existing non-communicable diseases (NCDs) like diabetes, cardiovascular ailments, and cancers.
2. The relationship between a country's NCDs burden and Covid-19 case fatality is direct. Countries with very high underlying NCDs mortality show high Covid-19 case fatalities, as a comparison across Singapore, India, and Indonesia shows. All this points to the urgency and importance of first vaccinating patients suffering from NCDs.

3. In this task of vaccinating all people with pre-existing NCDs, India faces a serious unknown quantity.
4. Unlike many communicable diseases, many slow-onset NCDs do not have any perceptible symptoms in early stages.

BURDEN OF NCDs:

1. It is estimated that although India has 30 million diagnosed diabetes cases, the prevalence rate estimated by the National Diabetes and Diabetic Retinopathy Survey is 11.8% in the adult population.
2. Studies show that undetected hypertension cases may be as high as 26% of the adult population.
3. India has one of the lowest incidences of cancer per 100,000 population, but this is largely due to inadequate early screening and detection.
4. As with most low- and middle-income countries, roughly 40%-50% of the non-communicable disease burden in India remains undiagnosed or undetected until the very late stages of the disease. This leads to high rates of mortality and high out-of-pocket expenses:
5. NCDs are very costly to treat at the advanced stages, and India's Multi-sectoral NCD Action Plan estimates that 47% of all out of-pocket health expenditure is due to NCDs.

AN OPPORTUNITY TO INTEGRATE:

1. As the entire Covid-19 vaccination drive in India will be recorded on the digital CoWin platform, a little bit of integration will enable CoWin to be integrated with the government's Health Management Information System (HMIS) databases, where all the details of newly detected NCDs can be recorded.
2. The National NCD Action Plan already aims to promote continued surveillance and screening surveys to detect undiagnosed NCD cases.

WAY AHEAD:

1. Following the newly amended labour laws, India can create large scale fixed term employment amongst educated rural young people with basic digital training to

undertake the registration and vaccination drive.

2. Large numbers of nursing students, auxiliary nursing mid wife trainees, and retired Army and defence services personnel in every village can also be mobilized for the vaccination drive.
3. Prioritising vaccinations for those with pre-existing non-communicable diseases will keep the Covid- 19 case fatality rate as low as possible.
4. The strategy for Covid-19 vaccination can be dovetailed into a comprehensive screening programme for people aged 50 and over for major NCDs like diabetes, cardio vascular disease (CVD) and even common cancers.
5. This will reveal the undetected cases of hypertension and diabetes. The current operational guidelines for Covid-19 vaccination aim to mobilise all the district collectors, rural frontline health staff from primary health centres and urban civil and sub district hospitals.
6. The vaccination centres have been very meticulously planned to deliver the vaccination efficiently.
7. The Covid-19 vaccination drive offers a nationwide opportunity to screen and update the national database of NCD patients, and an updated database which captures a larger number of patients at the early stages of NCDs will help in demedicalising the care of NCD.
8. Through advocacy and through the newly created health and wellness centres, all registered NCD patients can be provided with advice for self-care, reduction of aggravating risk factors like sugary and salty foods, taking more exercise and reducing harmful alcohol and tobacco use.
9. The continuity of self-care by patients can be monitored on various mobile based applications like the Digital Life care solution developed by Dell with the Ministry of Health, which has been adopted by over 40,000 frontline healthcare professionals. This can easily be integrated with the CoWin platform to capture the newly detected NCD patients.

CONCLUSION:

1. This is a great opportunity to equip all the frontline vaccination staff, including vaccination officers, with glucometers and

blood pressure measurement instruments to screen people for potential co-morbidities such as diabetes and hypertension.

2. The Defeat Non-Communicable Disease Partnership anchored in the United Nations Institute of Training and Research, Geneva, has espoused a similar win-win approach in Rwanda and Myanmar, its two programme countries. A nationwide Covid-19 vaccination drive is the ideal entry point for enrolling all the co-morbid patients below the poverty line in Ayushman Bharat so that their future out of pocket expenses are minimised.
3. A win-win for eliminating Covid-19 and reducing NCD mortalities by one-third in line with Sustainable Development Goal 3.4!

Nourishing the nation

GS 2: Hunger and Malnutrition

CONTEXT:

1. First phase of the NFHS-5 survey was published which shows deteriorating nutrition, dietary deficiency and anaemia indicators, especially among children.
2. Adolescent malnutrition (our future demographic dividend) is as alarming as child malnutrition, and for this there is no clear strategy in place yet.
3. More deterioration in nutrition indicators following the COVID-19 pandemic is feared in the next phase of NFHS-5, primarily on account of loss of livelihoods, reduced food consumption among the poor and disruption of government nutrition programmes.

ISSUES:

1. The current programmes are adequate and effectively target the root causes of malnutrition or if the strategies require change.
2. There is the large dietary deficit among at least 40 per cent of our population of all age groups, brought out repeatedly in a succession of reports this decade — the National Nutrition Monitoring Bureau's Third Repeat Survey (2012), NFHS 4, 2015-16, the NNMB Technical Report Number 27, 2017.

3. Current interventions are not being able to bridge this protein-calorie-micronutrient deficit. The NHHS-4 and NFHS-5 surveys reveal an acute dietary deficit among infants below two years, and considerable stunting and wasting of infants below six months (caused by foetal malnutrition/maternal dietary deficit).
4. There is no national IEC (information, education and communication) programme that reaches targeted households to bring about the required behavioural change regarding some basic but critical facts — for example, about the importance of balanced diets in low-income household budgets, proper maternal, child and adolescent nutrition and healthcare.
5. IEC and behavioural change have been highlighted in all our early Five-Year Plans, but somehow, successive governments have not been able to make it happen.
6. There is an inequitable market conditions that deny affordable and energy-fortified food to children, adolescents and adults in lower-income families.
7. In spite of the mandate of the National Nutrition Policy 1983 and the National Plan of Action on Nutrition 1995, the market has stacks of expensive fortified energy food and beverages for higher income groups, but nothing affordable for low-income groups except non-nutritive junk and no private entrepreneur wants to enter this field.
8. There is a direct correlation between the high incidence of underweight, stunting and wasting among children, low body mass index and stunting among adolescents, and the lack of low-cost fortified energy food in the market.

WHAT TO DO?

1. There is a need for higher budgetary allocations for healthcare, ICDS and monitoring systems.
2. In the Indian context, it becomes the responsibility of the government/civil society to first provide information and awareness to the community about malnutrition and its causes, and then implement programmes to address them.
3. The government could start showing its seriousness by examining the current nutrition-related programmes, and

analyzing why they are not able to reduce malnutrition faster.

4. There should be different norms and more intensive interventions within the ICDS for these chronically malnourished pockets with the poorest indicators.
5. There is a need to know if the National Nutrition Policy 1993 is still operational. If it is, then there is an urgent need to update it, and prioritise interventions in accordance with the latest surveys and research findings. If not, it seems that we are attempting to address this invisible scourge without a policy framework or plan of action.
6. Unless maternal/infant dietary deficit is addressed, rapid improvement can't be seen in our nutritional indicators. This is a serious problem which needs to be acknowledged and prioritised in the public health/public policy agendas.
7. There is a need to produce nutritive fortified energy food for children.

CONCLUSION:

1. Raising the diet of people from subsistence level to higher levels of nourishment is the only way to improve the nutritional indicators of population — amongst children, adolescents and adults.
2. The government must show its seriousness and start addressing this issue urgently through new ideas and innovations.

India's UNSC opportunity

GS 2: Important International Institutions , Global Groupings

CONTEXT:

- Recently, India joins United Nations Security Council (UNSC) as non-permanent member for the third time since the end of the Cold War, earlier it became the non-permanent member of UNSC in 1991-92 and 2011-12.
- Since then a lot of changes has occurred in India and its interests along with its global partners.

Background

- India's attitude change from reactive to proactive makes its stance for permanent seat at UNSC more purposeful and pragmatic, which meant for integrate with UNSC in a more productive manner avoid overly ambitious goals.
- During 1991-92, there were many events were happened like disintegration of USSR, end of the Cold War and born of Russia as rival to US.
- China opened its economy for private players but India was facing challenges like economic and political crisis and rejuvenate its foreign policy to cope with the post-Soviet world.

How conditions changed internationally?

- Since its establishment Russia and a rising China want to crack down Western agenda at the UN.
- Although India's own relative position improved in the first decade of the 21st century, due to rapid economic growth.
- China has risen to be a great power and is making expansive claims and trying to redeem them.
- Meanwhile, US and Russia have drifted apart and Russia has moved closer to China.
- The tensions among the US, China and Russia has been reinforced by sharpening disagreements between Washington and its European allies

Significance for India

- It is a chance to resist external imposition of solutions to its manifold problems- especially on the Kashmir question and the nuclear issue.
- There will be enough room for India to carve out a larger role for itself amid renewed great power rivalry.
- The seat at forum will make India's voice more solidified for permanent seat at UNSC.
- It will help India to raise some international issues like Pakistan's sponsored terrorism, illegal trafficking in border areas etc.
- The engagement with peace and security issues at the UNSC will allow India to strengthen its new coalitions such as the

Quad — which brings together Australia, India, Japan and the US.

- India could also use the UNSC tenure to deepen collaboration with its European partners like France, Germany, "Global Britain" (post- BREXIT) in the security arena.
- India can intensify its dialogue with Moscow on all international issues.
- India needs to revitalise its engagement with its traditional partners in the "global south" by articulating their peace and security concerns in the UNSC.
- The UNSC tenure is a good moment for Delhi to intensify India's engagement on peace and security issues in Africa at bilateral, regional and global levels.

Challenges for India

- India is facing China's hostility on borders. Since the end of Cold war era, India want China's cooperation to resolve boundary disputes and expand the areas of bilateral relations. But all efforts are in vain. Now, China could become more aggressive as India now joins the UNSC amid a continuing military standoff between the two armies in the high Himalayas.
- China has repeatedly tried to get the UNSC to focus on India's constitutional changes in Kashmir. On cross-border terrorism, Beijing protects Pakistan from the international pressures.
- On the nuclear front, China continues to block India's membership of the Nuclear Suppliers Group.
- Supporting the sovereignty and survivability of the island states is a crucial political task for India.

Major Concerns for UNSC

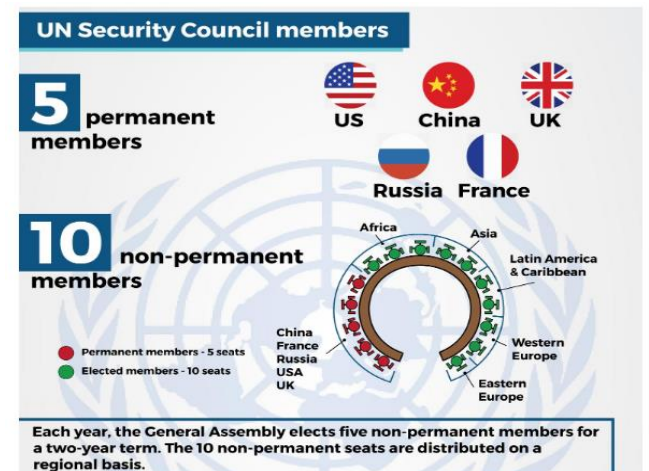
- The West could not resist the temptations for geopolitical overreach at the UN.
- The UNSC is becoming less effective due to the deep divisions among the major powers.
- The UNSC system is concentrated among the five permanent members.
- The veto power of permanent members becomes the matter of contestation.
- Confrontation among members like US and China due to trade issues.

- The UNSC failed to make itself a truly global body by not including the other prominent countries under its arena.
- The numerous small island states around the world face existential challenges from global warming and rising sea levels. They also struggle to exercise control over their large maritime estates.
- The Security Council is not representative of the geopolitical realities of the modern world. Both Africa and Latin America do not have a permanent seat on the Council, while Europe is overrepresented and Asia is underrepresented.
- There is a lack of transparency in the Council's working methods. This means how the Council goes about making decisions and the lack of information that they are required to provide to other parts of the UN.
- The "G4" countries have been putting themselves as the most serious candidates for permanent membership in the Council. Brazil, Germany, India and Japan have positioned themselves as leaders within the UN, but have failed to garner enough support to ascend as permanent members.
- Another group, the S-5 (Costa Rica, Jordan, Lichtenstein, Singapore and Switzerland) advocates for more transparency and coordination between the Security Council and the General Assembly and Economic and Social committees. The proposal also included some guidelines on the use of the veto.

Way Forward

- There is a demand to transform this “international” forum into a “supra-national” institution that would actively reshape the domestic structures of different societies.
- The US has to work closely with European allies in the global arena, not all wrinkles can be smoothed over.
- As a tenure as non-permanent members, India along with other countries should work in that way to make UNSC a more efficient and effective international body.
- The UNSC offers room for sustained diplomatic interaction between the major powers, which could minimise tensions and create new opportunities for cooperation.

- The demand of India Brazil, Germany and Japan etc, to expand the UNSC must be addressed.



The dilution of patent working disclosure rules hampers the effectiveness of India's compulsory licensing regime

GS 2- Government policies and interventions for development in various sectors and issues arising out of their design and implementation

GS 3- Indian Economy and issues relating to planning? Inclusive growth and issues arising from it in Public health.

CONTEXT:

1. The central government recently published the Patent (Amendment) Rules, 2020. Amended following a Delhi High Court order on the matter in April 2018.
2. In exchange of a 20year Patent monopoly granted to an inventor, India's patent law imposes a duty on the patentee annually have worked the invention in India.
3. The disclosure is to be made in the Form 27 format as prescribed under the Patent Rules, 2003 to commercially work the invention in India to ensure that its benefits reach the public and Impact on public interest.

SALIENT FEATURES:

- The Centre has streamlined the procedures to annually submit statements to the Patent Office disclosing regarding the working of a patented invention on a commercial scale, giving additional flexibilities to the patentee.
- Patentees would now required to provide 'approximate revenue/value accrue' while authorised agents would be able to submit Form-27 on behalf of patentees, in respect of single or multiple related patents. Also been extended to six months, against the current three months.
- There are also changes with reference Rule 21 on filing of priority documents. If the priority document is available in WIPO's (World Intellectual Property Organisation) digital library, the applicant would not be required to submit the same in the Indian Patent Office.

BACKGROUND:

1. **It is mandatory under the (Indian) Patents Act, 1970 ("Act") for every patentee and every licensee to file a statement as to the extent of commercial working of a granted patent in the Indian Territory.**
2. **Taking note of the issue the Delhi High Court had directed the government to take action for carrying out necessary amendments to Form- 27. Pursuant to the directions of the Delhi High Court, the 2003 Rules have now been amended.**

Advantages of new amendment:

1. **Requirement to provide details of licensees/sub-licensees removed:** the earlier Form 27 was the requirement to provide details of licensees and sub-licensees. This requirement has now been removed. It make more additional flexibilities to the patentee.
2. **No requirement to provide statement on meeting public requirement:** As per the 2003 Rules, a patentee was required to state if the public requirements for the patented invention had been met partly/

adequately/ to the fullest extent at reasonable price. Has been removed by way of the Amended Rules.

3. **. One form for multiple patents:** The Amended Rules have now clarified that a patentee can file one form for multiple patents if all such patents are related patents and approximate revenue/value accrued from a particular patented invention cannot be derived separately from the approximate revenue/value accrued of the related patents.

CHALLENGE IN NEW RULE:

1. This could hamper the effectiveness of India's compulsory licensing regime which depends on full disclosure of patent working information.
2. in turn could hinder access to vital inventions including lifesaving medicines, thereby impacting public health.

World Intellectual Property Organisation (WIPO):

- It was created in 1967 and it is one of the specialized agencies of the United Nations
- **Objective:** To encourage creative activity, to promote the protection of intellectual property throughout the world.
- **Headquarters:** Geneva, Switzerland
- It has currently 191 member states.
- In 1975 India joined WIPO.
- All member states of the UN are entitled, though not obliged, to become members of the specialized agencies like WIPO.
- 188 of UN member states, as well as the Cook Islands, Holy See, and Niue, are members of WIPO.
- Palestine has permanent observer status.

Source: The Hindu

WAY FORWARD:

For the health of the country. The government must reconsider its amendments to the form taking into account the PIL recommendations like **the government to strictly enforce the patent working disclosure rules and take action against the violators** and reamed it to restore as well as strengthen its spirit.

Taking note of farmer welfare, the Kerala way

GS 2- Government policies and interventions for development in various sectors and issues arising out of their design and implementation

CONTEXT:

1. Farmers are writing a new history by representing the unflinching will of a people who consider agriculture as their culture. This farmers' struggle is unique in the history of free India.
2. In some manner, the upsurge by these farmers resembles the 'Occupy Wallstreet Movement' in the United States, in 2011, whose slogan reverberates even today across the world: "We are the 99 percent".

FARM BILLS:

1. The three Farm Bills were passed as an ordinance and while it was passed in Rajya Sabha by voice vote.
 - a) The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Bill, 2020, allows farmers to sell their harvest outside notified APMC mandis without taxes.
 - b) The Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Bill, 2020, facilitates contract farming and direct marketing.
 - c) The Essential Commodities (Amendment) Bill, 2020, deregulates the production, storage, movement and sale of cereals, pulses, edible oils and onion.


CLEARING THEIR STANCE

While the opposition parties have raised several concerns over the passing of the new farm bills, central govt has made some clarification

➤ Procurement at MSP will continue. The MSP for Rabi season will be announced next week

➤ Mandis will not stop functioning. Under the new system, farmers will have the option to sell their produce at other places in addition to the mandis

10,000 farmer producer organizations are being formed throughout the country. These FPOs will work to ensure remunerative pricing for farm produce




WHY ARE FARMERS UPSET WITH THE FARM BILLS?

1. The Farm Bill allows farmers to directly sell to private companies without relying on the APMC mandis. Farmers fear this could **lead to scrapping of MSP**.
2. Government has removed most agricultural products from Essential Commodities List. Farmers expect this to lead to **price volatility and hoarding**.
3. Effectively, the bills permit private sector investment into farm infrastructure. Farmers are sceptical that large corporates may squeeze out the traditional farmer.

WHY ARE FARMERS WORRIED ABOUT TAX-FREE DEALS OUTSIDE THE APMC?

1. Farmers fear that tax-free private trade in food grains will make these mandis unviable. If volumes shift out of the APMC mandis, government may lose interest in enforcing MSP.
2. In Punjab and Haryana, most government procurement centres are located within the APMC mandis. Farmers want MSP to be made universal; both within mandis and outside mandis.

WHAT'S IN THE BILLS AND WHY THE OPPOSITION

BILL ON AGRI MARKET Farmers' Produce Trade and Commerce (Promotion and Facilitation) Bill, 2020		
Provisions <ul style="list-style-type: none"> ➤ To create an ecosystem where farmers and traders enjoy the freedom to sell and purchase farm produce outside registered 'mandis' under states' APMCs ➤ To promote barrier-free inter-state and intra-state trade of farmers' produce ➤ To reduce marketing/transportation costs and help farmers in getting better prices ➤ To provide a facilitative framework for electronic trading 	Opposition <ul style="list-style-type: none"> ➤ States will lose revenue as they won't be able to collect 'mandi fees' if farmers sell their produce outside registered APMC markets ➤ What happens to 'commission agents' in states if entire farm trade moves out of 'mandis'? ➤ It may eventually end the MSP-based procurement system ➤ Electronic trading like in e-NAM uses physical 'mandi' structure. What will happen to e-NAM if 'mandis' are destroyed in absence of trading? 	
BILL ON CONTRACT FARMING The Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Bill, 2020	Provisions <ul style="list-style-type: none"> ➤ Farmers can enter into a contract with agri-business firms, processors, wholesalers, exporters or large retailers for sale of future farming produce at a pre-agreed price ➤ Marginal and small farmers, with land less than five hectares, to gain via aggregation and contract (Marginal and small farmers account for 86% of total farmers in India) ➤ To transfer the risk of market unpredictability from farmers to sponsors ➤ To enable farmers to access modern tech and get better inputs ➤ To reduce cost of 	Opposition <ul style="list-style-type: none"> ➤ Farmers can engage in direct marketing by eliminating intermediaries for full price realisation ➤ Effective dispute resolution mechanism with redressal timelines ➤ Farmers in contract farming arrangements will be the weaker players in terms of their ability to negotiate what they need ➤ The 'sponsors' may not like to deal with a multitude of small and marginal farmers ➤ Being big pvt cos, exporters, wholesalers and processors, the sponsors will have edge in disputes
BILL RELATING TO COMMODITIES The Essential Commodities (Amendment) Bill, 2020	Provisions <ul style="list-style-type: none"> ➤ To remove commodities like cereals, pulses, oilseeds, onion and potatoes from the list of essential commodities. It will do away with the imposition of stockholding limits on such items except under "extraordinary circumstances" like war ➤ This provision will attract private sector/FDI into farm sector as it will remove fears 	Opposition <ul style="list-style-type: none"> ➤ Price limits set for "extraordinary circumstances" are so high that they are likely to be never triggered ➤ Big cos will have freedom to stock commodities — it means they will dictate terms to farmers, which may lead to less prices for the cultivators ➤ Recent decision on export ban on onion creates doubt on its implementation

WHY ARE SOME STATE GOVERNMENTS UPSET WITH THE FARM BILL?

1. It is purely economical. For example, Punjab government charges 6% mandi tax (along with a 2.5% fee for handling central procurement).
2. Punjab earns Rs.3,500 crore and Haryana Rs.1,600 crore from these mandi taxes. For other states, mandi tax is less than 1% of revenues while for Punjab and Haryana it is almost 9%.
3. Also, agriculture is a state subject and state governments are not comfortable with the centre diluting their importance.

WILL THE FARM BILL HELP BRING PRIVATE INVESTMENTS INTO AGRICULTURE?

1. With just 7000 APMC markets in India, agricultural marketing largely happens outside the mandi network. Bihar, Kerala and Manipur do not follow APMC system.
2. The facilitation and storage of agri commodities is likely to attract large corporates in the agriculture space.
3. They will invest in farm technology and robotics, apart from post-harvest infrastructure.

KERELA MODEL:

1. There are no Agricultural Produce Market Committees (APMCs) and mandis in Kerala, and the concept of the Minimum Support Price is not prevalent in the State. But it does not mean that the interests of farmers are not taken care of in the State.
2. In fact, Kerala is the State where farmers' rights are being protected by the government itself, and much more effectively than any other Indian State.
3. While the government of India has fixed the procurement rate for rice at ₹18 a kg, the government in Kerala is procuring rice from cultivators at ₹27.48 a kg.
4. In the same manner copra (dried coconut) is also procured at a much higher rate in

WHY ARE PROTESTS VOCIFEROUS ONLY FROM STATES LIKE PUNJAB AND HARYANA?

1. More than 50% of all government procurement of wheat and paddy since 2015 happened in Punjab and Haryana.
2. Nearly, 85% of wheat and paddy grown in Punjab, and 75% in Haryana is bought at MSP rates.
3. Farmers in these States expect prices to fall without MSP. Punjab has invested in the mandi system and infrastructure.
4. Large farmers in Punjab and Haryana double up as commission agents. So, they earn the commission plus the interest on loans given to smaller farmers. These will cease to exist.

Kerala than the price announced by the central government.

5. Kerala is the State where increased basic price is ensured not only for paddy but also vegetables and fruits.
6. Sixteen such items are enlisted by the government where the basic prices (per kg) are guaranteed. For example, tapioca (₹12), banana (₹30), garlic (₹139), pineapple (₹15), tomato (₹8), string beans (₹34), ladies' fingers (₹20), cabbage (₹11) and potato (₹20).
7. Apart from crop insurance, paddy cultivators will get the royalty in Kerala at the rate of ₹2,000 per hectare. They have a pension too, which is something unique in India.
8. In 2006, when farmers' suicides became the order of the day across the country, the then state government introduced a debt relief commission that extended a helping hand to the farmers, thereby saving them.

CONCLUSION:

1. This is the reality of the farm Bills. Though they claim 'to enable' the protection and the empowerment of farmers, the truth is just the opposite.
2. The purpose of these laws is the enabling of the corporatisation of Indian agriculture and the introduction of contract farming.
3. The annadatas have been able to foresee the evil in the three farm laws that would eventually find them at the mercy of corporate profit mongers.
4. They know that these laws would ruin the backbone of the agricultural economy and badly affect the food security of India.
5. The farmers are in the struggle in order to prevent such a calamity from happening. It is high time that the Prime Minister and his government understand the patriotic and selfless role being played by the food providers of the country and the genuine nature and cause of their struggle.

NEW INDIA, NEW DALIT

GS 2: Mechanisms, laws, institutions, and Bodies constituted for the protection and betterment of vulnerable sections

Government policies and interventions for development in various sectors and issues arising out of their design and implementation

GS 3: Inclusive growth and issues arising from it

CONTEXT:

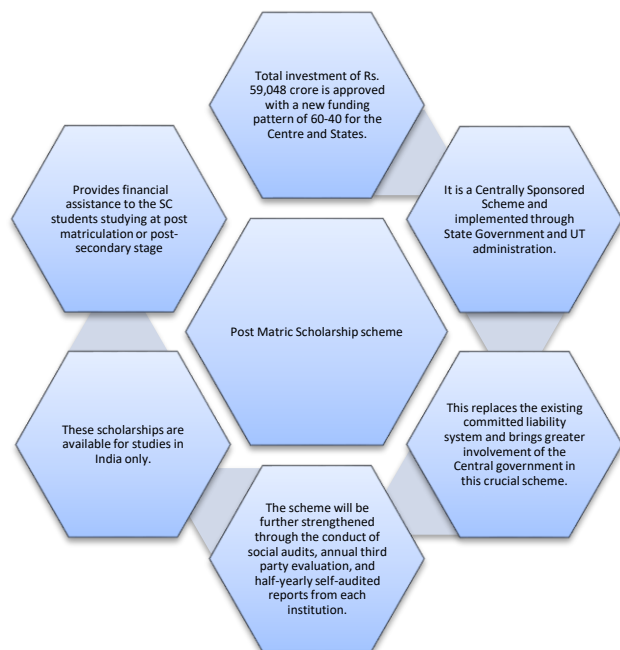
1. The Cabinet Committee on Economic Affairs has approved an outlay of Rs 59,000 crore to the post-matric scholarship scheme for students from Scheduled Caste (SC) groups.

ABOUT:

1. Post Matric Scholarship scheme aims to provide financial assistance to the Scheduled Caste students studying at post matriculation or post-secondary stage.
2. It aims to benefit more than 4 Crore SC students in the next 5 years so that they can successfully complete their higher education.
3. It is a Centrally Sponsored scheme (CSS) with a funding pattern of 60-40 for the Centre and States.
4. The scheme will be run on an online platform with cyber security measures that would assure transparency, accountability, efficiency, and timely delivery of the assistance without any delays.

BACKGROUND:

1. The post-Matric scholarship scheme for Scheduled Caste students has been in existence since 1944 and has helped students to pursue any post-Matric course starting from class 11 onwards, with the government meeting the cost of education.



BENEFITS TO SCs:

1. The scheme will maximise the gross enrolment ratio of SC students in higher education as education provides them avenues for upward mobility and more importantly, dignity and recognition.
2. The next generation of Dalits is aspiring precisely for this esteem and social civility.
3. The central government is also committed to the development of villages, where people from Dalit communities constitute a significant chunk of the population.
 - In 2019, the Union government started a programme to ensure the focused implementation of welfare schemes from both the central and the state governments to boost infrastructure and reduce socio-economic disparities in 27,000 such villages.

CHALLENGES FACED BY SOCIALLY-MARGINALISED COMMUNITIES:

1. In India, Dalit youth are facing challenges in pursuing higher education due to financial constraints and the uninspired attitude of state governments.
2. Many states did not pay scholarship on time or use the fund for some other purposes resulting in increasing dropouts from SC students due to lack of scholarship.

3. Dalits have remained at the bottom of the socio-economic pyramid over the last 70 years.
4. On the parameters of health and education, nothing substantial has been achieved until now.
5. Expressing in the name of caste and token representation has caused insurmountable damage to the Dalit psyche.

STEPS TAKEN BY THE GOVERNMENT:

1. In the last six years, schemes like Stand-up India and MUDRA have greatly benefitted young people from the community.
2. Dalit Indian Chambers of Commerce and Industry (DICCI) have also been closely working with the government to generate opportunities for entrepreneurship and self-employment for Dalit youth. “Be Job Givers and not Job Seekers”, is a leitmotif for the government.
3. Schemes like a venture capital fund for SCs and a credit enhancement guarantee plan have already benefited countless youngsters.
4. Efforts are also being aimed at creating structures to handhold those youth who want to become entrepreneurs through a network of incubation centres and an enabling financial assistance architecture.
5. **EXAMPLE:** The youngest woman MLA from Gujarat, Malti Maheshwari, and numerous other leaders, are now making themselves heard and are appropriately voicing the concerns and aspirations of Dalits across the country.

CONCLUSION:

1. The vision of New India will be complemented by the New Dalit. Representation, not mere tokenism, is what the New Dalit wants and the Congress never went beyond tokenism.
2. With sustained economic empowerment, political representation and educational opportunities like the boost in the post-matric scholarship for SC students, Dalits are increasingly becoming an inseparable part of the New India story that is deeply inclusive in its foundation, consultative in its approach and focused on making the country a leading light in the new world order.

3. With this new scheme, the government is committed to giving a big push and further impetus to this effort so that the GER (higher education) would reach national standards within the five-year period.
4. It will also ensure greater educational access to youngsters belonging to SC communities.

Clear connection

GS 2- Government policies and interventions for development in various sectors and issues arising out of their design and implementation

CONTEXT:

1. From 1 January 2021, India has ended Interconnection Usage Charges (IUC) regime.
2. Under IUC regime, one telecom operator paid a charge to another on whose network a subscriber's voice call was completed.
3. This new change has created a new era in which these companies can focus on upgrading their networks and service.

WHAT IS INTERCONNECTION?

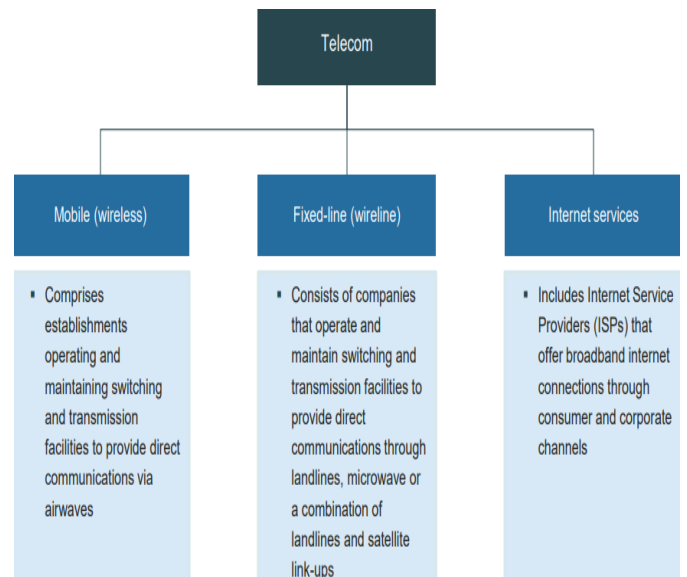
1. The term 'interconnection' refers to an arrangement under which telecom players connect their equipment, networks and services with other Telecom Services Providers.
2. The regulator, Telecom Regulatory Authority of India (TRAI), addresses the various issues related to interconnection arrangements. It also regulates the IUC.

INTERCONNECTION USAGE CHARGE (IUC):

1. IUC is a charge payable by a service provider, whose subscriber originates the call, to the service provider in whose network the call terminates.
2. In a calling-party pays regime (CPP), if you originate a call, you pay your access provider, who in turn pays termination charges to the network you placed the call.
3. This is paid to cover the network usage costs as the operator, on whose network the

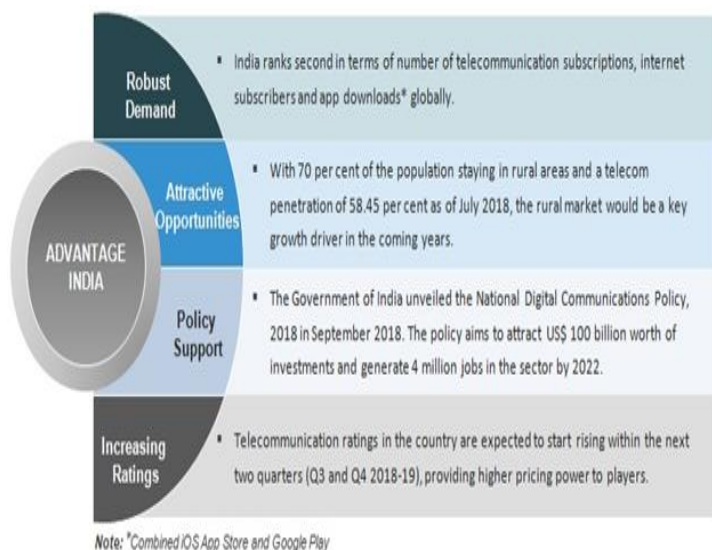
call terminates, carries the call on its network to the customers. This requires infrastructure investment.

4. Thus, IUC ensures operators make appropriate investments to carry voice calls without terminations.



TELECOM REGULATORY AUTHORITY OF INDIA (TRAI):

1. It is a statutory body set up by the Government of India under section 3 of the Telecom Regulatory Authority of India Act, 1997. It is the regulator of the telecommunications sector in India.
2. It consists of a Chairperson and not more than two full-time members and not more than two part-time members.
3. The TRAI Act was amended by an ordinance, effective from 24 January 2000, establishing a Telecom Disputes Settlement and Appellate Tribunal (TDSAT) to take over the adjudicatory and disputes functions from TRAI.



EXPANSION OF NETWORKS:

1. India's high density telecom market is poised for further growth as it awaits expansion through 5G and Internet-connected devices.
2. Yet, as the Economic Survey of 2019-20 pointed out, intense competition has reduced the number of private players.
3. Public sector operators BSNL and MTNL still face a challenge and their future must be clarified early, with efforts to improve their technological capabilities and service levels.
4. A parallel trend has been the rise in 4G subscribers from 196.9 million in September 2017 to 517.5 million out of a total wireless subscriber base of 1,165.46 million in June 2019.
5. The end of the IUC should spur an expansion of high-capacity networks, going beyond 2G and 3G that some telcos continue to use. The removal of interconnection charges was opposed by them just a year ago.
6. TRAI has stressed the importance of consumer welfare through adequate choice, affordable tariff and quality service.
7. It is important to tread cautiously on claims made on behalf of the sector, that higher tariffs alone can ensure the health of telecoms.

WAY FORWARD:

1. India is a mass market for voice and data services that fuel the digital economy.
2. Badly priced spectrum could lead to auction failures and lack of genuine competition is bound to hamper the growth of the next big wave of telecoms, of which the 5G piece is critical for new services.
3. On the consumer side, helping more people migrate to 4G services quickly through affordable handsets will help telcos put their infrastructure to better use.
4. Having got the interconnection charges out

SHIFTING THE FOCUS:

1. Initially, the plan to end IUC regime was delayed by a year by TRAI due to concerns that not all operators were ready. Also, the fact that the shift to more efficient 4G networks and compatible subscriber handsets was slower than anticipated.
2. With the new change, there is a need to monitor call termination data and make IUC payments no longer exists.
3. A spectrum auction is also scheduled this year. Now, the focus should shift to giving the users a better deal — as reliable call quality and competitive tariffs.
4. For the subscriber, other than those who had to pay higher access tariffs on one wireless network due to the IUC system, the latest measure may not carry a significant impact, since providers sold unlimited call packs even earlier.
5. One operator, Jio, had a higher proportion of outgoing calls to other wireless operators, thus having to pay significant net interconnection charges, which was six paise per minute since 2017.
6. That imbalance has reduced, and TRAI has now introduced an arrangement called bill and keep, which does away with the IUC.

of the way, telcos should focus on service quality.

An ill-conceived, overbroad and vague ordinance

GS 2- Government policies and interventions for development in various sectors and issues arising out of their design and implementation

CONTEXT:

1. Recently, Uttar Pradesh government had passed an ordinance in the name “The Uttar Pradesh Prohibition of Unlawful Conversion of Religion Ordinance” which is commonly called the anti-love jihad ordinance. It is considered as unconstitutional and violates key rights.

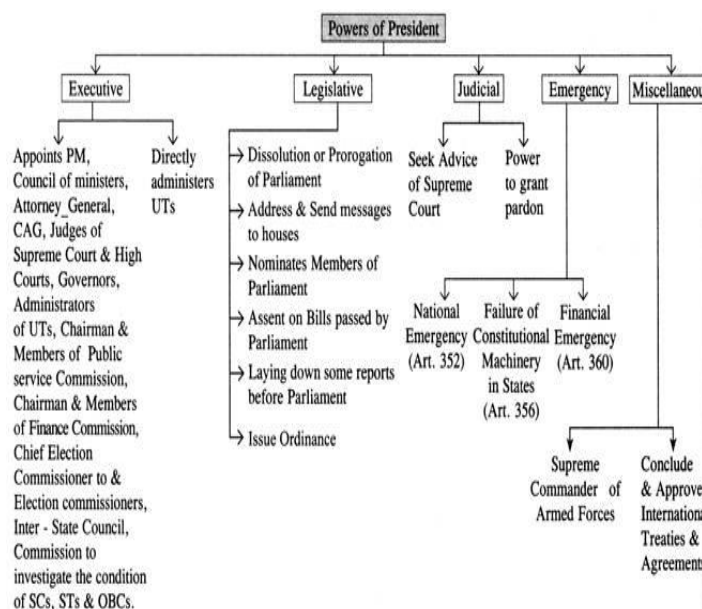
WHAT IS AN ORDINANCE?

1. Ordinances are laws that are promulgated by the President of India on the recommendation of the Union Cabinet, which will have the same effect as an Act of Parliament. They can only be issued when Parliament is not in session.
2. They enable the Indian government to take immediate legislative action.
3. Ordinances cease to operate either if Parliament does not approve of them within six weeks of reassembly, or if disapproving resolutions are passed by both Houses.
4. It is also compulsory for a session of Parliament to be held within six months. A total of 679 ordinances have been issued from 1950-2014.
5. Article 213 (1) of the Constitution of India provides-

“If at any time, except when the Legislative Assembly of a State is in session, or where there is a Legislative Council in a State, except when both Houses of the Legislature are in session, the Governor is satisfied that circumstances exist which render it necessary for him to take immediate action, he may promulgate such Ordinances as the circumstances appear to him to require: ...”

6. Three pre-conditions to be satisfied before the Governor promulgates an ordinance-

- a. State Legislature should not be in session
- b. Circumstances should exist for promulgating an ordinance and;
- c. Those circumstances must warrant immediate action.



CIRCUMSTANCES, URGENCY:

1. There is no established practice requiring the Governor (or the President under Article 123 of the Constitution) to state the circumstances for immediate action.
2. The Farmer's Produce Trade and Commerce Ordinance merely stated in the preamble what the ordinance provides for, but did not disclose the circumstances and urgency for immediate action.
3. A healthy convention should develop and the preamble to any ordinance should state the immediacy for promulgating it when the Legislature is not in session.
4. This would greatly enhance transparency in legislation, but, more importantly, enable legislators to understand why they are, in a sense, by-passed and why a debate and discussion in the Legislature could not be awaited.

5. The reason for immediate action is, as yet, not justiciable and it is unlikely that any court will get involved into this arena.
6. SC has held that the existence of circumstances leading to the satisfaction of the Governor can be inquired into.
7. However, the court will not delve into the sufficiency of circumstances. Therefore, it is important to disclose the circumstances and reason for immediate action in the first instance rather than require people to go to court to find out.

THE U.P. ORDINANCE & FLAWS:

1. Anti-love jihad ordinance provides for unlawful conversion from one religion to another by coercion, misrepresentation and so on “or by marriage”.
2. It then proceeds to record the satisfaction of the Governor of the existence of circumstances and the necessity for “him/her to take immediate action”.
3. If one fraudulent or coercive inter-faith marriage is taking place, the police can certainly prevent it, as they supposedly do in child marriages. An ordinance is not required for it.
4. However, if more than one such fraudulent or coercive inter-faith marriage is expected to take place, the State government would have information of mass conversions for the purpose of marriage.
5. In the normal course, it is unlikely that these mass conversions would be in secret and almost simultaneous.
6. A more realistic expectation would be specific information of some or many unwilling religious conversions likely to take place.
7. Surely, these can also be prevented by an alert police force by invoking existing legal provisions. Assuming a somewhat unbelievable scenario does exist, how does one justify immediate action for promulgating an ordinance?

RIGHT TO PRIVACY:

1. The Constitution of India encompasses Right to Privacy under Article 21, which is a requisite of right to life and personal liberty. Stressing on the term ‘privacy’, it is a dynamic concept which was needed to be explained.
2. The scope of Article 21 is multi-dimensional under the Indian Constitution. Law of torts, Criminal Laws as well as Property Laws also recognize right to privacy.
3. Privacy is something that deals with individual privacy and also which was needed to be protected earlier before the passing of a landmark case, i.e., K.S. Puttaswamy v. Union of India in 2017 as it was, previously, not considered a fundamental right under the Indian Constitution.
4. However, our Indian judiciary has, at present, carved out a distinctive precinct regarding privacy and an upshot of that is Right to Privacy, it is, now, recognized as a fundamental right, which is intrinsic under Article 21.
5. Right to privacy is a requisite of right to life and personal liberty under Article 21 of the Indian Constitution.
6. Right to privacy is not an absolute right, it may be subject to certain reasonable restrictions for prevention of crime, public disorder and protection of others.

CONCLUSION:

1. The ordinance is prone to abuse and we have seen its consequences — of intimidation, bullying, arbitrary arrests and the loss of a foetus.
2. It is ill-conceived, overbroad and vague in many respects.
3. It defames all inter-faith marriages and places unreasonable obstacles on consenting adults in exercising their personal choice of a partner.
4. It also mocks the right to privacy and

violates the right to life, liberty and dignity. In short, it is unconstitutional.

Over-reliance on digital technology has worsen financial exclusion

GS 3: Economy – Inclusive growth

CONTEXT:

1. **Financial exclusion** refers to individuals and populations without access to common financial services. These can include savings accounts, loans, cashless transactions, credit, and other traditional banking services.
2. People are excluded because of their socio-economic status and because they can't meet the requirements of a formal banking institution. This poses a huge challenge to populations, as whole groups of people are unable to participate in the financial sector.
3. Improvements in internet banking made availability of a buffet of products to consumers. In rural India, **an over-reliance on digital technology alone has widened the distance between the rights holder and their entitlements. This is exemplified in the pursuit of financial inclusion.**

INDIA GO DIGITAL:

1. The government has launched many flagship schemes to promote financial inclusion and provide financial security to empower the poor and unbanked. Schemes include the PradhanMantri Mudra Yojana, Stand-Up India Scheme, PradhanMantriJeevanJyotiBimaYojana, PradhanMantriSurakshaBimaYojana, and Atal Pension Yojana.
2. The Direct Benefits Transfer (DBT) initiative is a technology aimed to improve financial inclusion. DBT has been operational since 2011, it has become synonymous with the Aadhaar Payments Bridge Systems (APBS) since 2015.
3. Various government programmes such as maternity entitlements, student scholarships, wages for MGNREGA workers fall under the DBT initiative where money is

transferred to the bank accounts of the respective beneficiaries.

4. The most common barriers to the digital financial inclusion include the non-availability of suitable financial products, lack of skills among the stakeholders to use digital services, infrastructural issues, teething problems between various systems

CHALLENGES:

1. Due to digital programme of India and wider use of internet, beneficiaries face many hurdles in accessing their money under the DBT initiative. These are referred to as "last mile challenges".
2. Customer Service Points (CSP) and Banking Correspondents (BC) were promoted. These are private individuals who offer banking services through the Aadhaar Enabled Payment Systems (AePS).
 - Subject to network connectivity and electricity, beneficiaries can perform basic banking transactions such as small deposits and withdrawals at these kiosks.
3. There are some merits of online payments, the process of transition from older systems and the APBS technology itself needs more scrutiny.
4. Less digital awareness among workers like where their wages have been credited and what to do when their payments get rejected, often due to technical reasons such as incorrect account numbers and incorrect Aadhaar mapping with bank accounts.
 - Some state governments paid attention in resolving rejected payments for MGNREGA, the lack of any accountability for APBS and AePS and absence of grievance redressal.
5. More importantly, the workers/beneficiaries have rarely been consulted regarding their preferred mode of transacting.
6. Lack of adequate checks and balances, absence of any accountability framework for payment intermediaries are other major challenges.
7. This has created new forms of corruption as has been recently evidenced in the massive scholarship scam in Jharkhand, where many poor students were deprived of their scholarships owing to a nexus of middlemen, government officials, banking

correspondents and others. These exclusions are digitally induced.

8. Rural banks are **short-staffed and tend to get overcrowded**. People had to make multiple visits to the bank for their transaction.
9. CSP/BCs appeared to be a convenient alternative to banks due to their proximity. However, an estimated 40 per cent of them had to make multiple visits to withdraw from CSPs/BCs due to biometric failures.
10. The only way for rural bank users to keep track of their finances is through their bank passbooks. However, more than two-thirds of time workers were denied the facility to update their passbooks at banks. Some workers get charged for transacting at CSPs/BCs which is meant to be free.
11. **Less bank branches in rural India:** Despite hardships of access, most workers preferred to transact at the banks. Branch expansion into rural unbanked locations significantly reduced poverty. With technological advances, the costs of running rural banks also get lowered.

CONCLUSION:

1. **Right to work also includes the right to access your own money in a timely and transparent manner.** These rights must be protected through strengthening grievance redressal processes and setting accountability norms for all payment intermediaries.
2. A technological intervention must have a governance framework in which protection of rights must be fundamental and which provides more choices to the marginalised.
3. For the **success of digital initiatives**, there has to be a multidimensional approach through which existing digital platforms, infrastructure, human resources, and policy frameworks are strengthened.

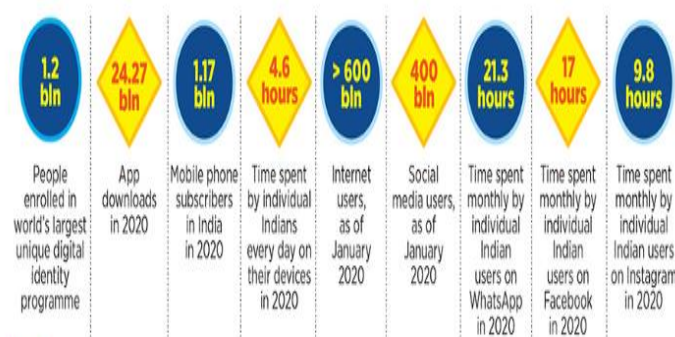
THE WHATSAPP FIX

GS 3: Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges, basics of cyber security

CONTEXT:

1. Earlier in January, WhatsApp announced policy updates, in which a closer integration with Facebook would result in sharing of private user chat data with advertisers.
2. Indians are sharing more personal data online, transacting more through digital platforms, and depending more on internet service providers to go about their daily life than ever before, there need to be checks and balances around data collection and processing practices, in which both technology companies and the state are held accountable.
3. This has made the need for a legislative framework in India to empower users against the misuse of personal information more crucial than ever.

India's Data Economy



SOURCE: McKinsey Global Institute report, 2019; App Annie State of Mobile 2020 Report; DataReportal

BACKGROUND:

1. In November 2014, WhatsApp adopted the Signal protocol for end-to-end encryption after its acquisition by Facebook in February in the same year.
2. Since then, it has grown to be the most popular app for IP messaging and telephony with almost two billion users worldwide, of which 400 million are in India, the largest in any country.

3. WhatsApp's unique blend of text, audio and voice messaging and calling platform with the end-to-end encryption has allowed the company to maintain its pole position.

RECENT POLICY BY WHATSAPP:

1. WhatsApp as a platform has made a virtue out of protecting user privacy and now it is trying to force its updated terms of service (ToS) and privacy policy on users.
2. The policy seeks consent from users to allow the platform to share their data with Facebook and its companies, which means that WhatsApp would share transaction data, mobile device information, IP addresses and other metadata on how users interact with businesses on WhatsApp.
3. Such sharing would be done with the user being notified before the start of a chat if the business uses Facebook to store and analyse data and the user would have the option of blocking the business.
4. This would defy the principle of purpose limitation that has been the yardstick of addressing privacy concerns at a global level.
5. Facebook does not have a stellar record of data protection of its users. In 2018, there were reports of Facebook entering into data-sharing deals with other tech firms like Apple, Amazon and Spotify.

STEPS TAKEN BY WHATSAPP:

1. WhatsApp responded to widespread concern by clarifying that the update did not change anything as far as the private chats between individuals and groups were concerned and that the data would be shared only for business interactions.
2. It then issued large media ads and finally proposed to defer the implementation by about three months to May 15, 2021.
3. But these steps didn't stop the exodus of many users to alternate online messaging services like Signal and Telegram.

STEPS TAKEN BY INDIAN GOVERNMENT:

1. The Indian government opposed and sought the company's response to 14 queries related to their practices in India and asking the platform to withdraw those proposed changes.

2. This note has sent a clear message to WhatsApp to not subject Indian users to greater information security risks and vulnerabilities with the consolidation of data from WhatsApp and Facebook.
3. The government referred to the principle of **purpose limitation provisions in the Personal Data Protection Bill (PDPB)** that was introduced in Parliament in December 2019 and is currently being discussed by a joint select committee.

At present, in the absence of a dedicated data protection regulation, the usage and transfer of personal data of users is regulated by the Information Technology (IT) Rules, 2011, under the IT Act, 2000.

However, given the growing pace of the digital economy, the Act has shortcomings with respect to how personal and sensitive data is defined, and provisions that can be easily overridden by companies using a contract.

4. It will be pertinent to mention that had the bill been passed by now, WhatsApp's move would have been illegal.
5. The Bill is a result of the Supreme Court declaring privacy as a Fundamental Right in 2017, and it not only has provisions for individual consent and control over private online data, but also outlines strong obligations for companies that use and process this data.
6. Provisions in the bill required that every data intermediary has to take explicit permission from the user whose data would be harvested.
7. Even the method of data classification into sensitive personal data and critical data has been defined and their processing possibilities mentioned in the bill.



Data Protection Bill: Time Line

August 2017	July 2018	December 2019	March 2020	September 2020	November 2020
The Supreme Court holds privacy as a Fundamental Right, with privacy of personal data being an essential aspect of Right to Privacy	A committee of experts, chaired by Justice BN Srikrishna, submits a draft Personal Data Protection Bill (PDP), 2018, and a report to the government titled 'A Free and Fair Digital Economy: Protecting Privacy, Empowering Indians'	The PDP Bill is introduced in Lok Sabha, which is a version revised by MeitY based on stakeholder consultation and recommendations	Joint Parliamentary Committee report expected by the Budget Session, extended to the second week of the Monsoon Session of Parliament	The Joint Parliamentary Committee examining the Bill gives another extension to submit the report during the Winter Session of Parliament	Bill not tabled in the Winter Session either, likely to be tabled during Budget Session in February 2021

The Big Picture

What's Good About the Draft Bill

- It requires those collecting data to **provide notice for data collection and obtain informed consent**
- Those using personal data must **adhere to principles of data collection, purpose and use limitation; ability to retain personal data is limited**
- It **prescribes security safeguards**, institutes grievance redressal mechanism to address complaints
- It gives **individuals the right to obtain information** on how data has been processed
- **People can seek correction or erasure** of inaccurate, incomplete or out-of-date personal data
- People **can restrict continuing disclosure of personal data** and withdraw consent
- The Bill **establishes a Data Protection Authority** to address matters containing data privacy
- It **lays down norms for social media intermediaries**, cross-border transfers

SOURCE Draft Personal Data Protection Bill, Live Law

Where Action is Needed

- **Broad exceptions are made for government and law enforcement** agencies. Crucially, requirements for government processing only "necessary and appropriate" data has been cut
- The Bill **reduces the powers and independence of the data protection authority** by weakening the commission that will appoint the chairperson and members
- The Bill's **Social Media Verification provisions** require users to voluntarily verify their identities on social media. This would entail users sending photos or government IDs to companies, incentivising collection of sensitive data
- **Forced transfer of non-personal data** provision for "public good and policy planning" could constitute protected trade secrets of companies. Collection of non-personal data could also be used to draw inferences regarding caste, religion and sexuality of users
- There is **implementation ambiguity**; with no references to timelines, enforcement is at the complete discretion of the central government

SOURCE Mozilla blog post by Jochai Ben-Avie and Udbhav Tiwari, Dec 2019

- WhatsApp did make an exception for its users in the European Union. At the same time, for the Competition Commission of India, this is a classic case of an organisation using its near monopolistic power in the market to push through something that is not in the consumer interest.
- Data should be collected only for a clearly defined purpose and not beyond that. If the purpose or scope of data collection is evolving, like in the case of the WhatsApp privacy policy, it has to be identified, outlined and reviewed by the Data Protection Authority (DPA) to see if it meets the tenet of data minimisation or not.
- The Bill also includes provisions where the government can direct entities or companies to provide it with non-personal data for policy-planning purposes. This will blur the demarcations between personal and non-personal data, and anonymised data can be re-identified in many cases.

CONCLUSION:

- Tech giants need more legal and regulatory watch, given the digital proliferation in the country.
- As Digital India expands and brings in more users from the current base of 70 crore, and more take to social media for communications and business, they must be ensured a safer digital space, given that most wouldn't be aware of the reach of the data being generated.
- All eyes are on the Budget session of the Parliament in February, where a Joint Parliamentary Committee is expected to table its report on the draft Personal Data Protection (PDP) Bill, 2019.
- Implementation of a robust data protection law should involve building a strong culture of cyber hygiene among people, where both the government and the civil society take the lead in making people aware of sensitive data leakages, possible ways in which it can be abused, and how they can take charge of protecting it.
- For now, WhatsApp has to roll back the TOS and privacy policy and think of methods to allow opt-in and opt-out choices so that forced consent is never made the order of the day.

WAY AHEAD:

- The government has to make the PDPB into law sooner than later so that such restrictive practices can never be introduced in the first place.

GS 3: SCIENCE AND TECHNOLOGY

CONTEXT:

1. The 5th national draft Science, Technology and Innovation (STI) Policy was released on 1 January 2021, which contains radical and progressive proposals that could be game-changers for not just the scientific research community, but also for the way ordinary Indians interact with science.

ABOUT RECENT STI POLICY:

1. It follows core principles of being **decentralised, evidence-informed, bottom-up, experts-driven, and inclusive**.
2. It aims to be dynamic, with a **robust policy governance mechanism** that includes periodic review, evaluation, feedback, adaptation and, most importantly, a timely exit strategy for policy instruments.
3. The STIP will be guided by the vision of **positioning India among the top three scientific superpowers** in the decade to come; to attract, nurture, strengthen, and retain critical human capital through a people-centric STI ecosystem; to double the number of fulltime equivalent (FTE) researchers, gross domestic expenditure on R&D (GERD) and private-sector contribution to GERD every five years; and to build individual and institutional excellence in STI with the aim of reaching the highest levels of global recognition and awards in the coming decade.
4. The policy outlines strategies for **strengthening India's STI ecosystem** to achieve the larger goal of **Atmanirbhar Bharat**.
5. **STIP provides a forward-looking, all-encompassing Open Science Framework** to provide access to scientific data, information, knowledge, and resources to everyone in the country, and to all who are engaging with the Indian STI ecosystem on an equal partnership basis.
6. The STIP envisions **free access to all journals, Indian and foreign, for every Indian** against a centrally-negotiated payment mechanism.
7. The larger idea behind **One Nation, One Subscription** is to **democratize science**

by providing access to scholarly knowledge to not just researchers but to every individual in the country.

8. **Participation of women in science and education to promote inclusion and equity:** The STIP has made recommendations such as mandatory positions for excluded groups in academics; 30% representation of women in selection/evaluation committees and decision-making groups; addressing issues related to career breaks for women by considering academic age rather than biological/physical age; a dual recruitment policy for couples; and institutionalization of equity and inclusion by establishing an Office of Equity and Inclusion, etc.
9. **COVID-19 learning:** In India, the pandemic presented an **opportunity for R&D institutions, academia, and industry** to work with a shared purpose, synergy, collaboration and cooperation, which helped the country develop the capability to produce these kits in record time. **The STIP draft focuses on the need to adopt such learnings for greater efficiency and synergy in future.**
10. **The policy is to identify and address the strengths and weaknesses of the Indian STI (Science, Technology, Innovation) ecosystem to catalyse the socioeconomic development of the country.**

INCREASE FUNDING IN R&D

1. **Low private sector investment (less than 40%) in R&D activities** in India so at 0.6% of GDP, India's gross domestic expenditure on R&D (GERD) is quite low compared to other major economies that have a GERD-to-GDP ratio of 1.5% to 3%.
2. STIP recommended expansion of the **STI funding landscape** at the central and state levels; enhanced incentivisation mechanisms for leveraging the private sector's R&D participation through boosting financial support and fiscal incentives for industry and flexible mechanisms for public procurement; and creative avenues for collaborative STI funding through a portfolio-based funding mechanism called the **Advanced Missions in Innovative Research Ecosystem (ADMIRE)**

programme to support distributed and localized collaborative mission-oriented projects through long-term investment strategy.

3. A national STI Financing Authority, along with an STI Development Bank, need to be set up to direct long-term investments in select strategic areas.
4. The STIP also suggests modification or waiver of General Financial Rules (GFR), for large-scale mission mode programmes and projects of national importance.

WHAT IS OPEN SCIENCE FRAMEWORK?

1. **Open Science fosters more equitable participation in science** through increased access to research output; greater transparency and accountability in research; inclusiveness; better resource utilisation through minimal restrictions on reuse of research output and infrastructure; and ensuring a constant exchange of knowledge between the producers and users of knowledge.
2. It is important to make publicly funded research output and resources available to all to foster learning and innovation.
3. This framework will be largely community-driven, and supported with necessary institutional mechanisms and operational modalities.
4. Output from research that is not funded by the government will be outside the purview of this framework.
5. However, they will be encouraged to participate in this framework. Since the scheme of providing open access is applicable to every Indian, private-sector researchers, students, and institutions will also have the same accessibility.

Cooperate for the consumer

GS 3: Changes in industrial policy and their effects

CONTEXT:

1. Consumer protection is an article of faith for the present ruling government.
Consumers are the fulcrum of any industry, the protection of whose interests is central to its growth and development.

2. Real Estate (Regulation and Development) Act (RERA) ensures this idea and promotes transparency, accountability and boost domestic and foreign investment in the real estate sector as there are numerous issues in real estate sector, so, this act passed in 2016, deals with those issues.
3. In this context, there are number of central and state conflicts regarding regulation of real estate sector as land improvement are in the **State List** of the Seventh Schedule of the Constitution. RERA has been enacted under **Concurrent List**.

ISSUES IN REAL ESTATE SECTOR:

1. Huge generation of black money
2. Developers cheated property buyers
3. Largely unregulated
4. Delays in projects - huge cost overrun due to delays
5. Issues like delays, price, quality of construction
6. No grievance redressal mechanism
7. No standardization of business practices and transactions

BACKGROUND:

1. First, the bill was introduced in the Rajya Sabha in 2013. It is essential to highlight the stark differences between the 2013 bill and the 2016 Act.
2. The 2013 bill covered neither “ongoing projects” nor “commercial real estate”. The thresholds for registration of projects were so high that most projects would have escaped coverage under the law.
3. These exclusions made the 2013 bill meaningless and detrimental to the interests of home buyers.
4. While the 2013 bill was pending in the Parliament, in 2012, Maharashtra enacted its own law in the Assembly, and took Presidential assent under Article 254 of the Constitution in 2014. The law was not consumer-friendly and caused permanent damage to the home buyers of Maharashtra.
5. A holistic review was carried out along with multiple stakeholder consultations and thereafter both “ongoing projects” and “commercial projects” were included in the bill, 2016. The thresholds for registration of projects were also reduced.

6. Also, the present ruling government at the centre repealed the state Act vide section 92 of RERA. This was done by invoking the proviso under the same Article 254, which provides for powers of repeal.

PROVISIONS OF RERA, 2016:

1. The present ruling government enacted the Real Estate (Regulation and Development) Act (RERA), 2016.
2. It seeks to **protect home-buyers as well as help boost investments in the real estate sector** by bringing **efficiency and transparency** in the sale/purchase of real estate.
3. The Act establishes **Real Estate Regulatory Authority (RERA)** in each state for regulation of the real estate sector and also acts as an adjudicating body for **speedy dispute resolution**.
4. Decisions of RERAs can be appealed in **Real Estate Appellate Tribunal**.
5. The Act stipulates that no project can be sold without project plans being approved by the competent authority and the project being registered with the regulatory authority, putting to an end the practice of selling on the basis of deceitful advertisements.
6. Promoters are required to maintain “project based separate bank accounts” to prevent fund diversion.
7. The mandatory disclosure of unit sizes based on “carpet area” strikes at the root of unfair trade practices.
8. The provision for payment of “equal rate of interest” by the promoter or the buyer in case of default reinforces equity.
9. It also offers single window system of clearance for real estate projects.

ADVANTAGES OF RERA:

1. RERA has infused governance in a hitherto unregulated sector. Along with demonetisation and GST, it has, to a large extent, **cleansed the real estate sector of black money**.
2. It has transformational provisions, conscientiously addressing issues which have been a constant bane for the sector.
3. Strict regulations will be enforced on builders to ensure that construction runs

on time and flats are delivered on schedule to the buyer.

4. As per the Act, there should be **accurate project details**. It is also mandatory to declare the actual carpet area.
5. It ensures that developers get all the clearances before selling flats.

COOPERATIVE FEDERALISM:

1. RERA is a seminal effort in cooperative federalism. Though the Act has been piloted by the Central government, the rules are to be notified by state governments, and the regulatory authorities and the appellate tribunals are also to be appointed by them.
2. The regulatory authorities are required to manage the day-to-day operations, resolve disputes, and run an active and informative website for project information.
3. Since RERA came into full force, 34 states and Union territories have notified the rules, 30 states and Union territories have set up real estate regulatory authorities and 26 have set up appellate tribunals.
4. At the other end, in a glaring example of constitutional impropriety and poor governance, West Bengal ignored RERA and enacted its own state law — the West Bengal Housing Industry Regulation Act (WBHIRA) — in 2017.
5. Despite multiple efforts by the Centre, West Bengal refused to implement RERA, causing irreparable loss to home buyers.
6. There was already a central law on the subject, the state government enacted WBHIRA in 2017, and did not even care to approach the President of India seeking assent for the state bill under Article 254.

CONCLUSION:

1. RERA is to the real estate sector what SEBI is to the securities market. The history of urban India and of the real estate sector will always be remembered in two phases — “Pre RERA” and “Post RERA”.
2. The provisions of the Act have empowered consumers, rectifying the power asymmetry prevalent in the sector. States should not dilute the RERA provisions. Provisions for punishment of violations should be kept intact in all State laws. Hence, the “One

Nation One RERA” will be achieved then only.

What are spectrum auctions, and what can happen in the upcoming auction?

CONTEXT:

1. The Department of Telecommunications (DoT) declared that auctions for 4G spectrum in the 700, 800, 900, 1,800, 2,100, 2,300, and 2,500 MHz bands will begin from 1 March 2021. Licence holders have until February 5 to submit their applications.

WHAT ARE SPECTRUM AUCTIONS?

1. Devices such as cellphones and wireline telephones require signals to connect from one end to another. These signals are carried on airwaves, which must be sent at designated frequencies to avoid any kind of interference.
2. The Union government owns all the publicly available assets within the geographical boundaries of the country, which also include airwaves.
3. With the expansion in the number of cellphone, wireline telephone and internet users, the need to provide more space for the signals arises from time to time.
4. To sell these assets to companies which are willing to set up the required infrastructure to transport these waves from one end to another, the central government through the DoT auctions these airwaves from time to time.
5. These airwaves are called spectrum, which is subdivided into bands which have varying frequencies. All these airwaves are sold for a certain period of time, after which their validity lapses, which is generally set at 20 years.

WHY IS SPECTRUM BEING AUCTIONED NOW?

1. The last spectrum auctions were held in 2016, when the government offered 2,354.55 MHz at a reserve price of Rs 5.60 lakh crore.
2. Although the government managed to sell only 965 MHz – or about 40 per cent of the spectrum that was put up for sale – and the total value of bids received was just Rs 65,789 crore.
3. The need for a new spectrum auction has arisen because the validity of the airwaves bought by companies is set to expire in 2021.
4. In the spectrum auctions scheduled to begin on 1 March 2021, the government plans to sell spectrum for 4G in the 700, 800, 900, 1,800, 2,100, 2,300, and 2,500 MHz frequency bands.
5. The reserve price of all these bands together has been fixed at Rs 3.92 lakh crore. Depending on the demand from various companies, the price of the airwaves may go higher, but cannot go below the reserve price.

WHO ARE LIKELY TO BID FOR THE SPECTRUM?

1. All three private telecom players, Reliance Jio Infocomm, Bharti Airtel, and Vi are eligible contenders to buy additional spectrum to support the number of users on their network.
2. Foreign companies are also eligible to bid for the airwaves. They will have to either set up a branch in India and register as an Indian company, or tie up with an Indian company to be able to retain the airwaves after winning them.
3. The successful bidders will, however, have to pay 3 per cent of Adjusted Gross Revenue (AGR) as spectrum usage charges, excluding wireline services.

Misunderstanding the MSP

GS 3: Issues related to direct and indirect farm subsidies and minimum support prices

CONTEXT:

1. Recently, Farmers in India are protesting against the newly enacted three farm laws and the Electricity Amendment Bill 2020. One of their major demands has been that the government guarantee in the Minimum Support Price system, which assures them of a fixed price for their crops, is 1.5 times of the cost of production. MSP involves the most important of the many contentious issues.

WHAT IS MSP?

1. MSP is a “minimum price” for any crop that the government considers as remunerative for farmers and hence deserving of “support”. It is also the price that government agencies pay whenever they procure the particular crop.
2. The Commission for Agricultural Costs & Prices (CACP) recommends MSPs for 22 mandated crops and fair and remunerative price (FRP) for sugarcane.
3. MSP and public procurement system (PPS) were designed to incentivise farmers to produce cereals — mainly wheat and rice — and to assist the country in achieving its **goal of food self-sufficiency**, which was met by the early Seventies.
4. The purpose of MSP and PPS/APMC is now two-fold.
 - a. To maintain food self-sufficiency because crop diseases and weather conditions such as droughts, especially due to global heating, can lead to food shortages
 - b. To ensure a reasonable, assured income to the farmers. This is critical for the 86 per cent of India’s farming households who are either marginal (cultivating less than one hectare of land) or small (cultivating between one hectare and two hectares of land) and who sell their produce immediately after harvest.
5. Several pro-government and pro-agro-business economists, who argue for scrapping MSP stating that food procurement targets have been met, ignore

either or both of the two new purposes of MSP/APMC.

6. The flawed recommendation to dismantle FCI public procurement, made by the Shanta Kumar Committee in its 2015 report, displayed a similar lack of recognition of the importance of these two purposes.

ISSUE:

1. **The government system of announcing and implementing MSPs is inadequate.** MSPs are announced for 23 crops but since the other two components of the procurement package, compulsory and timely public procurement, are provided mainly for two crops, wheat and rice, the support price does not work for the remaining 21 crops. The farmers’ organisations have rightly demanded the extension of the full MSP package to the remaining 21 crops.
2. Farm activists demand that the 1.5-times MSP formula originally recommended by the National Commission for Farmers headed by agricultural scientist M S Swaminathan should be applied
3. The fear that the new regime will dismantle the system of procurement under Minimum Support Price (MSP) and leave farmers at the mercy of corporations is real. Government has not, however, offered a legal guarantee of MSP and the question of power subsidies also remains contentious.
4. The weakening of the Agricultural Produce Market Committee (APMC) system by subjecting it to competition — and its resultant bearing on Minimum Support Price (MSP), particularly on crops such as rice and wheat — is seen by the farmers as a threat to an assured sale of their produce at a price.
5. The government’s “assurance” that MSP/APMC can co-exist with the big agro-business-controlled private markets is not tenable.
6. The agro-business entity will take the non-compliant farmer to court, where the dispute resolution mechanism is stacked against the farmer due to the structural inequities of legal resources and social-cultural capital. The proposed dispute resolution mechanism increases the choice of the trader to trade and not of the farmer to sell.

7. The central law will prevail in the private markets, while state laws will prevail in the APMC mandis. Two markets with two regulatory frameworks will create conditions for perpetual Centre-state conflicts.

Farm protests, big picture

GS 3: Issues in agriculture sector

CONTEXT:

1. The **farmers are agitated on Delhi's border** against three laws passed by Parliament in September 2020 but **Government has been explaining the beneficial provisions of the laws**, and social media is full of stories about how farmers in Punjab have been “exploiting” the system of procurement of crops at minimum support price (MSP).
2. While **Punjab and Haryana have become the focus of the farmers' agitation**, the current scenario in agriculture is not very hopeful in other states too.

CURRENT SITUATION OF LAND IN AGRICULTURE

1. **Area under agriculture has been shrinking** — it reduced from 159.5 million hectares (mn ha) in 2010-11 to 157 mn ha in 2015-16 — but the **number of operational holdings has been rising** (increased from 138.3 million to about 146million).
2. This reflects in the **falling average landholdings' size of farmers**, which has come down from 1.2 ha to about 1.08 ha.
3. About 86% of farmers have an average landholding size less than 2 hectares; they are referred to as India's small and marginal farmers (SMF). The SMFs operate on about 47.35% of the total agri-area. More than half of India's farmers reside in the five states of UP, Bihar, Maharashtra, MP, and Karnataka.

IS FRAGMENTATION OF LAND A PROBLEM?

1. **Smaller landholdings produce smaller pockets of produce**, aggregation of which becomes essential to be carried to an agricultural produce market committee (APMC) mandi or a nearby market.
2. Due to small holdings caused by fragmentation, **small and marginal farmers are forced to sell their produce at farm gate itself**. This is especially so in states that have a weak network of APMC mandis.

WORKFORCE IS ENGAGED IN AGRICULTURE

1. As per recent estimates from the Labour Bureau, **45% of India's workforce is employed in agriculture**.
2. According to Census 2011, **55% of the agri-workforce comprises agri-labourers**, i.e., those who do not own land and work for wages on the land of others; **less than 45% are “farmers”** who own and cultivate land. Indian agriculture cannot support such a large population through growth in agriculture alone.

WATER-GUZZLING CROP

1. 1 kg of sugar requires about 1,500-2,000 litres while 1 kg of rice requires 5,000 litres. There are variations across states. A kg of sugar produced from cane cultivated in UP consumes 1,044 litres of water, while in Maharashtra it takes double that—2,086 litres.
2. In Maharashtra, sugarcane is cultivated on 4% of the cultivable land but consumes more than 70% of irrigation water. Due to the high returns on sugarcane compared to other crop combinations and assured marketing, the **area under sugarcane has been going up even in water-stressed regions**.
3. **The three Acts passed by Parliament do not touch the sugar sector**. In Punjab, sugar is grown only on 1.2% of gross cropped area. So they do not benefit from policies favouring sugarcane.

PROCUREMENT

1. While the government declares MSP for 23 crops, only wheat and paddy (rice) are procured in large quantities as they are required to meet the requirement of PDS, which is about 65 million tonnes.
2. In 2019-20, Punjab procured 92.3% of its rice production. Haryana procured 89.2%, while Telangana procured 102% of its production.
3. In the case of wheat, Punjab procured 72% of its production this year, while Haryana and MP procured 62% and 66% respectively.
4. Since 2015-16, the government has been procuring larger quantities of **pulses through National Agricultural Cooperative Marketing Federation of India (NAFED) and Small Farmers' Agri-business Consortium (SFAC)** for maintaining a buffer stock of 2 million tonnes.
5. **Cotton** is procured by **Cotton Corporation of India**, while **groundnut is procured in some states like Gujarat**.
6. Some horticultural products are also procured in a sporadic manner, e.g., apples in J&K in 2019-20 and onion in Maharashtra almost every year.
7. Sugarcane is not procured by the government but its farmers are assured of Fair and Remunerative Price (FRP) paid by sugar mills.
8. In some states, the government declares State Advised Price which is higher than the FRP. Jute is another crop protected by the government even though it is not directly procured.
9. Under Jute Packaging Material (JPM) Act, 1987, the Government has decided that 100% of food grains and 20% of sugar shall be mandatorily packed in diversified jute bags.

IF HORTICULTURE AND DAIRY ARE MORE PROFITABLE, WHY ARE FARMERS NOT GIVING UP MSP CROPS AND SWITCHING TO THESE?

1. Milk producers and farmers growing fruits and vegetables are equally prone to fluctuation in market prices. Except for dairy cooperatives in Gujarat, the milk

federations are funded by state governments through various means.

WHAT ARE THE SUBSIDIES GIVEN TO AGRICULTURE IN INDIA?

1. Farmers in India are provided support on both the input and output side.
2. On the input side, an average Indian farmer receives subsidies on fertilisers, seeds, farm machinery and equipment, electricity, logistics, etc. On the output side, the MSP regime offers support in states having robust procurement infrastructure.
3. However, small and marginal farmers are able to get only a small amount of these subsidies.
4. A number of subsidies meant for agriculture also flow to businesses, e.g., grant given to food processing units and cold chain projects.

THEN WHY IS IT SAID THAT INDIAN FARMER ARE NET TAXED?

1. As per the ICRIER-OECD report, despite the plethora of schemes run to support and subsidise Indian farmers, because of regressive policies on the marketing side (both domestic and international trade policies) and the deficit of basic infrastructure for storage, transportation etc., **Indian farmers suffered net losses and thus emerged to be net taxed despite receiving subsidies**.
2. Between 2014 and 2016, Indian farmers were on average net taxed to the tune of 6%.
3. As per the same ICRIER-OECD report, while Indian farmers were net taxed (i.e., received negative support), **farmers in the first world countries of Norway, Switzerland, Japan, Korea, United States, and Australia received the highest positive support**.
4. Even farmers in Indonesia received much higher positive support. Ukraine was another country like India that emerged to be taxing its farmers.

WHY RECENT PROTEST?

1. The farmers of Punjab, Haryana and other states that have robust APMC mandis and an efficient system of procurement opine that **these laws signal the beginning of the end of open-ended procurement**

of wheat and paddy. They fear that the success of these states in creating the infrastructure for procurement may now become the reason for withdrawal of support of the Centre.

2. Farmers cannot be left entirely to the mercy of market forces. Farmers growing non-MSP crops, especially fruits and vegetables, have experienced huge volatility in prices over the years. The price deficiency payment scheme did not succeed in MP.

CHALLENGES IN PROCUREMENT AND NEED OF PDS

1. The **procurement system in India serves two purposes** — purchases on MSP supports farmers, and subsidised distribution of procured grains under PDS supports India's economically vulnerable.
2. As per recent **National Family Health Survey (NFHS) data** on malnourishment in India, **malnutrition indicators for women and children have worsened over the years.**
3. With this in focus, the PDS system is likely to stay in the coming years. But the government will do well to prepare a 10-year roadmap of PDS to 2030 so that only the required quantities of wheat and rice are procured.
4. In case of high-value agricultural commodities in which India is in deficit or has only marginal surpluses (like pulses), there is a **genuine fear of stocking by corporates, especially those which are in modern retail and e-commerce.**

WAY AHEAD

1. **Direct income support** is the only way to shield them from suffering huge losses. A predictable **trade policy can also help in attracting private investment in the agriculture chain which can act as a shield against volatility.**
2. Option contracts through FPOs can also bring stability, but most farmers are not educated enough to deal with future markets, so they need support and guidance from the government.
3. The government must make it compulsory that they keep their **stock in Warehousing Development and**

Regulatory Authority-registered warehouses only, so that the private stocks are known to the government.

4. If India has to **move away from procurement-based support**, at present restricted to certain crops only, a more attractive income support scheme has to be conceived. However, it has to be coupled with much higher investment, both public and private, in agri-infrastructure.
5. The **Rashtriya Krishi Vikas Yojana (RKVY) incentivised the states**, which increased their expenditure on agriculture. The Centre's assistance for such states should be higher.
6. Several states of India have already achieved productivity levels seen in developed countries. But there are also states that have low productivity. Focused research on crops grown in low-productivity states can deliver better seeds, which can withstand the challenge of higher temperature due to climate change.
7. **Drought-tolerant varieties of seeds are also needed for crops grown in rain-fed areas.** Good quality seeds can enhance productivity by 15-20%.

Balance sheet of a bad bank

GS 3: Banking Sector

CONTEXT:

1. According to the Financial Stability Report of the Reserve Bank of India (RBI), non-performing assets (NPAs) of the banking sector are expected to shoot up to 13.5 per cent of advances by September 2021 from 7.5 per cent in September 2020 under the baseline scenario, as "a multi-speed recovery is struggling to gain traction" amidst the pandemic.
2. Despite a series of measures by the RBI for better recognition and provisioning against NPAs, as well as massive doses of capitalization of public sector banks by the government, the problem of NPAs continues in the banking sector, especially among the weaker banks.
3. Current Covid-19 pandemic related shock will place greater pressure on the balance

sheets of banks in terms of NPAs, leading to erosion of capital.

4. In such a situation, RBI Governor Shaktikanta Das indicated that the central bank can consider the idea of a bad bank to tackle NPAs and advised banks and non-banks to adopt appropriate compliance culture and identify risks early.
5. RBI have regulatory guidelines for asset reconstruction companies.

ISSUE and problem arises by NPA?

1. In COVID-19 times, Bad loans in the system increased due to contraction in the economy and the problems being faced by many sectors.
2. If the macroeconomic environment worsens into a severe stress scenario, the ratio may escalate to 14.8%. Among bank groups, the NPA ratio of PSU banks, which was 9.7% in September 2020, may increase to 16.2% by September 2021 under the baseline scenario.
3. **The K V Kamath Committee** noted that **corporate sector debt has come under stress** after Covid-19. 72% of the banking sector debt to industry remains under stress. This is almost 37% of the total non-food bank credit.
4. Sectors that have been under stress pre-Covid include NBFCs, power, steel, real estate and construction. Setting up a bad bank is seen as crucial against this backdrop.

ABOUT BAD BANK

1. A bad bank functions as a bank but has bad assets to start with. Technically, a bad bank is an **asset reconstruction company** (ARC) or an asset management company that takes over the bad loans of commercial banks, manages them and finally recovers the money over a period of time.
2. The bad bank is **not involved in lending and taking deposits**, but **helps commercial banks clean up their balance sheets and resolve bad loans**.
3. The takeover of bad loans is normally below the book value of the loan and the bad bank tries to recover as much as possible subsequently.

4. Former RBI Governor **Raghuram Rajan** had opposed the idea of setting up a bad bank in which banks hold a majority stake.
5. According to him, bad bank idea is like a shifting loans from one government pocket (the public sector banks) to another (the bad bank) and did not see how it would improve matters.
6. US-based Mellon Bank **created the first bad bank in 1988**, after which the concept has been implemented in other countries including **Sweden, Finland, France and Germany**.
7. However, resolution agencies or ARCs set up as banks, which originate or guarantee lending, have ended up turning into reckless lenders in some countries.

NEED OF A BAD BANK

1. The RBI had initiated an **asset quality review (AQR) of banks** and found that several banks had suppressed or hidden bad loans to show a healthy balance sheet.
2. But due to lack of consensus on the efficacy of such an institution, **ARCs (asset reconstruction company) have not made** any impact in resolving bad loans due to many procedural issues.
3. Due to COVID-19, the RBI **fears a spike in bad loans in the** wake of a six-month moratorium it has announced to tackle the economic slowdown.
4. A professionally-run bad bank, funded by the private lenders and supported the government, **can be an effective mechanism to deal with NPAs**.
5. The bad bank concept is in some ways similar to an ARC but is **funded by the government** initially, with banks and other investors co-investing in due course. The presence of the government is seen as a means to speed up the clean-up process.
6. Many other countries had set up institutional mechanisms such as the **Troubled Asset Relief Programme (TARP) in the US** to deal with a problem of stress in the financial system.

STAND OF THE RBI AND GOVERNMENT

1. While the RBI did not show much enthusiasm about a bad bank all these years. Last week, RBI can consider the idea of a bad bank to tackle bad loans. In recent months, the Finance Ministry too has been receptive to the idea.
2. It would be better to limit the objective of these asset management companies to the orderly resolution of stressed assets, followed by a graceful exit, according to previous deputy governor of RBI, **Viral Acharya**.
3. He suggested two models to solve the problem of stressed assets:
 - a) **Private Asset Management Company (PAMC)**: It is suitable for stressed sectors where the assets are likely to have an economic value in the short run, with moderate levels of debt forgiveness.
 - b) **National Asset Management Company (NAMC)**: It would be necessary for sectors where the problem is not just one of excess capacity but possibly also of economically unviable assets in the short to medium terms.

STAND OF BANKING SYSTEM

1. The banking sector, led by the **Indian Banks' Association**, had submitted a **proposal** last May for setting up a bad bank to resolve the NPA problem, proposing equity contribution from the government and banks.
2. The proposal was also discussed at the **Financial Stability and Development Council (FSDC)** meeting, but it did not find favour with the government which preferred a market-led resolution process.
3. The banking industry's proposal was based on an idea proposed by a panel on **faster resolution of stressed assets in public sector banks**.
4. This panel had proposed a company, **Sashakt India Asset Management**, for resolving large bad loans two years ago.
5. During the pandemic, **banks modified NPA and reclassification norms** from 90 days to 180 days as relief measures to tackle the impact of the lockdown and the slowdown in the economy.
6. Currently, loans in which the borrower fails to pay principal **and/or interest charges**

within 90 days are classified as NPAs and provisioning is made accordingly.

CONCLUSION:

1. Banks and non-bank financial companies (NBFCs) need to **identify risks early**, monitor them closely and manage them effectively.
2. The **risk management function in banks and NBFCs should evolve with changing times** as technology becomes all pervasive and should be in sync with best international practices.
3. In this context, **instilling an appropriate risk culture in the organisation is important**. This needs to be driven by the board and senior management with effective accountability at all levels.
4. Government must **define the fiscal roadmap in terms of the quality of the expenditure in Budget 2021-22**.
5. Going forward, it becomes imperative that fiscal roadmaps are defined not only in terms of quantitative parameters like **fiscal balance to GDP ratio or debt to GDP ratio**, but also in terms of measurable parameters relating to quality of expenditure, both for Centre and states.
6. **Building buffers and raising capital by banks — both in the public and private sector —** will be crucial not only to ensure credit flow but also to build resilience in the financial system.
7. **Maintaining and improving the quality of expenditure** would help address the objectives of fiscal sustainability while supporting growth.
8. There is also the **concern that setting up a bad bank** will free lenders from the repercussions of their actions. And if allowed, there may not be any incentive for banks to focus on the quality of credit extended, or for them **to monitor loans**, and guard against ever-greening.

The post-Covid priority

GS 3: Economy- growth development and Mobilisation of resources

CONTEXT:

1. Inequalities in India have been increasing over time. COVID-19 has further widened them.
2. More attention will be given to the social sector in the forthcoming budget 2021-22.

ISSUES:

1. India's progress in the social sector has been much slower compared to its GDP growth. The two primary factors that adversely affect India's human development are low levels of health attainments and education: India ranks 131 out of 189 countries on the Human Development Index (HDI).
2. A look at the social sector expenditure over the last few years shows that the share of education as a percentage of GDP has been stagnant around 2.8-3 percent during 2014-15 to 2019-20.
3. In the case of health, the expenditure as a percentage of GDP increased from 1.2 per cent to 1.5 per cent. This is lower than the required 2-3 per cent of GDP.
4. There seems to be an increase in expenditure on "other" services like sports, art and culture, family welfare, water supply and sanitation, labour and labour welfare etc.
5. The expenditures are inadequate in comparison to the problems in the sector. India's social sector in general, and health and education in particular, encounter significant regional, social and gender disparities, slow growth in public expenditures and problems in delivery systems.
6. The experience of COVID-19 has also shown that during pandemics we tend to neglect non-pandemic related patients. There are supply side problems regarding the health infrastructure. The pandemic has enhanced inequalities in education and has revealed the widening digital gap.
7. Migrant workers were the most affected during the pandemic and that they do not have any safety nets.
8. Another important issue in the social sector is that of undernutrition. The NFHS-5

report shows that malnutrition level has reduced marginally in a few states and has worsened in some other states, although some other indicators have improved between 2015-16 and 2019-20.

9. Apart from undernutrition, obesity seems to be increasing in both rural and urban areas. The cost of ignoring hunger and malnutrition will be high for the country.

TRENDS IN SOCIAL SERVICES EXPENDITURE BY GENERAL GOVERNMENT (COMBINED CENTRE AND STATES)

Item	As percentage to GDP					
	2014-15	2015-16	2016-17	2017-18	2018-19 RE	2019-20 BE
Of which (i) Education	2.8	2.8	2.8	2.8	3.1	3.1
(ii) Health	1.2	1.3	1.4	1.4	1.5	1.6
(iii) Others	2.1	2.5	2.6	2.4	3.0	3.0

WHAT TO DO?

1. Focus on social sector spending and efficiency in delivery systems is essential. India has somewhat progressed on bijli, sadak and paani, but it is essential to invest in the social sector. No country has progressed without investing in the social sector.
2. The Union Budget for 2021-22 can give medium term direction to the social sector by increasing allocations, particularly in health and education and for social safety nets.
3. An increase in health expenditure is also important to take care of the present and future pandemics.
4. Health insurance is an important component of health coverage. But, there is no alternative to universal health coverage including a focus on primary health centres to achieve the goals of the health sector.
5. It is essential to have a huge increase in public expenditure on health and provide accessible, affordable and quality health coverage to all.
6. Access and affordable diversified food intake is important for reducing both undernutrition and obesity. There is a need to raise allocations for ICDS and other nutrition programmes.

7. The determinants of nutrition are agriculture, health, women's empowerment, including maternal and child practices, social protection, nutrition education, sanitation and drinking water. The Poshan Abhiyan is a good programme, but has to cover all these determinants with a multi-pronged approach to reduce undernutrition.
8. Quality education is key for raising human development. Equality of opportunity in terms of quality education is the key for raising human development and for reducing inequalities in the labour market. Several committees have recommended that public expenditure on education should be at 6 per cent of GDP.
9. There is a need to have safety nets like an employment guarantee scheme for the urban poor and facilities for migrants. Similarly in rural areas, allocations to MGNREGA have to be increased because of the reverse migration.
10. The government should give more focus to the social sector with better policies and implementation. It has to work closely with the states in revitalising the social sector as major expenditures particularly on health and education are met by them.

15th Finance Commission

- It has mentioned that health expenditure should be increased to 2.1 per cent of GDP.
- The Commission may also suggest some incentives for states to increase health expenditure.

STEPS TAKEN BY THE GOVERNMENT:

1. Cooking gas (Ujjwala Yojana) and electricity (Saubhagya Yojana), Swachh Bharat Abhiyan and initiatives for housing, financial inclusion and providing loans to the self-employed. These programmes have helped the vulnerable sections, particularly women.
2. Another initiative of the government was to facilitate direct benefit transfers (DBT) for welfare schemes. These initiatives have to be continued.

WAY AHEAD:

1. India is committed to achieving the Sustainable Development Goals (SDGs) by 2030, and social sector development is

important in reaching them. Progress in this sector has intrinsic (for its own sake) and instrumental (for higher growth) value.

2. We cannot have a society with slow progress in health and education. India, aspiring to be a global power, should have a harmonious and inclusive social sector development.
3. This is also important for achieving the SDGs, reducing inequalities and building a \$5 trillion economy faster. Higher social sector funding with better implementation and outcomes are needed.

Economic Survey 2020-21

GS 3: Economy- growth development and Mobilisation of resources

CONTEXT:

- The **Budget Session** of the Parliament began recently and **Finance Minister tabled the Economic Survey (ES) 2020-21 in the Lok Sabha.**
- The annual document by the Ministry of Finance under the guidance of Chief Economic Advisor provides a **summary of annual economic development across the country during the financial year 2020-21.**

HIGHLIGHTS:

- Indian economy is **growing at 11 per cent in the financial year 2021-22 (FY22).** However, the **GDP growth rate** is estimated at **minus 7.7 per cent** for the ongoing fiscal.
- The **estimated real GDP growth for FY 2022 at 11 per cent** is the highest since independence and nominal GDP by 15.4 per cent.
- **Real growth rate for FY21 is taken as - 7.7 per cent (MoSPI) and the real growth rate for FY22 is assumed as 11.5 per cent based on IMF estimates.**
- While the **lockdown resulted in a 23.9 per cent contraction in GDP in Q1**, the recovery has been a V-shaped one as seen in the **7.5 per cent decline in Q2 and the recovery across all key economic indicators.**
- Despite the hard hitting economic shock created by the global [pandemic](#), India is

witnessing a **V-shaped recovery with a stable macroeconomic situation aided by a stable currency, comfortable current account, burgeoning forex reserves, and encouraging signs in the manufacturing sector output.**

Economic Survey: Top key stats

- Economic contraction projected at 7.7% in FY21
- 11% real GDP growth projected in FY22 as farm sector remains silver lining
- Nominal GDP projected to grow at 15.4% in FY22
- Global output likely to contract in range of 3.5 - 4.3% in 2020
- Exports to decline by 5.8%, imports by 11.3% in second half of FY21
- India could have Current Account Surplus of 2% of GDP in FY21, a historic high after 17 years

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- Together, prospects for **robust growth in consumption and investment** have been revived with the **estimated real GDP growth for FY 2021-22 at 11 per cent.**
- India's mature policy response to this **"once-in-a-century" crisis** thus provides **important lessons for democracies to avoid myopic policymaking and demonstrates the significant benefits of focusing on long-term gains.**
- Based on trends available for April to November 2020, there is likely to be **fiscal slippage** during the year.
- India expected to witness **current account surplus** during the current financial year after a gap of 17 years.
- **Performance of states in averting COVID cases & deaths:** Maharashtra -> under performer on both counts. UP, Gujarat, Bihar -> over performers in cases. Kerala, Telangana, AP -> over performers in deaths.
- Willingness to repay has been gold standard for India. Ability to repay is also very very high for India. So India should have highest credit rating observes Survey, reflecting an anomaly in India's sovereign credit rating.

Rating is a mapping of probability of default

Probability of default = Willingness to repay + Ability to repay

Willingness to repay is Gold standard → India has never defaulted on its debt obligations

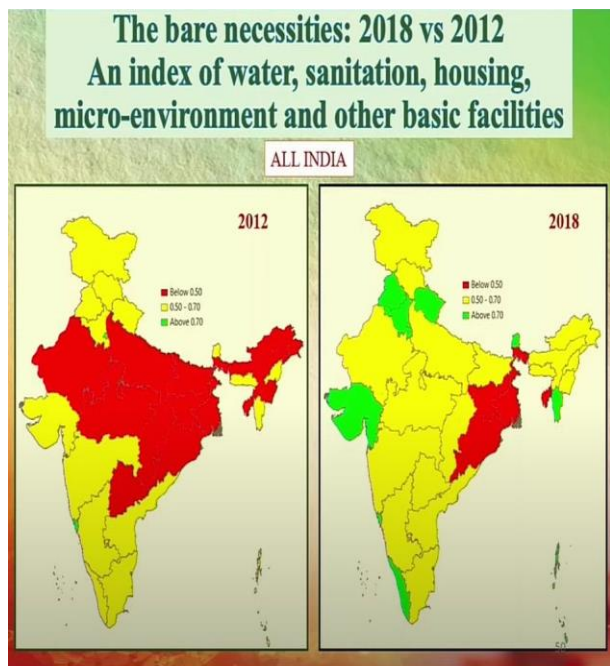
Ability to Repay:

- Sovereign's forex obligations (excluding bilateral and multi-lateral debt that CRAs do not consider) is minimal.
- As India does not have full capital account convertibility, private sector has to approach RBI to repay forex obligations
- On short-term debt (due in one year), India's reserves are adequate to even withstand a 0.1% probability event

India's total external debt (including all private sector debt) less than reserves => India resembles a negative debt company whose ability to repay is 100%

So, on both willingness and ability, India should have highest rating. Consistent with a large literature that highlights bias in sovereign credit ratings

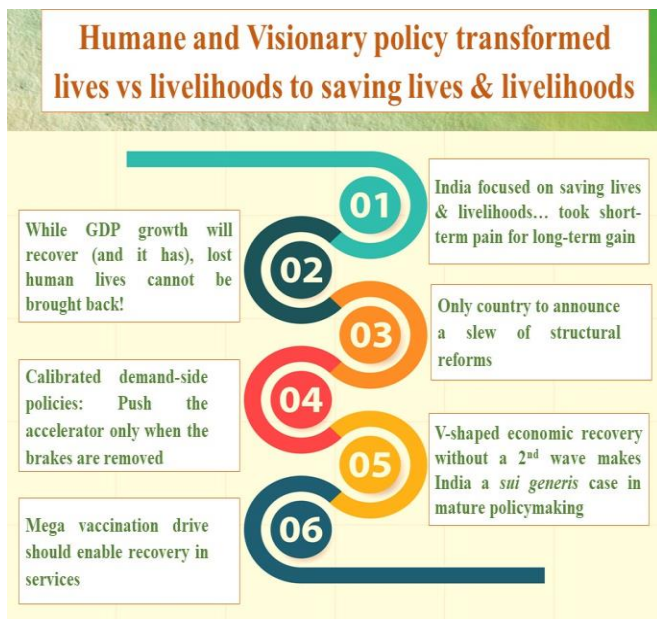
- Bare Necessities Index shows that there has been a pan India improvement in access to bare necessities, in 2018 vs situation in 2012 For both rural and urban India.



- **Rating methodology** needs to be made more transparent and objective, to reflect the willingness and ability of the country to meet sovereign obligations. **Survey calls for fiscal policy to focus on growth, notwithstanding credit rating.**

PANDEMIC AND SURVEY

- Chapter 1 is about India's policy response to [COVID-19](#) and Saving Lives And Livelihoods amidst a once-in-a-lifetime crisis.
- This Economic Survey is **dedicated to all COVID warriors** who upheld India.
- This year's Survey is being delivered in **e-book format, with an official app for it**.
- India's policy response to the pandemic stemmed fundamentally from the **humane principle advocated in the Mahabharata**—"Saving a life that is in jeopardy is the origin of dharma".



- India's **policy response valuing human life**, even while paying the price of temporary GDP decline, has initiated the process of transformation where the short-term trade-off between lives and livelihoods is converted into a win-win in the medium to long-term that saves both lives and livelihoods.
- The survey **emphasised that a stringent lockdown** from March 25 to May 31, 2020 helped in breaking the chain of the [pandemic](#)'s spread and preventing loss of lives. The subsequent policy response helped in ensuring a V-shaped economic recovery.
- The Survey said the **V-shaped economic recovery of GDP contraction of 7.5 per cent in Q2 as against 23.9 per cent contraction in Q1** correlates with the

stringency of the lockdown, with the country reaping the "**lockdown dividend**".

WAY AHEAD:

- The Survey, however, describes the **double-digit growth rate for the next year as "conservative estimates"**, and that it reflects upside potential that can manifest due to the continued normalisation in economic activities as the rollout of [Covid-19](#) vaccines gathers traction.
- This will further be supported by **supply-side push from reforms and easing of regulations, push to infrastructural investments, boost to manufacturing sector through the Productivity Linked Incentive Schemes, recovery of pent-up demand for services sector, increase in discretionary consumption subsequent to roll-out of the vaccine and pick up in credit given adequate liquidity and low interest rates**.
- These estimated levels of growth would **require significant central government and state spending, as private sector investment is yet to pick up pace**.
- The Ministry's projections are in line with IMF estimates of real GDP growth of 11.5 per cent in 2021-22 for India and 6.8 per cent in 2022-23. India is expected to emerge as the fastest growing economy in the next two years as per IMF (International Monetary Fund).



Solution:

- An **Asset Quality Review exercise** must be conducted immediately after the forbearance is withdrawn.
- **Divestment plans** for the current year were impacted by the pandemic but the “focus of the government is to embark on a significant privatisation exercise of CPSEs and speeding up big-ticket strategic sale/ privatisation of large CPSEs such as Air India, BPCL, CONCOR and SCI.
- Economic growth has a far greater impact on poverty alleviation than inequality. Therefore, given India’s stage of development, India must continue to **focus on economic growth to lift the poor out of poverty by expanding the overall pie.**
- **Reforms in tax administration** have set in motion a process of transparency, accountability and more importantly, enhancing the experience of a tax-payer with the tax authority, thereby incentivising tax compliance.
- Economic Survey calls for **counter-cyclical fiscal policy** to be an important point of emphasis, where the government steps in when the private sector does badly and steps back when the private sector does well. It also advised the government to continue with structural reforms and significant **privatisation of state-owned companies.**
- A greater focus on **core inflation is warranted.** Core CPI inflation excludes the impact of food and fuel. Core inflation has been viewed by many as the better measure of inflation for monetary policy purposes.

Economic Survey: Things to know

- Survey recommends increasing public healthcare spending
- India’s health infrastructure needs to be agile to respond to pandemics
- India over-regulates the economy resulting in regulations being ineffective
- Legal infrastructure for the recovery of loans needs to be strengthened de facto
- Survey suggests asset quality review exercise immediately after the forbearance is withdrawn

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