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ESE-2021

(Preliminary Examination)

Current Issues

(January - March - 2021)

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19 All India 1st Ranks in ESE

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Current Issues

(January to March -2021)

ECONOMY AND INDUSTRIAL DEVELOPMENT

BANKING

Working group on digital lending

- The Reserve Bank of India (RBI) has constituted a working group on digital lending — including online platforms and mobile apps — to study all aspects of digital lending activities in the regulated financial sector as well as by unregulated players.
- This is to ensure that an appropriate regulatory approach is put in place.

Digital loan

It consists of lending through web platforms or mobile apps, by taking advantage of technology for authentication and credit assessment. India's digital lending market has seen a significant rise over the years.

Significance of Digital Lending:

- ✓ It helps in meeting the huge unmet credit need, particularly in the microenterprise and low-income consumer segment in India.
- ✓ It helps in reducing informal borrowings as it simplifies the process of borrowing.
- ✓ Indians continue to borrow from family and friends, and moneylenders, sometimes at unreasonably high interest rates, primarily because these loans are more flexible and convenient.
- ✓ It decreases time spent on working loan applications in-branch. Digital lending platforms have also been known to cut overhead costs by 30-50%.

Issues with Digital Lending Platforms:

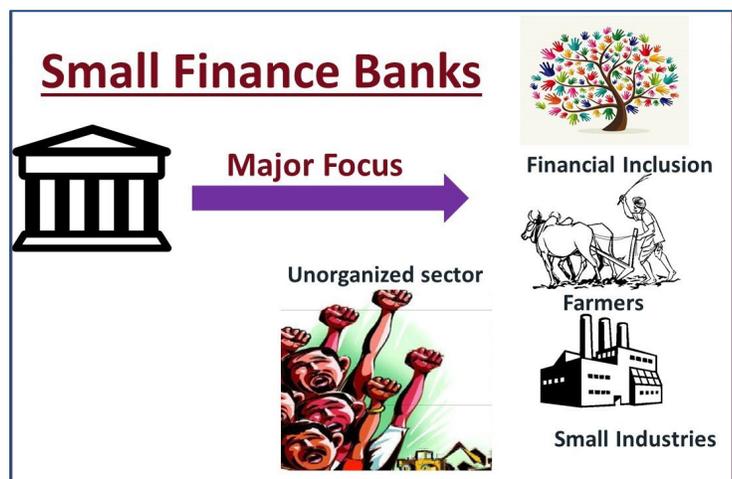
- ✓ Growing number of unauthorised digital lending platforms and mobile applications as:
- ✓ They charge excessive rates of interest and additional hidden charges.
- ✓ They adopt unacceptable and high-handed recovery methods.
- ✓ They misuse agreements to access data on mobile phones of borrowers.

- It will also recommend measures for expansion of specific regulatory or statutory perimeter and suggest the role of various regulatory and government agencies. It will also recommend a robust fair practices code for digital lending players.
- The group will submit its report within three months.

Shyamala Gopinath Panel

The news:

- The Reserve Bank of India (RBI) has announced the creation of a Standing External Advisory Committee under the chairmanship of Shyamala Gopinath for evaluating applications for Universal Banks and Small Finance Banks.
- This is part of the central bank’s earlier announced plan to give banking permits on a continuous basis to candidates, a process that is commonly known as ‘on-tap’ licensing.
- On tap licensing - means the RBI window for granting banking licences will be open throughout the year.
- Universal banking - is a system of banking where banks undertake a blanket of financial services like investment banking, commercial banking, development banking, insurance and other financial services including functions of merchant banking, mutual funds, factoring, housing finance, insurance etc.



	PAYMENTS BANKS	SMALL BANKS
WHO CAN PROMOTE	<ul style="list-style-type: none"> > Prepaid card issuers, telecom companies, NBFCs, business correspondents, supermarket chains, corporates, realty sector co-ops & PSUs 	<ul style="list-style-type: none"> > Individuals/professionals with 10 years experience in finance, NBFCs, microfinance cos, local area banks
WHAT THEY MUST DO	<ul style="list-style-type: none"> > Have a minimum capital of Rs 100cr > Maintain 75% of deposits in govt bonds > Maintain 25% of deposits in other banks > Have at least 26% investment by Indians > Get listed if net worth crosses Rs 500cr > Have 25% of branches in unbanked areas > Be fully networked and technology driven > Have Rs 1 lakh cap for deposits in one a/c 	<ul style="list-style-type: none"> > Have a minimum capital of Rs 200cr > Extend 75% of loans to priority sector > Have 25% of branches in unbanked areas > Maintain reserve requirements > Cap loans to individuals and groups at 10% and 15% of net worth > Have a business correspondent network
WHAT THEY CAN DO	<ul style="list-style-type: none"> > Offer internet banking > Sell mutual funds, insurance, pensions > Offer bill payment service for customers > Have ATMs and business correspondents (BC) > Can function as BC of another bank 	<ul style="list-style-type: none"> > Sell forex to customers > Sell mutual funds, insurance, pensions > Can convert into a full-fledged bank > Expand across the country
WHAT THEY CANT DO	<ul style="list-style-type: none"> > Offer credit cards > Extend loans > Handle cross-border remittances > Accept NRI Deposits 	<ul style="list-style-type: none"> > Extend large loans > Float subsidiaries > Cannot deal in sophisticated financial products

FINANCIAL MARKETS

Ordoliberalism is the German variant of economic liberalism that emphasizes the need for the state to ensure that the free market produces results close to its theoretical potential.

Ordoliberalism:

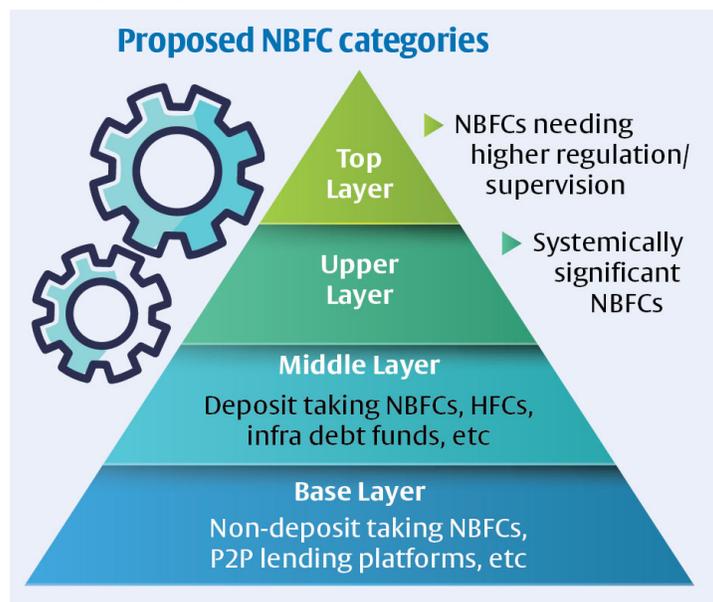
- Ordoliberal theory holds that the state must create a proper legal environment for the economy and maintain a healthy level of competition through measures that adhere to market principles. This is the foundation of its legitimacy.
- The concern is that, if the state does not take active measures to foster competition, firms with monopoly (or oligopoly) power will emerge, which will not only subvert the advantages offered by the market economy, but also possibly undermine good government, since strong economic power can be transformed into political power
- At the same time, the state must also avoid distorting the free market. Ordoliberal principles, famously adopted by former German Chancellor Ludwig Erhard, played a major role in the miraculous rise of the German economy in the post-Second World War era.
- This German variant of economic liberalism emphasizes the need for the state to ensure that the free market produces results close to its theoretical potential.

NBFC regulatory framework

- The RBI has proposed a significant shift in its regulatory approach towards India’s non-banking financial companies (NBFCs), from a general approach of light touch regulation to one that monitors larger players almost as closely as it does banks.
- If implemented, this could be the biggest overhaul of the regulatory framework for such finance companies (or shadow banks) in over two decades.

The RBI’s proposed regulatory approach:

- ✓ The regulatory and supervisory framework of NBFCs 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.
- ✓ 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.
- ✓ 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.
- ✓ 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.
- ✓ 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.
- ✓ A top tier has been envisaged with even more scrutiny, but the RBI wants to ideally use this approach only when a certain large player poses ‘extreme risks’.



Exporters send an SOS after Budget jolt

- India's exporters have red-flagged proposals in the Budget that aim to disallow IGST refunds for exports and empower customs officials to confiscate goods for making a 'wrongful claim', warning that these changes would severely hurt exports and could impact India's image as a reliable global supplier.
- More than 2,000 exporters had recently been served notices by the Department of Revenue Intelligence (DRI) and the Directorate General of GST Intelligence (DGGI) for what exporters contend are 'revenue-neutral' issues. About 5,000 exporters continued to be tagged as 'risky', which was leading to delays in their shipments and tax refunds, said the FIEO's top officials.
- The concept of revenue neutral is a system wherein all revenues that accrue to the government from a pricing system are returned to the households and businesses through some mechanism, like tax cuts.
- Since the GST is primarily intended as an exercise in reforming the consumption tax in India and not an exercise for additional resource mobilisation through discretionary changes, the CGST and SGST rates should be such rates which would yield the same revenue as collected from the various taxes which will be subsumed in the CGST and SGST, that is, it should be a 'revenue neutral rates'.

$$RNR = R \times 100 \div B$$

Where, RNR : Revenue Neutral Rate for the Centre or the States as the case may be;

R : Collection from the Central or State taxes, as the case may be, which are proposed to be subsumed in the CGST and SGST;

B : Estimated Tax base of the GST

As per a new sub-section inserted in Section 113 of the Customs Act, the government has provided for confiscation of goods for wrongful claim of remission or refund. Now, for a number of products, the drawback rate is 1%, and the remission rate is 2%.

TAXATION

'Green' tax

- Owners of old vehicles will have to pay the government a 'green' tax as a penalty for polluting the environment, which will be much steeper if you reside in one of the more polluted cities in India.
- Personal vehicles will be charged a tax at the time of renewal of Registration Certification after 15 years. The levy may differ depending on fuel (petrol/diesel) and type of vehicle. The proposal will now go to the States for consultation before it is formally notified. It includes 10-25% of road tax on transport vehicles older than eight years at the time of renewal of fitness certificate.
- The proposal on green tax also includes steeper penalty of up to 50% of road tax for older vehicles registered in some of the highly polluted cities in the country.

KEY CONTOURS

- Transport vehicles older than 8 yrs to be charged @ 10-25% of road tax**
- Personal vehicles to be charged on renewal of registration certificate after 15 years**
- EVs, vehicles using alternative fuels to be exempt**
- Farming-related vehicles also to be exempt**

- The policy will come into effect from April 1, 2022.
- In 2016, the Centre had floated a draft Voluntary Vehicle Fleet Modernisation Programme that aimed to take 28 million decade-old vehicles off the road. A panel of secretaries suggested the scheme may combine a phased regulatory approach for capping the life of vehicles along with stricter emission norms.

AGRICULTURE AND INDUSTRY

PLI plan for telecom

- The Union Cabinet approved the production-linked incentive scheme for the telecom sector with an outlay of Rs.12,195 crore over five years.
- The scheme, which aims to make India a global hub for manufacturing telecom equipment, is expected to lead to an incremental production of about Rs.2.4 lakh crore, with exports of about Rs.2 lakh crore over five years and bring in investments of more than Rs.3,000 crore.

ON THE GROUND

- Base year of incentive fixed for eligible entity**
- Incentive available on incremental sales from this base year**
- For example, base year ₹1,000 crore worth goods made**
- In year 1, ₹1,100 crore worth goods made**
- Incremental production would be ₹100 crore**
- First year benefit, in case of mobiles, 6%**
- The producer will get ₹6 crore as incentive from budget**
- The amount will fall to 4% of incremental sales by final year**

'Import dependence cut'

- The scheme was also likely to generate 40,000 direct and indirect employment opportunities and generate tax revenue of Rs.17,000 crore from telecom equipment manufacturing, including core transmission equipment, 4G/5G Next Generation Radio Access Network and wireless equipment, access and Customer Premises Equipment (CPE), Internet of Things (IoT) access devices, other wireless equipment and enterprise equipment such as switches and routers.
- With the telecom industry going through a very difficult phase, this move of the government would surely incentivise telecom service providers, who opt for equipment manufactured locally, thus saving on substantial costs relating to imports.

Biometric authentication

- In a bid to cut out the middleman and ensure greater transparency in the procurement of farm produce, the Centre is encouraging the States to deploy biometric authentication of farmers.
- The practice, already adopted in Uttar Pradesh and set to be rolled out in Madhya Pradesh, Chhattisgarh and Odisha this year, will aid in tracking the end-use beneficiary.
- The initiative comes at a time when farmers are agitating for a legal guarantee that all their crops will be procured at a minimum support price (MSP) and demanding the repeal of three farm reform laws that they believe will weaken the current system of procurement at State-run markets.
- In States such as Punjab and Haryana, where the agitation has been the strongest, middlemen who act as commission agents or arhitiyas are a key part of the procurement process at these mandis.
- The next step was the biometric authentication scheme that Uttar Pradesh had already rolled out.
- This initiative reduced the need for extensive paperwork, prevented leakages and speeded up process of procurement, with payment settlement being completed within 72 hours.
- The other advantage is that the farmer gets a receipt for his goods, showing the quantity and the MSP price, so nobody can cheat the farmer.

INFRASTRUCTURE

Interconnection Usage Charges

- The end of the Interconnection Usage Charges (IUC) regime on January 1 creates a new era in which t

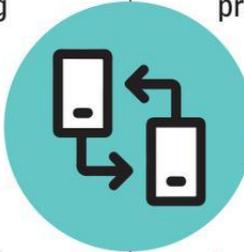
IUC is the cost that a mobile operator pays to another operator for carrying through/ terminating a call. Essentially, it is the originating network compensating the receiving network for the cost of carrying the call.

companies can focus on upgrading their networks and service.

- The measure was delayed by a year by regulator TRAI due to concerns that not all operators were ready, and the shift to more efficient 4G networks and compatible subscriber handsets was slower than anticipated.
- Now that the need to monitor call termination data and make IUC payments no longer exists, and a spectrum auction is also scheduled this year, the focus should shift to giving the users a better deal — as reliable call quality and competitive tariffs.

How IUC may be leading to more missed calls

- Interconnect usage charge (IUC) is what one mobile operator pays to another for allowing its calls
- It is 6 paise per minute, was 14 paise until 2017
- Jio's free calling meant that the company is paying 6 paise per minute for every call its customer made to other networks



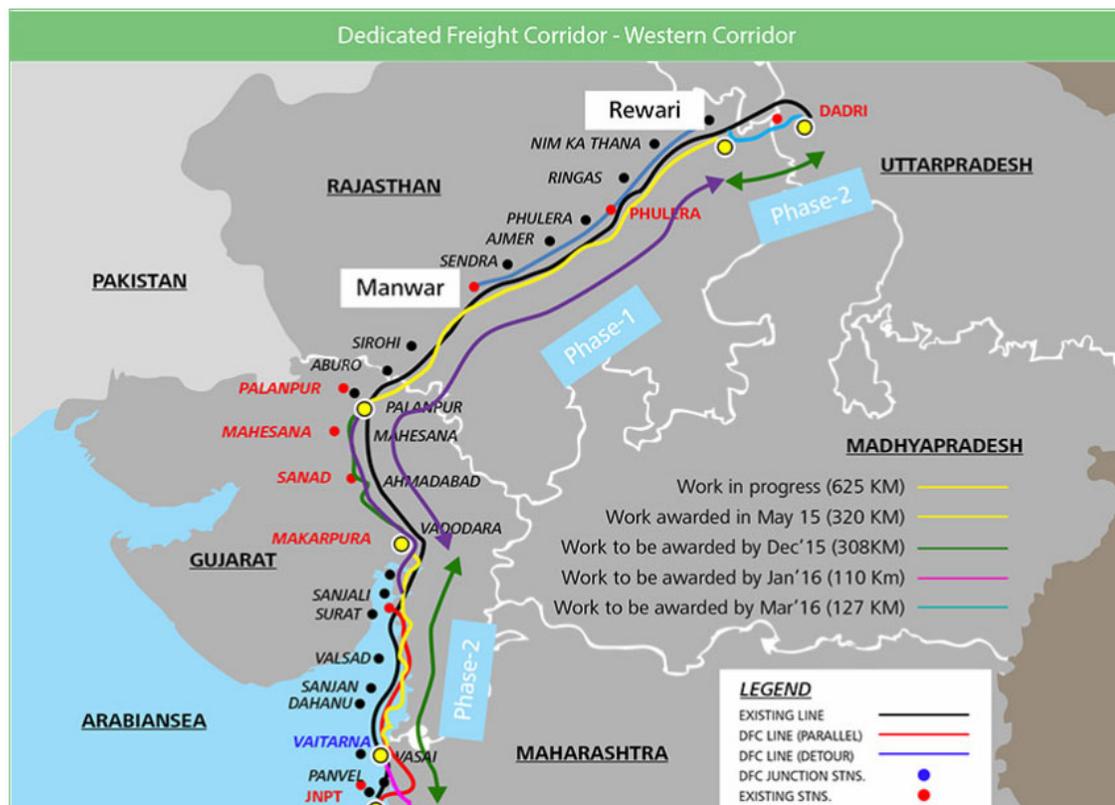
- Trai had indicated cutting IUC to zero by 2020, but is now reviewing the matter, prompting Jio to protest
- To cut IUC payments to rivals, cos have tried to reduce ringing time so that it becomes a 'missed call'
- A missed call means an incoming call becomes outgoing one, shifting the onus of IUC payment

- One operator, Jio, had a higher proportion of outgoing calls to other wireless operators since its launch a few years ago, thus having to pay significant net interconnection charges, which was six paise per minute since 2017. That imbalance has reduced, and TRAI has now introduced an arrangement called bill and keep, which does away with the IUC.

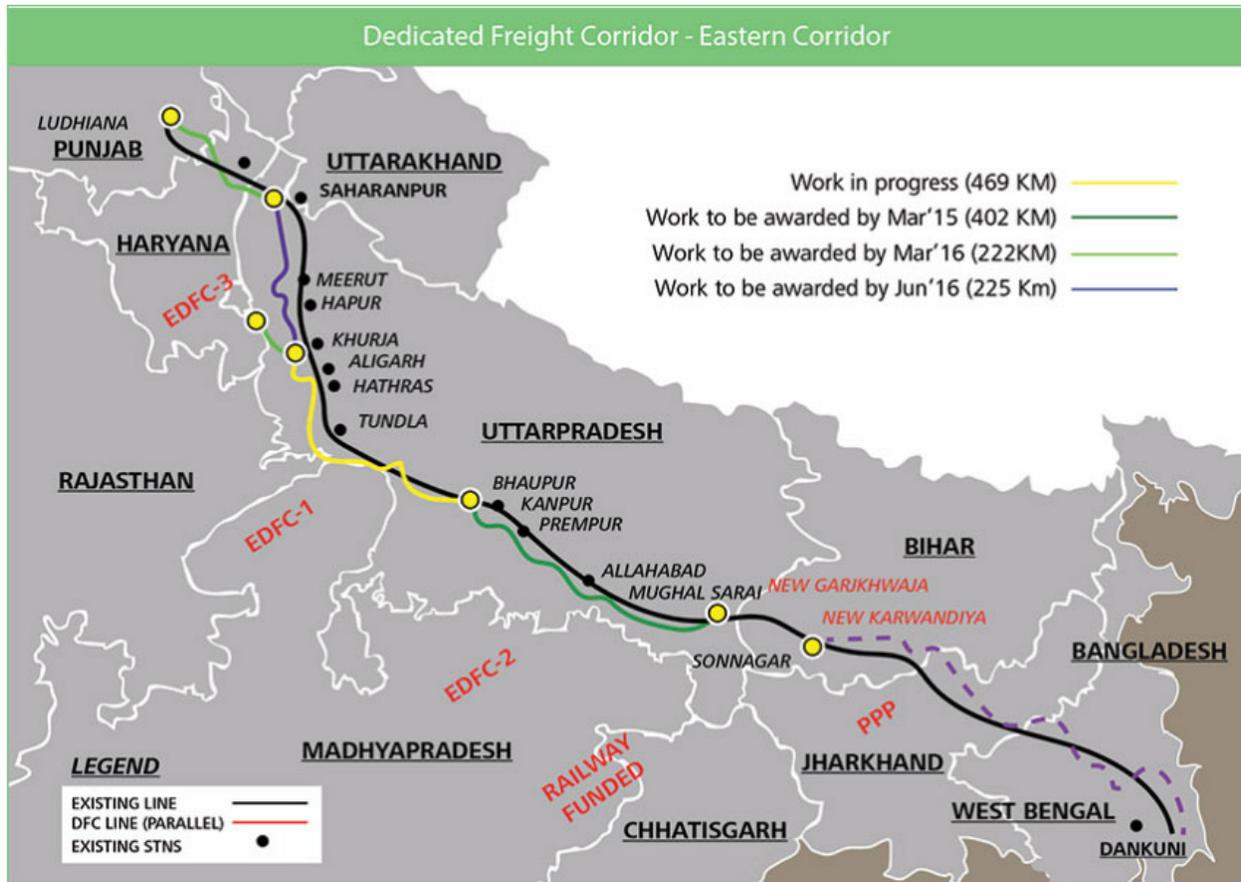
- India is a mass market for voice and data services that fuel the digital economy. Badly priced spectrum could lead to auction failures and lack of genuine competition is bound to hamper the growth of the next big wave of telecoms, of which the 5G piece is critical for new services.
- On the consumer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

New freight corridor

- Prime Minister Narendra Modi inaugurated the New Rewari-New Madar section of the Western Dedicated Freight Corridor and flagged off the world’s first 1.5-km-long electrified double stack long haul container train.
- The section, which became operational after a hard work of five to six years, would be beneficial to farmers, industrialists and businessmen in the National Capital Region, Haryana and Rajasthan.



- The corridor would lead to the development of growth centres and points in several cities, creation of job opportunities and conditions attracting more investments. It would give a new fillip to the local industries and manufacturing units by providing them faster and cheaper access to the national and international markets.
- With the launch of the double stack long haul container train between New Ateli in Haryana and New Kishanganj in Rajasthan, India had also entered the club of nations with such high capabilities.



Eastern Rajasthan Canal Project (ERCP)

The news:

Rajasthan Chief Minister Ashok Gehlot has been strongly demanding national project status for the Eastern Rajasthan Canal Project (ERCP).

Background:

- The Eastern Rajasthan Canal Project aims to harvest surplus water available during the rainy season in rivers in southern Rajasthan such as Chambal and its tributaries including Kunnu, Parvati, Kalisindh.
- Besides supplying drinking water in 13 districts, the mega project will also provide irrigation water to an additional 2 lakh hectares of land.
- It will also supply water to the Delhi-Mumbai Industrial Corridor and take care of the flood and drought situation in the area.
- According to the state Water Resources Department, Rajasthan, the largest state of India with a geographical area of 342.52 lakh hectares which amount to 10.4 per cent of the entire country, holds only 1.16 per cent of India’s surface water and 1.72 per cent of groundwater.

- Among the state's water bodies, only the Chambal river basin has surplus water. But, this water cannot be tapped directly because the area around the Kota barrage is designated as a crocodile sanctuary.
- Therefore, the ERCP aims to create a network of water channels which will cover 23.67 per cent area of Rajasthan along with 41.13 per cent population of the state.

List of Projects so far declared by the Government as National Projects

1	Gosi Khurd Irrigation Project	Maharashtra
2	Shahpurkandi dam project	Punjab
3	Teesta Barrage Project	West Bengal
4	Saryu Nahar Pariyojna	Uttar Pradesh
5	Polavaram Project	Andhra Pradesh
6	Lakhwar Vyasi Multipurpose Project	Uttrakhand
7	Renuka Dam Project	Himachal Pradesh
8	Ujh Multipurpose Project	J & K
9	Kishau Multipurpose Project	HP/Uttrakhand
10	Ken Betwa Link Project	Madhya Pradesh
11	Kulsi Dam Project	Assam
12	Noa-Dihing Dam Project	Arunachal Pradesh
13	Bursar HE Project	J & K
14	Gyspa HE Project	Himachal Pradesh
15	2nd Ravi Vyas Link Project	Punjab
16	Upper Siang Project	Arunachal Pradesh

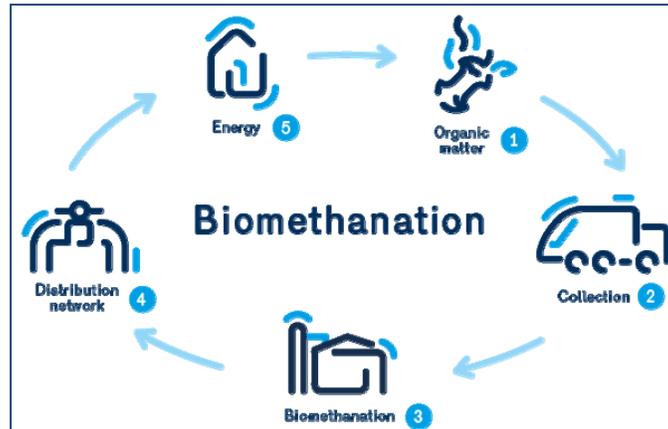
ENERGY

Garbage-to-power plant

- Prime Minister Narendra Modi, during his first Mann Ki Baat address for the year, made a mention of the garbage-to-power plant being commissioned inside the Dr. B.R. Ambedkar Agriculture Market in Bowenpally.
- Vegetable and fruit waste is used to generate power to the extent of 500 units a day and 30 kilos of green manure at the plant.
- This is being done by making use of 10 tonnes of left over market waste. The power generated is being used to light up the market and also run the canteen in the premises enabling the market committee to make substantial savings in power bills.

- The CSIR-Indian Institute of Chemical Technology (IICT) has designed and patented the high rate biomethanation technology-based Anaerobic Gas lift Reactor (AGR) for this Rs.3 crore project funded by the Department of Biotechnology and the Telengana government's Agriculture Marketing Department.

Biomethanation:



Biomethanation is a process by which organic material is microbiologically converted under anaerobic conditions to biogas. Three main physiological groups of microorganisms are involved: fermenting bacteria, organic acid oxidizing bacteria, and methanogenic archaea.

Diversification of oil imports

The news:

- India has asked state refiners to speed up diversification of oil imports to gradually cut their dependence on West Asian suppliers after OPEC+ decided to largely continue production cuts in April.
- The world's third biggest oil consumer imports about 84% of its crude needs with over 60% of that coming from West Asian countries, which are typically cheaper than those from the West.
- India, hit hard by rising oil prices, has urged producers to ease output cuts and help the global economic recovery. In response, the Saudi energy minister told India to dip into strategic reserves filled with cheaper oil bought last year.
- India had not cancelled any shipment of West Asian crude when oil demand collapsed due to COVID-19, the source said. OPEC's share in India's oil imports declined to historic lows in the first 10 months of this fiscal year.
- Iraq and Saudi Arabia are the two biggest suppliers of crude oil to India.

Ethanol-blended petrol

- Recently, fuel outlets began placing banners stating that the petrol they sell contains ethanol, which is a bio-fuel obtained primarily from sugarcane.
- This blending is being done by the oil marketing companies in their terminals. There have been reports of vehicle owners questioning presence of water in the petrol, especially down south in the State.

Ethanol -

- It is the organic compound Ethyl Alcohol which is produced from biomass. It is also an ingredient in alcoholic beverages.
- It has a higher octane number than gasoline, hence improves the petrol octane number. Ethanol has insignificant amount of water in it.

Blending ethanol with petrol -effect on the vehicle's pick up:

- It will not have any effect. Since ethanol contains oxygen, it is supposed to help in complete combustion of fuel, resulting in lower emissions.

Percentage of ethanol that is blended-

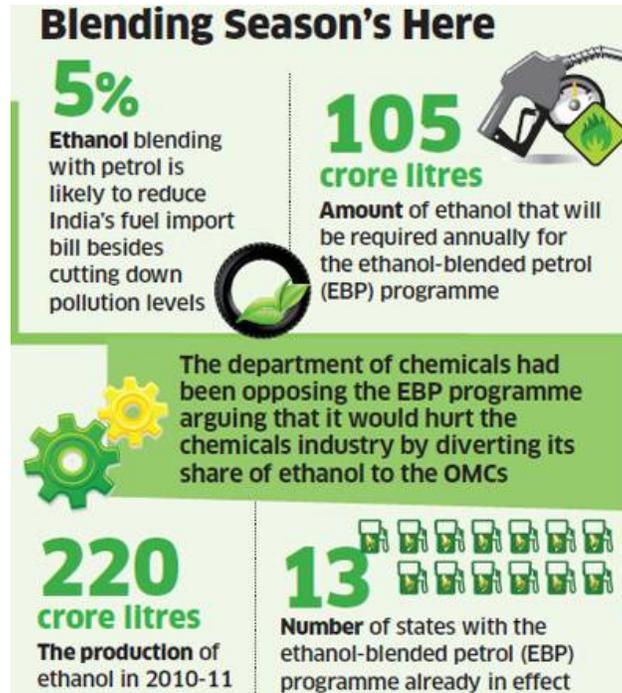
- India has an ethanol production capacity of 684 crore litre. For the targeted 20% blending of ethanol in petrol by 2030, the country will need a 1,000 crore litre capacity.

Ethanol cost-

- A litre of ethanol currently costs ₹61. But its price depends on internal fuel prices. There is however no change in the price of petrol or motor spirit, as it is called, due to ethanol blending. The consumer pays for a litre of petrol only.

Quality checks-

- Petroleum dealers have been asked to adhere to quality checks. There is no issue in case such checks are conducted and proper procedures followed.
- Ethanol has an insignificant amount of water in it and if the mix is as stipulated it does not do any harm. Since ethanol is blended in the terminal itself, there is no chance that it will separate from the petrol.



Government incentives-

- Financial assistance will be provided to set up distilleries to produce 1st Generation (1G) ethanol from feedstocks such as cereals (rice, wheat, barley, corn, and sorghum); sugarcane; and sugar beet. Assistance will also be provided for the conversion of molasses-based distilleries to dual feedstock.
- Under the program, the government would bear interest subvention for five years, including a one-year moratorium against the loan availed by project proponents from banks at 6% per annum or 50% of interest, whichever is lower. The new program is expected to bring about ₹400 billion (~\$5.47 billion) in investments.

ISSUES ON SOCIAL DEVELOPMENT

EDUCATION

Happiness Curriculum

- Uttar Pradesh government is likely to introduce a ‘happiness curriculum’ as a pilot project from this academic session.
- To be called ‘realisation curriculum’, it would be introduced in Mathura schools this session onwards.
- The purpose to launch the curriculum in UP is to support students in their journey to sustainable happiness through engagement in meaningful and reflective stories and activities.
- The happiness curriculum was first introduced by the Delhi government in 2018.
- The curriculum calls for schools to promote development in cognition, language, literacy, numeracy and the arts along with addressing the wellbeing and happiness of students.
- The curriculum is designed for students of classes nursery through the eighth standard.
- Group 1 consists of students in nursery and KG, who have bi-weekly classes (45 minutes each for one session, which is supervised by a teacher) involving mindfulness activities and exercise. Children between classes 1-2 attend classes on weekdays, which involves mindfulness activities and exercises along with taking up reflective questions.

WHAT IS HAPPINESS CURRICULUM

<ul style="list-style-type: none"> ➤ It calls for schools to address the well-being and happiness of students along with inculcating skills of critical thinking and inquiry ➤ It aims to enable learners to communicate effectively and apply life skills to stressful and conflicting situations ➤ The scheme of Delhi government was launched in July 2018 	 <ul style="list-style-type: none"> ➤ Shravan Kumar Shukla, a government school teacher from Gorakhpur, was a core member of the team in Delhi
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- The second group comprises students from classes 3-5 and the third group is comprised of students from classes 6-8 who apart from the aforementioned activities, take part in self-expression and reflect on their behavioural changes.
- The learning outcomes of this curriculum are spread across four categories:
 1. Becoming mindful and attentive (developing increased levels of self-awareness, developing active listening, remaining in the present).

2. developing critical thinking and reflection (developing strong abilities to reflect on one's own thoughts and behaviours, thinking beyond stereotypes and assumptions).
 3. developing social-emotional skills (demonstrating empathy, coping with anxiety and stress).
 4. developing better communication skills) and developing a confident and pleasant personality (developing a balanced outlook on daily life reflecting self-confidence, becoming responsible and reflecting awareness towards cleanliness, health and hygiene).
- For the evaluation, no examinations are conducted, neither will marks be awarded. The assessment under this curriculum is qualitative, focusing on the “process rather than the outcome” and noting that each student’s journey is unique and different.

HEALTH AND HOUSING

Project for affordable housing

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

Home solution

The Global Housing Technology Challenge is aimed at introducing best technologies to construct houses quickly and at a lower cost



- 6 winners will design and build projects of 1,000 housing units each
- The State and the Centre each will provide assistance of ₹1.5 lakh
- The Centre will give an additional technology grant of ₹2.5 lakh for each house
- Incubation facilities will be provided to develop building technologies with support from four IITs
- The approved technologies will be displayed by Central Public Works Department along with the rates

- The Ministry of Housing and Urban Affairs has conceptualized a Global Housing Technology Challenge - India (GHTC- India) which aims to identify and mainstream a basket of innovative technologies from across the globe for the housing construction sector that are sustainable, eco-friendly and disaster-resilient.
- The Prime Minister declared the year 2019-20 as ‘Construction Technology Year’ while inaugurating GHTC-India in March 2019.

3 Components of GHTC-India:

- ✓ *Grand Expo and Conference*: It is organized biennially to provide a platform to all stakeholders associated with housing construction for the exchange of knowledge and business.
- ✓ *Proven Demonstrable Technologies for the Construction of Lighthouse Projects*: These projects demonstrate the merits of the selected technologies and serve as live laboratories for research, testing, technology transfer, increasing mass awareness and for mainstreaming them in the country.
- ✓ *Potential Future Technologies for Incubation and Acceleration Support*: Potential future technologies from India that are applicable to the housing sector will be supported and encouraged through the ASHA (Affordable Sustainable Housing Accelerators) India program.
- Another major initiative — the Central rental housing complex project — was conceived last year, for migrant labourers. The project was being implemented in coordination with industrialists and other investors.

Animal Ambulance Network

- The state government of the Andhra Pradesh has decided to set up “India’s first government-run ambulance network” for animals. This decision was taken in order to further boost the animal husbandry and veterinary sector in the state.
- The Animal Husbandry Department was directed to set up one Mobile Ambulance Veterinary Clinic at each of the assembly constituency.
- Under the animal ambulance network, 175 mobile ambulances (veterinary) clinics will be placed in total at Assembly Constituency Level. These clinics is being set up on the lines of 108 Services to provide the Veterinary services at the doorstep.
- The mobile ambulances will provide the veterinary first aid services besides the spot diagnosis and attending all the emergency cases. The ambulance will also be providing the “Hydraulic Lift Facility” to lift the animals and shift them to the nearest Government Veterinary Facility in the emergency cases.
- The ambulance will always be carrying one veterinary doctor and one para-veterinary worker. These ambulances will also run a 24/7 toll-free call centre.



Veterinary Dispensaries

- The department of Animal Husbandry has highlighted that in total 1,576 veterinary dispensaries have been established across the state. In these dispensaries around 1,376 veterinary doctors have been recruited. More doctors will be recruited to ensure better functioning and treatment.

WOMEN AND CHILDREN

Maternal welfare scheme beneficiaries

- The government's maternity benefit scheme, or Pradhan Mantri Matru Vandana Yojana, has crossed 1.75 crore eligible women till financial year 2020.
- According to the government's initial estimate, it aimed to reach 51.7 lakh women per year through the scheme.
- Under PMMVY, pregnant women and lactating mothers receive Rs.5,000 on the birth of their first child in three instalments, after fulfilling certain conditionalities. The direct benefit cash transfer is to help expectant mothers meet enhanced nutritional requirements as well as to partially compensate them for wage loss during their pregnancy.
- The scheme was announced on December 31, 2016, by Prime Minister Narendra Modi in a televised address to the nation.

Incentive Disbursal Structure Under PMMVY

1st Instalment
₹1000

On early registration of pregnancy at an Anganwadi Centre (AWC)/ approved health facility

2nd Instalment
₹2000

Disbursed after 6 months of pregnancy on receiving at least one ante-natal check-up (ANC)

3rd Instalment
₹2000

After the birth of the child gets registered and the child has received the first cycle of immunization for BCG, OPV, DPT and Hepatitis-B

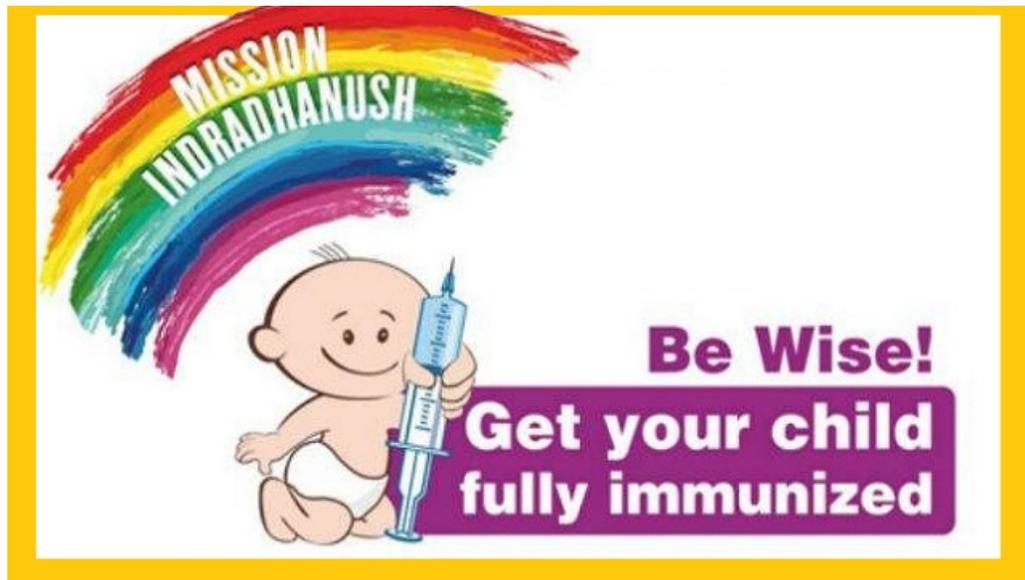


PRADHAN MANTRI MATRU VANDANA YOJANA (PMMVY)

- Maternity benefit programme implemented from 01.01.2017
- Incentive of ₹5000 to pregnant women and lactating mothers
- Provides partial compensation for wage loss so that woman can take adequate rest before and after delivery
- Cash incentive provided leads to improved health seeking behaviour
- Efficiency in the implementation touched 90% mark in 2019
- Aims to achieve 100% target in 2020

Indradhanush 3.0

- The States and Union Territories (UTs) have rolled out the Intensified Mission Indradhanush (IMI) 3.0 scheme to cover children and pregnant women who missed routine immunisation during the COVID-19 pandemic. More than 29,000 children and 5,000 pregnant women were covered on the first day.
- The campaign is scheduled to have two rounds of immunisation lasting 15 days (excluding routine immunisation and holidays). It is being conducted in 250 pre-identified districts/urban areas across 29 States/UTs.



Remote areas

- Beneficiaries from migration areas and remote areas would be targeted as they may have missed their vaccine doses during the pandemic. As per the guidelines released for IMI 3.0, the districts have been classified to reflect 313 low risk, 152 medium risk and 250 high risk districts.
- The States have been asked to follow a “staggered approach” to avoid crowding at the session sites and even plan break-up sessions if a staggered approach is not effective.
- The sessions have also been planned in such a way that not more than 10 beneficiaries are present at the session site at one given point in time.

SmartUp Unnati programme

- This programme was launched on the occasion of International Women’s Day.
- Under this programme, the senior women leaders from the HDFC Bank with the expertise will mentor the women entrepreneurs so as to help them in achieving their goals in next one year.

- This programme is available for the existing customers of the bank. The programme will initially target more than 3,000 women entrepreneurs who are associated with the SmartUp programme of the bank.
- Under the programme, the senior women executive leaders' will be acting as the sounding board for women entrepreneurs. Thus, it is a programme for women by women.
- This programme will provide women the access to mentorship and help them in expanding their visions. It will also enable them to scale up their businesses by widening their visions. This, it will encourage the women entrepreneurs to face the challenges which are unique to them.
- The SmartUp programme was launched by the HDFC Bank in the year 2018. It is an online mentoring platform which was launched for banking start-ups. Under this programme, HDFC is working with the state governments, incubators and accelerators in a bid to promote the entrepreneurship. The programme recognises the challenge that the entrepreneurs usually face ranging from “accessing credit” to “formulating strategy in the dynamic business environment”.

WATER AND SANITATION

Catch the rain Campaign

- National Water Mission, Ministry of Jal Shakti had launched a campaign “Catch the Rain” with the tag line “Catch the rain, where it falls, when it falls” in 2020.
- It aims to nudge the states and all stakeholders to create Rain Water Harvesting Structures (RWHS) suitable to the climatic conditions and sub-soil strata, with people's active participation.
- Launched in collaboration with the “Nehru Yuva Kendra Sangathan” (NYKS) involving Youth Clubs in 623 districts across the country.



- Under this campaign, drives to make check dams, water harvesting pits, rooftop RWHS etc; removal of encroachments and de-silting of tanks to increase their storage capacity; removal of obstructions in the channels which bring water to them from the catchment areas etc; repairs to step-wells and using defunct

bore-wells and unused wells to put water back to aquifers etc are to be taken up with the active participation of people.

- To facilitate these activities, states have been requested to open “Rain Centers” in each district-- in Collectorate/Municipalities or GP offices.
- During this period, these Rain Centres will have a dedicated mobile phone number and will be manned by an engineer or a person well trained in RWHS. This centre act as a technical guidance centre to all in the district as to how to catch the rain, as it falls, where it falls.

SKILL DEVELOPMENT

Government to monitor OTT content

- For the first time, the government, under the ambit of the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules 2021, has brought in detailed guidelines for digital content on both digital media and Over The Top (OTT) platforms, while giving itself overriding powers.

Emergency powers

- The new rules lay down a three-tier grievance redressal mechanism.
- However, over and above this framework, the government has equipped itself with “emergency” powers to block public access of any information.
- Such orders can be released “without giving an opportunity of hearing” to the publishing platform.
- The first level of the grievance redressal system will be at the level of each OTT provider. Each complaint will have to be addressed within 15 days.
- If the complaint is not satisfactorily addressed, then the complainant can scale it up to a self-regulatory body collectively established by the OTTs.
- This body will be headed by a retired judge of the Supreme Court, a High Court, or an independent eminent person from the field of media, broadcasting, entertainment, child rights, human rights or other relevant fields.
- This self-regulatory body also has “censuring” powers in case of any incriminating content.
- At the third tier, the government has equipped itself with overriding powers in the form of “oversight mechanism”. An inter-ministerial committee will perform this function and it will largely have the same powers as the collective self regulatory body of the OTTs.

BILLS AND ACTS

Special Marriage act

The Allahabad High Court ruling that people marrying under the Special Marriage Act, 1954, can choose not to publicise their union with a notice 30 days in advance may not exactly be a judicial pushback

The Special Marriage Act, 1954 is an Act of the Parliament of India with provision for civil marriage (or "registered marriage") for people of India and all Indian nationals in foreign countries, irrespective of the religion or faith followed by either party.

against problematic anti-conversion laws.

- The parties wishing to marry are supposed to give a notice for their marriage to the Marriage Officer in an area where one of the spouses has been living for the last 30 days. Then, the marriage officer publishes the notice of marriage in his office.
- Anyone having any objection to the marriage can file against it within a period of 30 days. If any such objection against the marriage is sustained by the marriage officer, the marriage can be rejected.
- The high court ruling serves to get a major irritant out of the way of couples wanting to marry against the wishes of their parents or their immediate community.
- Many intercaste and inter-faith marriages have faced violent opposition from those acting in the name of community pride or those raising the bogey of 'love jihad'.
- The court said that mandatorily publishing a notice of the intended marriage and calling for objections violates the right to privacy.

Sullyng reputation a ground for divorce

Allegations of an estranged spouse which has the effect of sullyng the other's reputation and career amounts to "mental cruelty" and forms a ground for divorce, the Supreme Court said in a recent judgment.

Judgement:

- The result of this 'mental cruelty' must be such that continuation of a marital relationship be impossible. In other words, the wronged person can hardly be expected to condone the other.
- The degree of tolerance will vary from one couple to another and the court will have to bear in mind the background, the level of education and also the status of the parties, in order to determine whether the cruelty alleged is sufficient to justify dissolution of marriage.
- The judgment came in an appeal filed by an Army officer whose estranged wife had filed a series of complaints against him with his superiors, even the Army chief.

Facts:**Grounds For Divorce:**

It is important to bear an understanding of the Applicable Law:

- Indian Divorce Act, 1869 governs the divorce procedure for Christians.
- Hindu Marriage Act, 1955 for Hindu, Jains, Buddhists, and Sikhs.
- Parsi Marriage and Divorce Act, 1936 is followed for divorce procedure in Parsi couples.
- Procedure and grounds for divorce under the Dissolution of Muslim Marriage Act, 1939 are taken into account for Muslim couples.

Following are the 9 common legal grounds for divorce which are widely present in all current enactments on divorce law:

- ✓ Adultery
- ✓ Desertion
- ✓ Insanity
- ✓ Conversion
- ✓ Renunciation
- ✓ Cruelty
- ✓ Venereal disease
- ✓ Presumption of death

Places of Worship Act**The news:**

- A co-mutawalli of 350-year-old "TeelyWali masjid" of Lucknow, has approached the Supreme Court seeking intervention in the pending PIL challenging provisions of the Places of Worship Act.
- The applicant has opposed the plea claiming that the petition is a mischievous one which aims at isolating the Muslim Community as a separate category from other religious communities in India.

Key features:

- The Act declares that the religious character of a place of worship shall continue to be the same as it was on August 15, 1947.
- It says no person shall convert any place of worship of any religious denomination into one of a different denomination or section.
- It declares that all suits, appeals or any other proceedings regarding converting the character of a place of worship, which are pending before any court or authority on August 15, 1947, will abate as soon as the law comes into force. No further legal proceedings can be instituted.

Shared spaces

The Vishwa Hindu Parishad and other Hindu groups have in the past laid claim to Shahi Idgah, located adjacent to Krishna Janmabhoomi Temple in Mathura, and Gyanvapi Mosque, next to Kashi Vishwanath Temple in Varanasi



▶ Krishna Temple, left, and Shahi Idgah, right, exist side by side. Security camps were added following the demolition of Babri Masjid in 1992

PHOTOS: THE HINDU



▶ A photo of Kashi Vishwanath Temple, left, and Gyanvapi Mosque, right, taken in 2012. Last October, part of the wall separating the two was demolished by a government contractor

After independence, we have set about healing the wounds of the past and endeavoured to restore our traditions of communal amity and goodwill to their past glory. By and large, we have succeeded, although there have been, it must be admitted, some unfortunate setbacks

S.B. CHAVAN
Home Minister of the day,
in Lok Sabha in Sept. 1991



In providing a guarantee for the preservation of the religious character of places of public worship as they existed on 15 August, 1947, and against the conversion of places of public worship, Parliament determined that independence from colonial rule furnishes a constitutional basis for healing the injustices of the past by providing the confidence to every religious community that their places of worship will be preserved and that their character will not be altered

SUPREME COURT OF INDIA



These provisions will not apply to:

- Ancient and historical monuments and archaeological sites and remains that are covered by the Ancient Monuments and Archaeological Sites and Remains Act, 1958.
- A suit that has been finally settled or disposed of; and any dispute that has been settled by the parties or conversion of any place that took place by acquiescence before the Act commenced.
- The Act also does not apply to the place of worship commonly referred to as Ram Janmabhoomi-Babri Masjid in Ayodhya. This law will have overriding effect over any other law in force.

INTERNATIONAL ISSUES

China's Defence law

- China's President Xi Jinping has signed an order that has amended China's National Defence Law.
- The revised regulations on military equipment, which are effective as of January 1, focus on "war preparedness and combat capabilities", "define the basic tasks, contents and management mechanisms for military equipment work under the new situation and system."



- Draft amendments released last year noted that "when China's sovereignty, unity, territorial integrity, and security and development interests are under threat, the country can conduct nationwide or local defense mobilisation".
- The phrase "development interests" was a new addition to the law, with experts noting this also included the protection of China's economic activities and assets overseas, such as those under the Belt and Road Initiative, as a reason for defence mobilisation.
- In 2016, Mr. Xi pushed sweeping reforms of the PLA and brought its various departments under more direct control of the CMC, which he heads. Seven military regions were reorganised into five integrated theater commands. The Western Theater Command, the largest, is responsible for the border with India.

U.S. Capitol attacks

As a pro-Trump mob swarmed the U.S. Capitol on January 6, the comparisons drawn to the storming of Hong Kong's Legislative Council (LegCo) complex on July 1, 2019 were immediate.

The two historic moments marked days when protest movements breached the hearts of their respective governments. But that is where the similarities ended. Beyond this superficial level, the differences between the two were numerous.

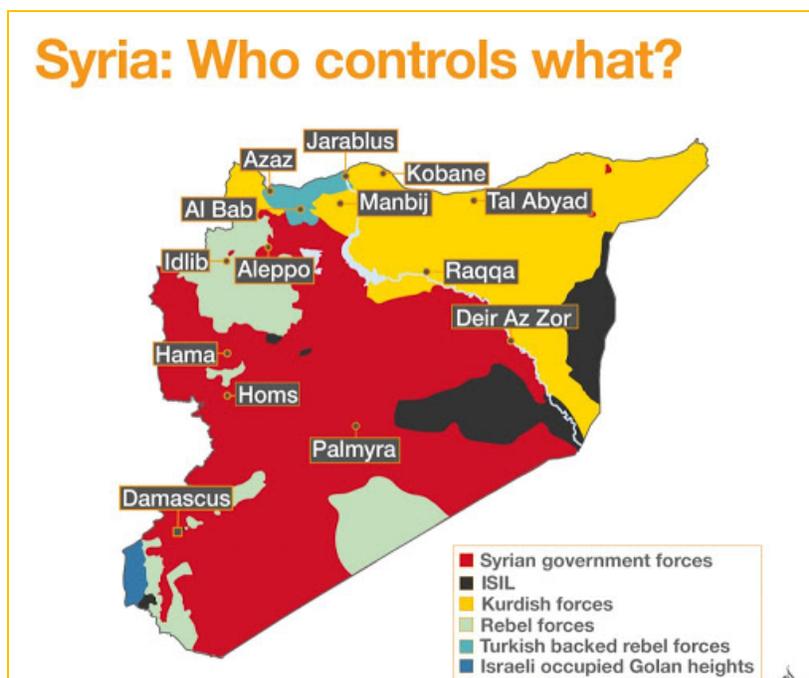
Stark differences

- While those besieging the Capitol sought to overturn the results of an election to cement their strongman leader's rule, those in Hong Kong sought to secure their right to elect their leader and govern themselves, as promised in their own constitutional document.
- While hordes supporting U.S. President Donald Trump stormed the Capitol as Congress was in session, intending to hold their elected representatives hostage, LegCo was occupied late at night when it was empty.
- The target of the Hong Kong protesters was not any individual but a symbol: a building that, far from a centuries-old temple of democracy, was a barely eight-year-old steel-and-glass dolmen for a government they had never voted for, and which continued to ignore them even when two million Hong Kongers marched peacefully through the streets to demand the withdrawal of a bill allowing criminal suspects to be sent to Communist Party-controlled courts in mainland China.
- But not all comparisons between Washington and Hong Kong are unwarranted. Days after the LegCo siege, another watershed event took place that bears far more of a resemblance to the events on Capitol Hill: the infamous attack at Yuen Long station, launched by pro-government thugs viciously and indiscriminately targeting returning protesters, journalists and everyday commuters.
- The venue — a metro station far from the city centre in the northwest New Territories — was different, but the motivations and actions of the Yuen Long mob share far more in common with the one on Capitol Hill: manipulated by establishment figures to exact revenge against those desperately seeking to make their voices heard, and the “fake news” media deemed complicit in helping to project these voices.
- No arrests were made on the scene, and it later emerged that police had received warnings about the impending attack and had observed the throng of men wielding wooden sticks, poles, rattan canes, steel rods, and even knives as they amassed outside the station.

	Capitol hill attack	LegCo seige	Yuen Long station attack
			(happened as a response to LegCo seige)
Aim	To over run election results	to secure their right to elect their leader	targeting returning protesters
When it took place	as Congress was in session	late at night when it was empty	Days after the LegCo siege
Targets	Individuals in the capitol	eight-year-old steel-and-glass dolmen	returning protesters, journalists and everyday commuters
Venue	U.S Capitol hill	Hong Kong's legislatice council	Near Yuen Long station

Syrian war casualties

- The Syrian conflict claimed the lives of at least 6,800 people in 2020, the lowest annual death toll since it began nearly a decade ago.
- According to figures compiled by the Syrian Observatory for Human Rights, more than 10,000 people were killed in the conflict in 2019. The deadliest year was 2014, when more than 76,000 people died, according to the U.K.-based organisation, which has an extensive network of sources on the ground.
- The overall tally since the start of the conflict has crept up to 3,87,000, including 1,17,000 civilians.



- The fighting, which erupted in 2011 after the brutal repression of anti-government protests, largely abated in 2020 as a ceasefire was held in northwestern Syria and attention turned to containing the COVID-19 pandemic.

Iran steps up Uranium enrichment

The Syrian civil war is an ongoing multi-sided civil war in Syria fought between the Ba'athist Syrian Arab Republic led by Syrian president Bashar al-Assad, along with domestic and foreign allies, and various domestic and foreign forces opposing both the Syrian government and each other in varying combinations.

- Iran began enriching uranium up to 20% at an underground facility and seized a South Korean-flagged oil tanker in the crucial Strait of Hormuz, further escalating tensions in West Asia between Tehran and the West.



Iran seizes South Korean-flagged ship

Iran's Revolutionary Guards Corps seized a South Korean-flagged tanker in Gulf waters and detained its crew, Iranian media said on Monday, amid tensions between Tehran and Seoul over Iranian funds frozen in South Korean banks due to U.S. sanctions.

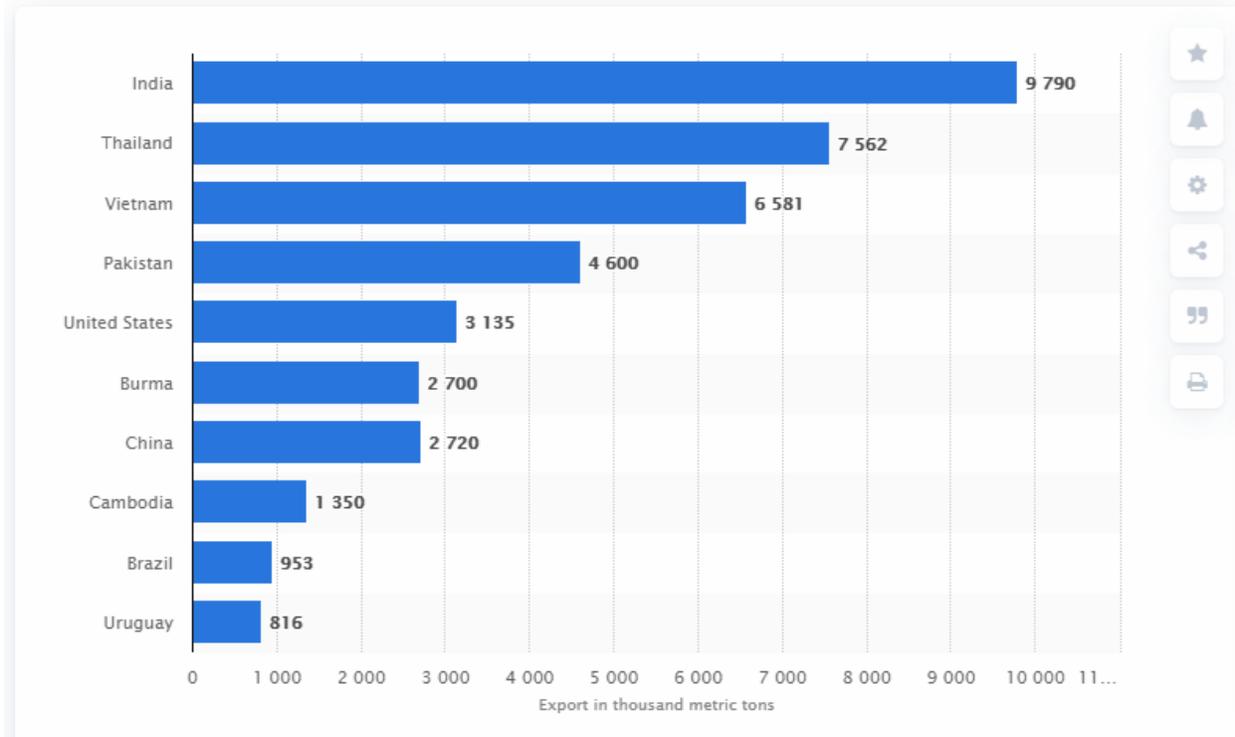


- The dual incidents come amid heightened tensions between Iran and the U.S. in the waning days of President Donald Trump's term in office. During Mr. Trump's tenure, the U.S. leader unilaterally withdrew from Tehran's nuclear deal with world powers in 2018 and set off months of tense episodes that increasingly strained relations between the countries.
- Iran's decision to begin enriching to 20% purity a decade ago nearly triggered an Israeli strike targeting its nuclear facilities, tensions that only abated with the 2015 atomic deal. A resumption of 20% enrichment could see that brinkmanship return as that level of purity is only a technical step away from weapons-grade levels of 90%.

Vietnam buys Indian rice

- Vietnam, the world's third biggest exporter of rice, has started buying the grain from rival India for the first time in decades after local prices jumped to their highest in nine years amid limited domestic supplies.
- The purchases underscore 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.

Principal rice exporting countries worldwide in 2018/2019 (in 1,000 metric tons)



- Indian traders have contracted to export 70,000 tonnes of 100% broken rice for January and February shipments at about \$310 per tonne on a free-on-board basis.

Reasons behind:

- Indian prices are very attractive. The huge price difference is making exports possible.” Vietnam’s 5% broken rice is offered at about \$500-\$505 per tonne, compared to Indian prices of \$381-\$387. Dwindling supplies and continued Philippine buying lifted Vietnamese rice export prices to a fresh nine-year high.
- In 2020 India exported a record 14 million tonnes of rice, provisional data from the trade Ministry showed.

Open Skies treaty

- Russia announced it was pulling out of the Open Skies treaty, saying that the pact, which allows unarmed surveillance flights over member countries, had been seriously compromised by the withdrawal of the United States.

Open Skies Treaty

First proposed in 1955 by former US President Dwight Eisenhower as a means to deescalate tensions during the Cold War, the landmark treaty was eventually signed in 1992 between NATO members and former Warsaw Pact countries following the demise of the Soviet Union. It went into effect in 2002 and currently has 35 signatories along with one non-ratifying member (Kyrgyzstan).

The OST aims at building confidence among members through mutual openness, thus reducing the chances of accidental war. Under the treaty, a member state can “spy” on any part of the host nation, with the latter’s consent. A country can undertake aerial imaging over the host state after giving notice 72 hours before, and sharing its exact flight path 24 hours before.

- The United States left the Open Skies arms control and verification treaty in November, accusing Russia of violating it, something Moscow denied.
- Russia said in a statement that Moscow had made specific proposals to other members to mitigate against the impact of the U.S. exit but that those proposals were not backed by Washington’s allies.
- Moscow will formally notify other member states about its exit once it has completed unspecified withdrawal procedures at home, it said. The exit process usually takes months to be finalised.

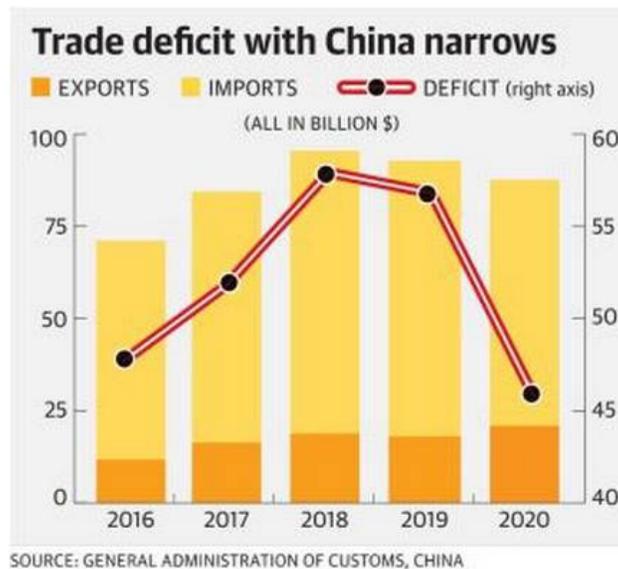
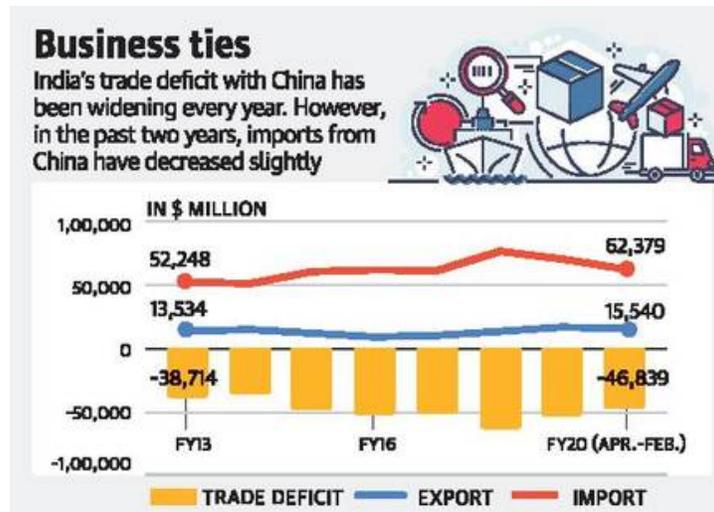


Sharing of intelligence

- Russia has raised concerns that despite leaving the treaty Washington could potentially retain access to overflight intelligence gathered by allies who remain members in the treaty.
- The Kommersant newspaper reported earlier that Moscow had tried to get guarantees from other countries that they would not share such intelligence with the U.S. but had not been given any assurances.

Trade deficit with China

- India’s exports to China jumped 16% to a record high of \$20.86 billion as Asia’s largest economy consumed more iron ore.
- India’s trade with China declined last year to the lowest level since 2017, with the trade deficit narrowing to a five-year low as the country imported far fewer goods from its northern neighbour.
- Bilateral trade slid 5.6% to \$87.6 billion, according to new figures from China’s General Administration of Customs (GAC). India’s imports from China shrank by 10.8% to \$66.7 billion, marking the lowest level of inbound shipments since 2016.
- India’s exports to China, however, jumped 16%, crossing the \$20 billion-mark for the first time to a record high of \$20.86 billion.
- The trade deficit, a source of friction in bilateral ties, shrank to \$45.8 billion, the lowest level since 2015.



- India's biggest import in 2019 was electrical machinery and equipment, worth \$20.17 billion. Other major imports in 2019 were organic chemicals (\$8.39 billion) and fertilisers (\$1.67 billion), while India's top exports that year were iron ore, organic chemicals, cotton and unfinished diamonds.
- The last 12 months saw a surge in demand for iron ore in China, as a slew of new infrastructure projects aimed at reviving growth after the COVID-19 slump lifted consumption of steel. Total iron ore imports in Asia's largest economy rose 9.5% in 2020.
- The drop in India's imports from China largely mirrored a decline in overall inbound shipments last year as domestic demand slumped in the wake of the pandemic.
- The dip in exports to India bucked a strong year for Chinese exports, which surged 10.9% in December and grew 4% in 2020, aided by the economic recovery in China while many countries worldwide remained in various stages of lockdown.
- China was "the world's only major economy to have registered positive growth in foreign trade in goods."

India wants Chabahar port on key corridor

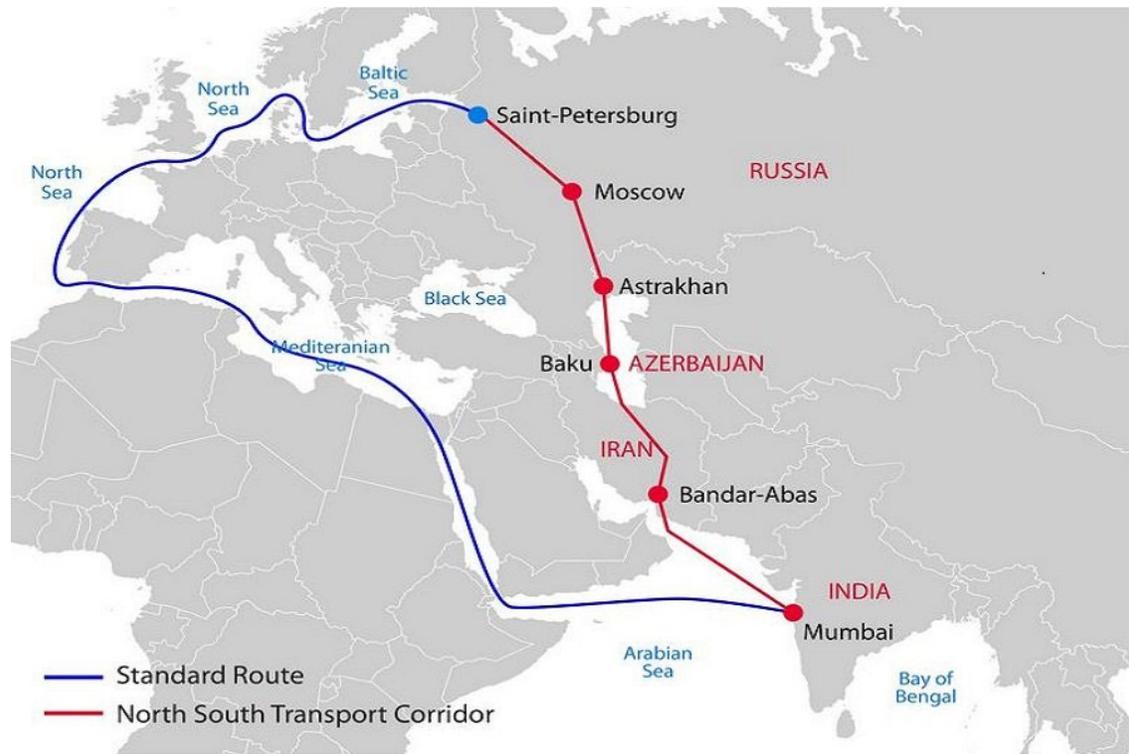
India wants Chabahar port to be included in the 13-nation International North South Transport Corridor that extends from India to Russia, and expand INSTC membership by including Afghanistan and Uzbekistan.

Features:

- Pitching for Chabahar in the INSTC which goes via Iran's biggest port Bandar Abbas, it is proposed that the land route via Kabul and Tashkent would form the INSTC's "Eastern corridor".
- Establishing an eastern corridor through Afghanistan would maximise its potential. India has also proposed the inclusion of Chabahar in the INSTC route.

Facts:

- Chabahar Port is a seaport in Chabahar located in southeastern Iran, on the Gulf of Oman. It serves as Iran's only oceanic port, and consists of two separate ports named Shahid Kalantari and Shahid Beheshti, each of which has five berths.
- In May 2016, India and Iran signed a bilateral agreement in which India would refurbish one of the berths at Shahid Beheshti port, and reconstruct a 600 meter long container handling facility at the port.
- In October 2017, India's first shipment of wheat to Afghanistan was sent through the Chabahar Port. In December 2018, India took over the port's operations.
- The International North-South Transport Corridor (INSTC) is a 7,200-km-long multi-mode network of ship, rail, and road route for moving freight between India, Iran, Afghanistan, Azerbaijan, Russia, Central Asia and Europe.



- The route primarily involves moving freight from India, Iran, Azerbaijan and Russia via ship, rail and road. The objective of the corridor is to increase trade connectivity between major cities such as Mumbai, Moscow, Tehran, Baku, Bandar Abbas, Astrakhan, Bandar Anzali, etc.
- The primary objective of the NSTC project is to reduce costs in terms of time and money over the traditional route currently being used.
- Analysts predict by having improved transport connectivity between Russia, Central Asia, Iran and India their respective bilateral trade volumes will increase. A study conducted by the 'Federation of Freight Forwarders' Associations in India (FFFAI) found the route is, "30% cheaper and 40% shorter than the current traditional route".

Military camp blasts in E. Guinea

The news:

- The death toll from accidental explosions at a military camp in Equatorial Guinea were on a rise.
- Six hundred people were injured in the blasts, which also flattened homes near the camp on the outskirts of the economic hub of Bata. It showed images akin to a war zone, in which rescue workers and civilians struggled to remove bodies from smoking ruins.
- A string of four huge explosions occurred hitting the Nkoa Ntoma camp, which houses special forces and gendarmes and their families, as well as homes nearby.

- President Teodoro Obiang Nguema, who has ruled the small central African state for 42 years, has blamed the accident on stubble-burning by local farmers and on “negligent” supervision of the camp’s munitions depot.
- Bata is home to 8,00,000 of E. Guinea’s 1.4 million people, most of whom live in poverty despite the country’s oil and gas wealth.

Facts:

- Equatorial Guinea is a Central African country comprising the Rio Muni mainland and 5 volcanic offshore islands. Capital Malabo, on Bioko Island, has Spanish colonial architecture and is a hub for the country’s prosperous oil industry.
- The only Spanish-speaking country in sub-Saharan Africa, Equatorial Guinea is one of the most closed-off nations on the continent.





Troika plus meet

The news:

- Close on the heels of U.S. plans for a United Nations regional conference on Afghanistan, Russia has announced it will hold a conference of special envoys from the U.S., China, and Pakistan, along with representatives of the Afghanistan government, Taliban and other senior Afghan leaders.
- Unlike the UN-led formulation, however, India has not been invited to the Russian conference, officials confirmed, adding that Moscow has kept New Delhi apprised of the two-year old “Troika” process involving consultations between U.S., Russia and China.
- Apart from the Afghan representatives of the Ghani government and the High Council for National Reconciliation, leaders including former President Hamid Karzai and Qatar’s envoy have also been invited.

Background:

- Since the Post-Cold War era, dynamics of international politics have transformed tremendously due to globalization and the emergence of new actors.
- The emergence of the troika among three nuclear states, Russia, China and Pakistan is one of the indicators of this shift in the structure of international politics which has also brought changes at the regional level.
- The nature of this emerging troika (Russia-China-Pakistan) is dependent on security and economic interests. The situation in Afghanistan is among the important concerns of this troika and an important point of convergence among the three states.

- The future of the troika is largely dependent on Chinese pace of economic development and BRI. Russia adds to the political and security dynamics of this partnership, while Pakistan has geo-strategic importance for the other troika partners. The partnership is likely to generate economic activity in its sphere of influence, bringing political and security weightage alongside, which may not include India

India - Japan space ties

The news:

- Indian and Japanese space agencies reviewed cooperation in earth observation, lunar cooperation and satellite navigation, and also agreed to explore opportunities for cooperation in “space situational awareness and professional exchange programme”.
- This was agreed during a bilateral meeting between the Indian Space Research Organisation (ISRO) and the Japan Aerospace Exploration Agency (JAXA) held virtually.
- India and Japan are already working on a joint lunar polar exploration (LUPEX) mission and the two space agencies have been working on the mission that aims to send a lander and rover to the Moon’s south pole around 2024.

Facts:

- The Lunar Polar Exploration mission (LUPEX) is a robotic lunar mission concept by Indian Space Research Organisation (ISRO) and Japan Aerospace Exploration Agency (JAXA) that would send a lunar rover and lander to explore the south pole region of the Moon in 2024.
- JAXA is likely to provide the under-development H3 launch vehicle and the rover, while ISRO would be responsible for the lander.
- The Lunar Polar Exploration mission would demonstrate new surface exploration technologies related to vehicular transport and lunar night survival for sustainable lunar exploration in Polar Regions.

Taiwan to Ration Water

The news:

According to Economy Minister of Taiwan, Wang Mei-hua, Taiwan will ration water from April, 2021 for more than one million households residing in centre of the island.

Background:

- Taiwan is a sub-tropical country and is experiencing its worst drought in half a century because the rain-soaking typhoons failed to make landfall in the country in 2020.

- Shortage of water is most severe across the swathe of western Taiwan, where most of the people live. Thus, from April, water supplies in parts of Taichung and Miaoli would be cut for two days in a week and government will sent out water tankers to supply residents when required.
- Government also adds that; Hsinchu province, which is home to companies such as Taiwan Semiconductor Manufacturing Co Ltd (TSMC), will not be affected by this drought. Reservoirs of Hsinchu are low but supplies are being topped up by carrying water from Taipei city and by desalination.
- TSMC is a multinational semiconductor contract manufacturing and design company. It is the largest company in Taiwan and the most valuable semiconductor company across the world.
- It is also the largest dedicated independent semiconductor foundry in the world. TSMC is headquartered in Hsinchu Science Park in Hsinchu, Taiwan. It is majorly owned by foreign investors.
- Hsinchu is 7th largest city in Taiwan by population. It is a windy coastal city which borders Taiwan Strait in west, Hsinchu County in north & east and Miaoli County in south. This city was founded by Han settlers in 1711. In the year 1878, it was renamed to Hsinchu.

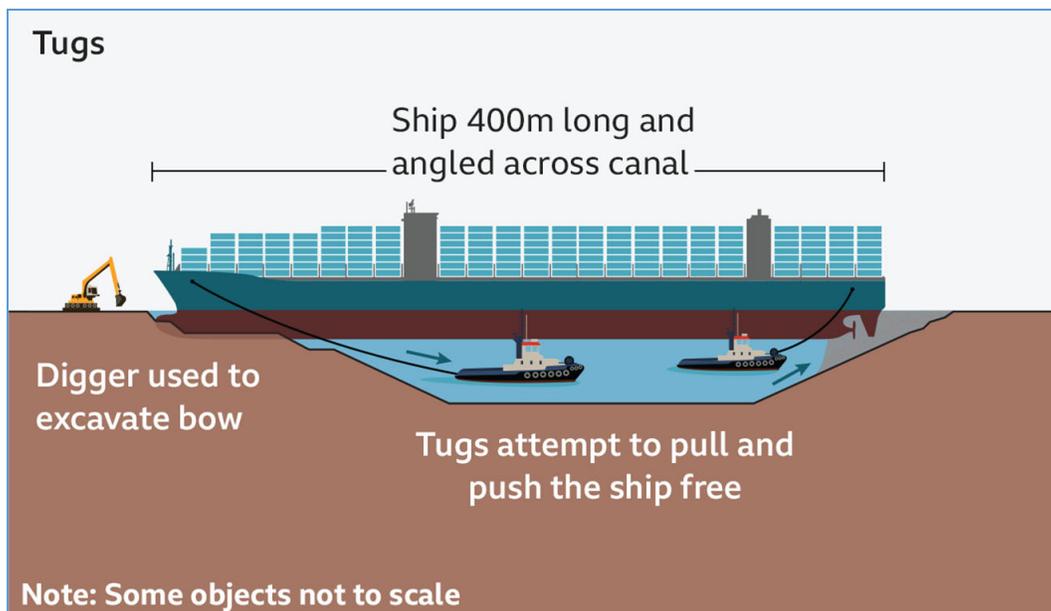
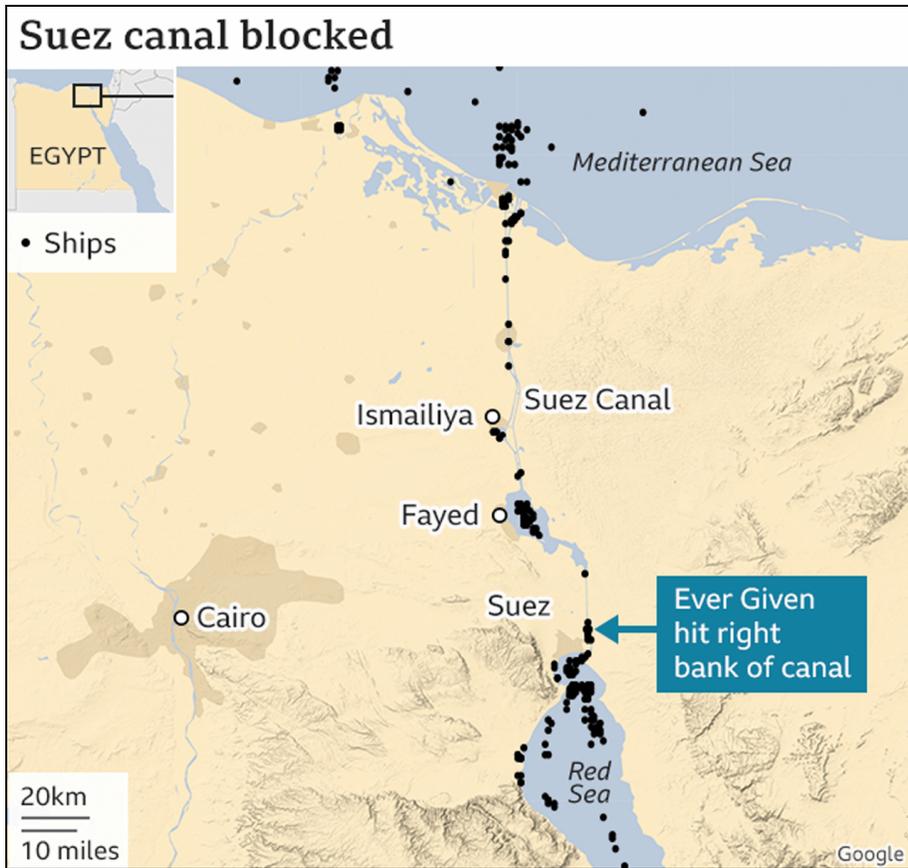
Suez Canal – Ever Given

The news:

A large cargo ship named ‘Ever Given’ got stuck near the southern end of the Suez Canal due to a mishap caused by bad weather. This is causing a huge jam of vessels at either end of the vital international trade artery.

Background:

- The Suez Canal is an artificial sea-level waterway running north to south across the Isthmus of Suez in Egypt, to connect the Mediterranean Sea and the Red Sea.
- The canal separates the African continent from Asia.
- It provides the shortest maritime route between Europe and the lands lying around the Indian and western Pacific oceans.
- It is one of the world’s most heavily used shipping lanes, carrying over 12% of world trade by volume.
- Ever Given is a Golden-class container ship, one of the largest container ships in the world. The ship is owned by Shoen Kisen Kaisha, and is time chartered and operated by container transportation and shipping company Evergreen Marine headquartered in Luzhu District, Taoyuan City, Taiwan.
- Ever Given is registered in Panama, and its technical management is the responsibility of the German ship management company Bernhard Schulte Shipmanagement (BSM).
- On 23 March 2021, while traveling from Tanjung Pelepas, Malaysia to Rotterdam, Netherlands, the ship ran aground in the Suez Canal, blocking it.



ENVIRONMENT

Lepoard count in the country

To get a population estimate of an elusive carnivore at the geographical scale of 21 States in India is tricky and requires colossal effort.

About the animal:

- The Indian leopard (*Panthera pardus fusca*) is a leopard subspecies widely distributed on the Indian subcontinent.
- The species *Panthera pardus* is listed as Vulnerable on the IUCN Red List because populations have declined following habitat loss and fragmentation, poaching for the illegal trade of skins and body parts, and persecution due to conflict situations.

Leopard population by state	
State	Leopards (2015)
Andhra Pradesh	343
Bihar	32
Chhattisgarh	846
Goa	71
Jharkhand	29
Karnataka	1,129
Kerala	472
Madhya Pradesh	1,817
Maharashtra	905
Odisha	345
Tamil Nadu	815
Uttar Pradesh	194
Uttarakhand	703

Misleading picture

- In 2014, the study estimated a minimum leopard population of 7,910 individuals from 18 different Indian States covering a study area of 92,164 square kilometres.
- In 2018, the study was expanded to 21 States with a study area of 121,337 square kilometres, which shows a spatial increase in the size of the study area by 25%. Even the number of camera trap locations has increased by nearly threefold (9,735 to 26,838 camera trapping locations).
- So, comparing results from 2014 with 2018, and hailing it as a 60% increase is quite misleading.

The main threats

- In general, habitat loss due to mining and quarrying, poaching for body parts, mortality due to vehicular collisions, retaliatory killing due to human-leopard conflict and accidental deaths due to snares set for catching wild prey all seem to be impacting the conservation of this rosette-patterned cat.
- If we can assess leopard numbers in a few selected sites and monitor the area occupied by them over large swathes, it will perhaps give us a better overview of leopard conservation efforts.

Species in Sunderbans

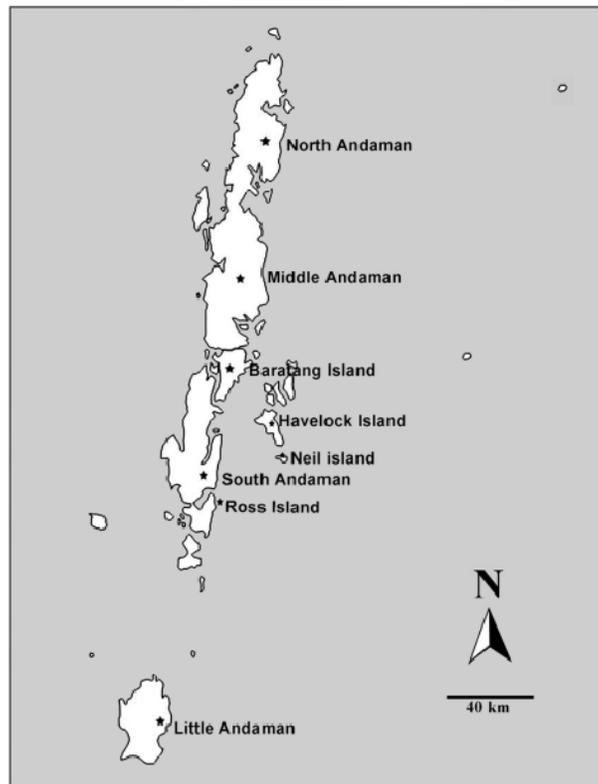
- The Indian Sunderbans, which is part of the largest mangrove forest in the world, is home to 428 species of birds, a recent publication of the Zoological Survey of India (ZSI) states.
- Authors of the publication said the book, with photographs of the males and females of various species, is aimed to kindle interest and spread knowledge about birds among people from all walks of life — from forest staff to tourists to amateur birdwatchers.
- 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).
- The scientists said of the 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.

A bullet through an island's heart

A plan for the sustainable and holistic development of the 680 sq km, fragile Little Andaman Island in the Andaman and Nicobar group has raised the alarm among conservationists.

Little Andaman Island:

- Little Andaman Island is the fourth largest of the Andaman Islands.
- It lies 88 km south of Port Blair, the capital of Andaman and Nicobar Islands.



- The ‘Sustainable Development of Little Andaman Island - Vision Document’, is the NITI Aayog’s proposal to leverage the strategic location and natural features of the island.
- This, the vision says, will be done by building a new greenfield coastal city there, that will be developed as a free trade zone and will compete with Singapore and Hong Kong.

Three zones

The proposal is pivoted along three development anchors and zones.

Zone 1:

- spread over 102 sq km along the east coast of Little Andaman
- will be the financial district and medi city and will include an aerocity, and a tourism and hospital district.

Zone 2:

- Will be the leisure zone constructed by razing 85 sq km of pristine forest
- will have a film city, a residential district and a tourism SEZ.

Zone 3:

- will be a nature zone on 52 sq km of pristine forest
- further categorised into three districts: an exclusive forest resort, a nature healing district and a nature retreat, all on the western coast.

Concerns:

- 95% of Little Andaman is covered in forest, a large part of it the pristine evergreen type. Some 640 sq km of the island is Reserve Forest under the Indian Forest Act, and nearly 450 sq km is protected as the Onge Tribal Reserve, creating a unique and rare socio-ecological-historical complex of high importance.
- The note said such large diversion of forest land would cause obvious environmental loss leading to irreversible damage (more than 2 million trees stand in the forest land sought for these projects), that habitats of various wild animals including endangered sea turtles would be affected, and that the impact could not even be assessed because there was no environment impact assessment report and neither were there any detailed site layout plans for the proposed diversion.

Red-eared turtle

- Another invasive species is posing a major threat to the biodiversity of waterbodies in Kerala after the pink bloom, an alien flower that choked the Avala Pandi canal at Perambra. This time, it is the red-eared slider turtle.
- Scientifically called *Trachemys scripta elegans*, it is a favourite among pet lovers because of its small size and colour.

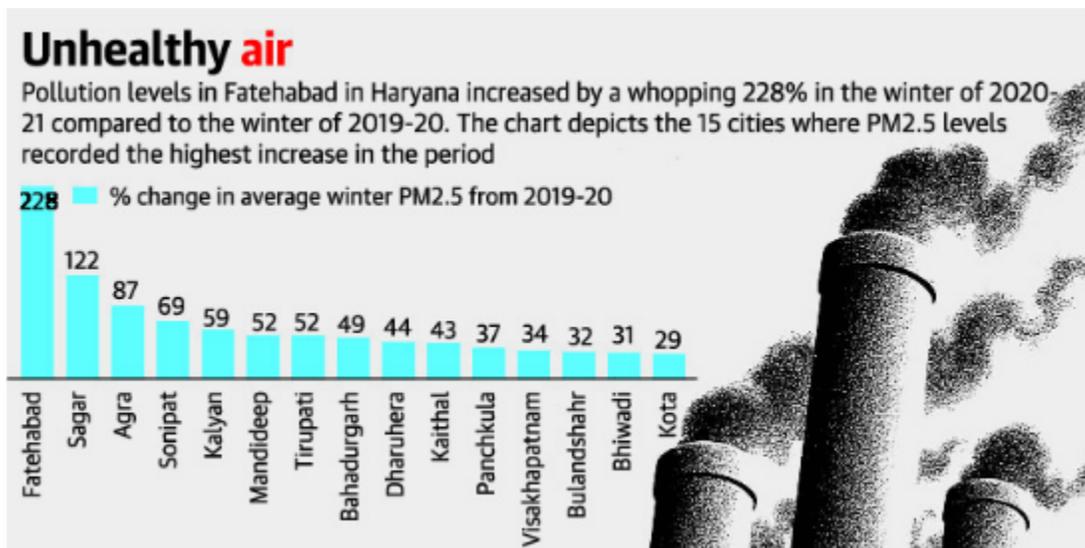


- The small turtle can even be kept in a matchbox. But it grows fast. Adult turtles require lots of aquatic plants. They are also omnivores. Finding it difficult to keep them as they grow bigger, people sometimes release them into waterbodies. This turtle is considered one of the world's worst invasive species.

- The slider turtles live in still and warm waterbodies. They are considered a major threat to native turtle species as they mature fast, grow larger, produce more offspring and are very aggressive.
- As they eat plants and animals, they can finish off a wide range of aquatic species, including fish and rare frogs. In places such as Australia and the European Union, it is illegal to import and keep these turtles.
- The turtle found in the Kalathode canal has been referred to the Nodal Centre for Biological Invasions (NCBI) at KFRI.

Winter pollution increases

- The levels of PM 2.5, the most threatening of particulate matter, worsened in 43 of 99 cities whose winter air in 2020 and 2019 was compared by the Centre for Science and Environment (CSE), a non-governmental research organisation.
- Only 19 registered “substantial improvement” — one of these was Chennai. The rest of the cities did not experience significant change.
- In the aftermath of the lockdown, several cities reported improved pollution levels but by winter, when the restrictions were significantly eased, pollution levels had clawed back to pre-COVID-19 levels, the CSE notes, underlining the significant contribution of local and regional factors to a city’s pollution levels.



- The cities with the worst pollution spikes in 2020 over 2019 include Gurugram, Lucknow, Jaipur, Visakhapatnam, Agra, Navi Mumbai, and Jodhpur. Kolkata is the only mega city in this group.
- In 37 cities that are otherwise showing stable or declining seasonal averages, their peak pollution levels have risen significantly during winter. These include Aurangabad, Indore, Nashik, Jabalpur, Rupnagar, Bhopal, Dewas, Kochi, and Kozhikode. On the other hand, in North India, other cities, including Delhi,

have experienced the reverse — that is, an increase in the seasonal average but decline in the seasonal peak.

- During winter, cool and calm weather traps and spikes daily pollution, particularly in north Indian cities located in the Indo-Gangetic Plain. This year, the average level of PM2.5 during the summer and monsoon months was considerably lower than the previous year due to the summer lockdown. However, the winter PM2.5 concentration has risen from the 2019 winter figures in cities across regions.
- When ranked from the most to the least polluted cities, 23 of the most polluted cities are from north India. While Mysuru is the least polluted, followed by Satna in Madhya Pradesh and Kochi in Kerala, Ghaziabad is the most polluted city in the northern belt.
- The study emphasises it was the smaller and upcoming cities that were emerging as pollution hotspots.

Himalayan serow

- A Himalayan mammal, somewhere between a goat and an antelope, has been confirmed as the newest creature to be spotted in Assam (close to the border with Bhutan in Manas's Bansbari-Mathanguri forest).
- A couple of nature guides had spotted the Himalayan serow, a goat-antelope, in the 950-sq.km Manas Tiger Reserve. The animal — a high-altitude dweller usually found 2,000-4,000 metres above sea level — was seen being chased by wild dogs.
- The sightings of rare animals and birds in Manas is an outcome of better access to remote parts of the protected area where extremists and hunters once ruled.

Some others:

- The Reserve is contiguous with the 1,057-sq. km. Royal Manas National Park in Bhutan. The black-necked crane was also recently sighted in Manas. The Buddhists revere the bird that nests in the Tawang region.
- Officials in Manas said the critically endangered white-bellied heron was also seen a few weeks ago.
- In February, birders had sighted the colourful Mandarin duck in the Maguri-Motapung wetland near eastern Assam's Dibru-Saikhowa National Park. This duck was last spotted in Assam 118 years ago.



Facts:

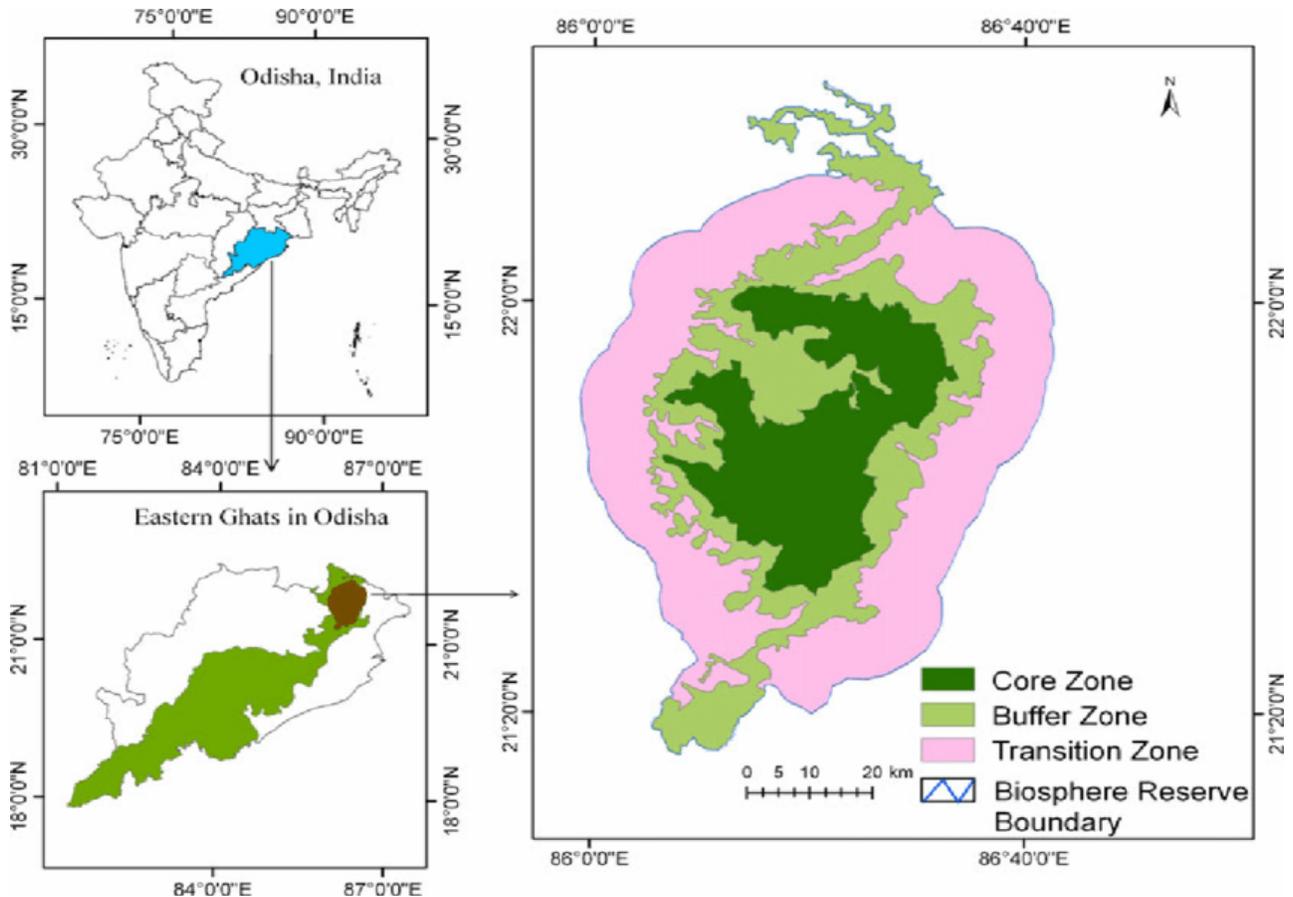
- Manas National Park or Manas Wildlife Sanctuary is a national park, UNESCO Natural World Heritage site, a Project Tiger reserve, an elephant reserve and a biosphere reserve in Assam, India. Located in the Himalayan foothills, it is contiguous with the Royal Manas National Park in Bhutan. The park is known for its rare and endangered endemic wildlife such as the Assam roofed turtle, hispid hare, golden langur and pygmy hog. Manas is famous for its population of the wild water buffalo.
- The Manas river flows through the west of the park and is the main river within it. It is a major tributary of Brahmaputra river and splits into two separate rivers, the Bwrsi and Bholkaduba as it reaches the plains. The Manas river also serves as an international border dividing India and Bhutan.
- The park is divided into three ranges. The western range is based at Panbari, the central at Bansbari near Barpeta Road, and the eastern at Bhuiyapara near Pathsala.

Massive fire - Similipal Biosphere

- A massive fire is threatening the Similipal Biosphere — one of the largest biospheres of India — prompting the Odisha government to deploy a big contingent of field-level staff to douse it.
- The fire that broke out in isolated places of Similipal in Mayurbhanj district in the first week of February has spread to eight forest ranges.
- Though the State government said the biosphere's core area was untouched by the fire, environmentalists and activists raised an alarm over possible damage to flora and fauna.
- The biosphere spread over 4,374 sq km has 845 sq km of core forest (tiger reserve), 2,129 sq km buffer area and 1,400 sq km of transition space.

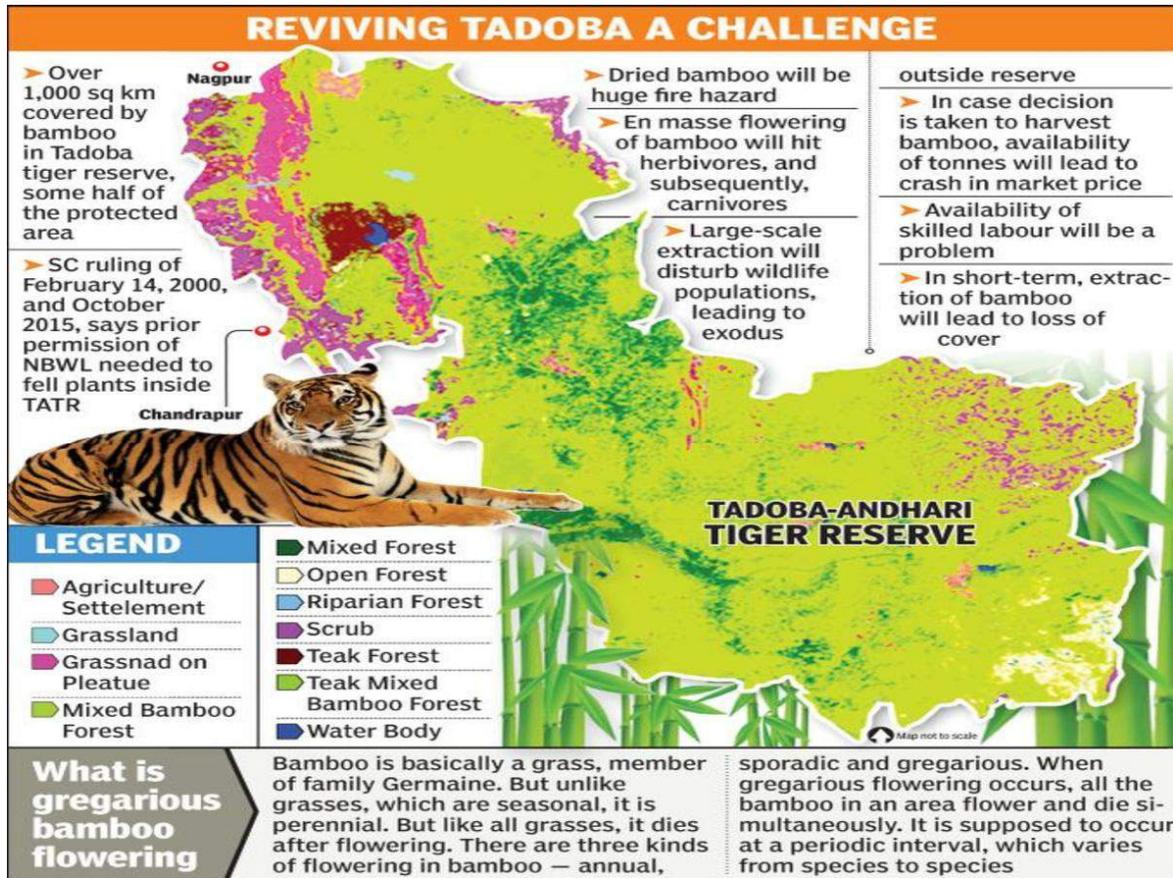
Facts:

- Similipal National Park is a national park and a tiger reserve in the Mayurbhanj district in the Indian state of Odisha covering 2,750 km².
- It is part of the Mayurbhanj Elephant Reserve, which includes three protected areas — Similipal Tiger Reserve, Hadgarh Wildlife Sanctuary with 191.06 km² and Kuldiha Wildlife Sanctuary with 272.75 km².
- Similipal National Park derives its name from the abundance of red silk cotton trees growing in the area. It is the 7th largest national park in India.
- The park is home to Bengal tiger, Asian elephant, gaur, and chausingha along with some of the beautiful waterfalls like Joranda and Barehipani Falls.
- This protected area is part of the UNESCO World Network of Biosphere Reserves since 2009



Gregarious bamboo flowering in Wayanad

- The “gregarious flowering of bamboo” inside the Wayanad Wildlife Sanctuary (WWS) and the nearby Mudumalai Tiger Reserve and Gudalur forest division in Tamil Nadu this year may pose a threat to wildlife in the Nilgiri biosphere, a major tiger and elephant habitat.
- The bamboo groves in the Wayanad forest are the mainstay of herbivores in the Nilgiri biosphere during summer. With the advent of the season, migration of wild animals starts from the adjacent sanctuaries in Karnataka and Tamil Nadu to Wayanad due to shortage of fodder and water.



- Moreover, pointing to a threat to wildlife as well as the ecology of the Nilgiri biosphere, it is reported that over 25% of bamboo groves in the WWS and nearby sanctuaries have bloomed since 2010, and the phenomenon is continuing.
- Thorny bamboo (*Bamboosa bambos*) is a monocarpic (flowering only once) plant belonging to the Poaceae family (grass family), and its flowering cycle varies from 40 to 60 years.
- Profuse natural regeneration occurs from seeds after gregarious flowering. Seeds have no dormancy, and it helps germination under favourable conditions soon after seed fall.
- But protection from fire and grazing is essential for proper establishment of seedlings.
- Fire incidents have been comparatively low in the sanctuary for the past five years owing to summer rain and conservation measures implemented by the Forest Department.

SCIENCE AND TECHNOLOGY

Avian influenza virus

Avian influenza refers to the disease caused by infection with avian (bird) influenza (flu) Type A viruses. These viruses occur naturally among wild aquatic birds worldwide and can infect domestic poultry and other bird and animal species.

Background:

- Just three months after India declared itself to be free of the avian influenza outbreak, the highly pathogenic avian influenza subtypes, H5N1 and H5N8, have been reported from a dozen epicentres in four States — Rajasthan, Madhya Pradesh, Himachal Pradesh and Kerala. In addition, thousands of poultry birds have died in Haryana, while Jharkhand and Gujarat, too, have sounded an alarm; the cause in these three States is still unknown.
- The two subtypes have targeted different birds — crows in Rajasthan and Madhya Pradesh, migratory birds in Himachal Pradesh, and poultry in Kerala.
- In a bid to stop the spread, over 69,000 birds, including ducks and chickens, were culled in Alappuzha and Kottayam as per India's 2015 National Avian Influenza Plan. Other States have been asked to be vigilant of any unusual deaths or disease outbreak signs amongst birds, particularly migratory ones.

The economic impact of bird flu:

- India's poultry sector, according to the Ministry of Agriculture and Farmers Welfare, is worth 80,000 crore, of which the organised sector represents 80%, and the rest is distributed among unorganised sectors, including backyard poultry-keeping which is crucial for income and nutritional security.
- Exports, mainly focused on West Asia, neighbouring countries and East Asia, were valued at 532 crore in 2017, with an emphasis on processed products such as egg powder, yolk powder, pharma ingredients, and chicken products. Avian flu is seen as a threat to the further growth of the sector as a whole.

CREATING A FLUTTER

WHY DELHI IS WORRIED

16 birds found dead at a DDA park in Hastals village; samples sent for testing

CONFIRMED CASES IN SIX STATES

Kerala, Rajasthan, Madhya Pradesh, Himachal Pradesh, Haryana and Gujarat

BUT WHAT IS BIRD FLU OR AVIAN INFLUENZA

Not all avian influenza viruses can affect humans. However, some can cause severe disease in them. Avian influenza H5N8 virus, commonly known as bird flu, is one of them. **It attacks the lungs, nose and throat.** It's a contagious respiratory illness and has symptoms similar to common cold

SYMPTOMS

Initial | Sore throat, sneezing, runny nose
Later stage | Fever, muscle pain, body chills, sweating, headache, dry cough, nasal congestion, fatigue

HIGH-RISK GROUPS

- Children under the age of 2 and adults over 65
- Those with comorbidities
- Women who are pregnant or have recently given birth

HOW TO STAY SAFE

- Avoid sources of exposure like coming in direct or close contact with infected poultry
- Avoid consuming uncooked or partially cooked chicken and eggs
- Cooking at high heat kills the virus
- If in direct contact with birds, influenza antiviral drugs can be taken as a preventive measure

BIRD-TO-BIRD TRANSMISSION

Some bird species like ducks and geese are considered to be natural reservoirs of influenza type-A viruses. They can spread the disease through their droppings

HOW HUMANS MAY GET INFECTED

Person-to-person spread of bird flu is not common. Those who work in close contact with infected birds, dead or alive, or eat uncooked or half-cooked poultry products are at risk

DIRECT CONTACT (MOST COMMON)

Human can get infected after touching infected bird and then touching their **eyes, nose or mouth**

CONTAMINATED SURFACES

A healthy looking bird can also spread the virus through its droppings on surfaces

VIRUS IN THE AIR

It may be in the air in the form of droplets or dust after an infected bird flaps its wings or shakes. Humans can get the virus if they inhale it

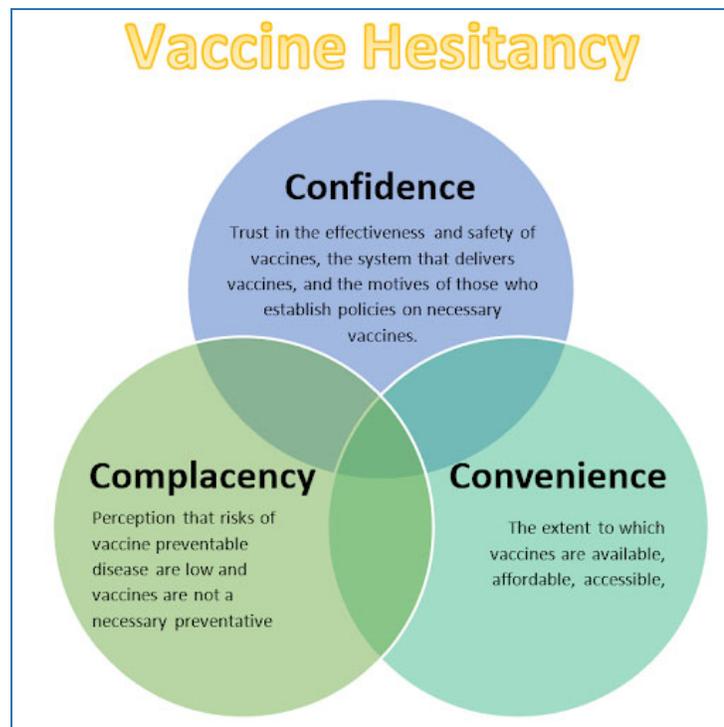
Till now, there is no evidence of sustained human-to-human transmission of bird flu in India

**Compiled from various sources
Graphic: Sunil Singh*

Vaccine hesitancy

- It refers to delay in acceptance or refusal of vaccines despite availability of vaccine services. It was identified by the World Health Organization as one of the top ten global health threats of 2019. The term encompasses outright refusal to vaccinate, delaying vaccines, accepting vaccines but remaining uncertain about their use, or using certain vaccines but not others.

- Faith in entities is often an act of personal commitment not amenable to falsification, but trust in a scientific process can be established with confidence-building measures and full disclosure of all relevant data.
- Vaccine hesitancy stems from multiple key factors including a person's lack of confidence (mistrust of the vaccine and/or healthcare provider), complacency (the person does not see a need for the vaccine or does not see the value of the vaccine), and convenience (access to vaccines).
- Any mass campaign that involves voluntary effort on the part of the public can succeed only when transparency and open communication channels are the tools of choice.
- If the poor rate of uptake of the COVID-19 vaccine in most of the States in the country is any indication, the government has not taken the people of the country along, in what is a purely voluntary exercise, but one vested with great power to retard the pace of the epidemic.
- Studies measured high levels of vaccine hesitancy among the general population, and among health-care workers, the first in the line list of people to receive free vaccination. Clearly, vaccine hesitancy was not addressed sufficiently, or not taken seriously enough.



- For instance, Tamil Nadu, a State perceived to be largely health literate, and relatively well-equipped with health infrastructure, achieved only over 16% of its targeted coverage on the launch day. On the second day of vaccination, the compliance further dropped; in some States, vaccination was suspended. A marked favouring of the Covishield vaccine over Covaxin was also noticed in multiple States.

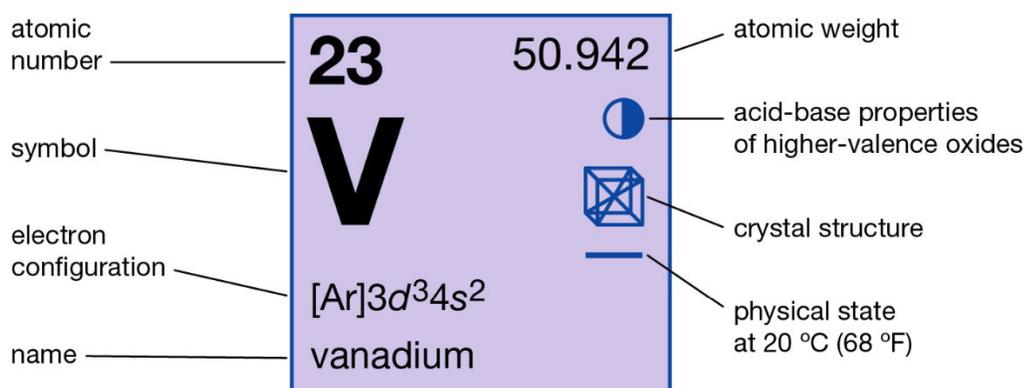
- The inability of the government and agencies involved to amicably resolve controversies surrounding the clearance for Covaxin, even before it was able to produce interim data on efficacy from phase-3 trials, has had a direct consequence, as witnessed by poor numbers in its uptake so far.
- A vaccine, unequivocally, is public good, but the lack of transparency surrounding the roll-out of the COVID vaccines has done little to enhance trust in this experiential principle. This uncommon haste in trying to lunge towards the tape while still some distance from the finish line might have been justified if the state had taken the people along.
- Vaccinating the nation, however, is less a race than a slow and steady process. Building confidence in the process is crucial to achieving the task at hand. And the Health Ministry must do whatever it takes to make a success of the vaccination drive.

Vanadium source - India

Natural resource:

- Arunachal Pradesh, considered a sleeping hydropower giant, is likely to become India's prime producer of vanadium, a high-value metal used in strengthening steel and titanium.
- Exploration being carried out by the Geological Survey of India (GSI) has placed the eastern Himalayan State on the vanadium map of the country, and geologists are confident of identifying a deposit soon.

Vanadium



 Transition metals	 Solid
 Body-centred cubic	 Equal relative strength

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Consumption:

- India is a significant consumer of vanadium, but is not a primary producer of the strategic metal. It is recovered as a by-product from the slag collected from the processing of vanadiferous magnetite ores.
- According to data provided by the GSI, India consumed 4% of about 84,000 tonnes of vanadium produced across the globe in 2017. China, which produces 57% of the world's vanadium, consumed 44% of the metal.
- Vanadium mineralisation in Arunachal Pradesh is geologically similar to the “stone coal” vanadium deposits of China hosted in carbonaceous shale. This high vanadium content is associated with graphite, with a fixed carbon content of up to 16%.

Uses for Vanadium

- One use for vanadium is to make rust free springs and steel.
- It is also helpful in nuclear applications.
- Vanadium is also used to dye fabrics.
- And, is used to bind Titanium and steel together.
- And it's last use is to make superconductive magnets.



Distribution:

- Geologists discovered two bands of about 7-metre thick carbonaceous phyllite for a length of more than 6 km in the Depo area. This prompted the GSI to extend its search to other areas of the State.
- “Good prospects” of vanadium for a cumulative length of 15.5 km and an average thickness of 7 m were found in the Deed, Saiya and Phop areas of Lower Subansiri district.
- Vanadium content was also found in the Pakro area of Pakke-Kesang district, Palin-Sangram in Kra Daadi, Kalamati in West Siang, Kalaktang in West Kameng and Kaying in Siang district.
- The expected grade of vanadium mineralisation in Arunachal Pradesh is comparable to the important vanadium deposits of the world. The largest deposits are in China, followed by Russia and South Africa.

India cultures new coronavirus strain

- India has successfully cultured the new coronavirus strain, which was first reported in the U.K. according to the Indian Council of Medical Research (ICMR).



- The ICMR claimed that no country had yet reported successful isolation and culture of the new variant of SARS-CoV-2.
- Culture is the process by which cells are grown under controlled conditions, generally outside their natural environment.

Methods for Cultivation of Virus

- Generally three methods are employed for the virus cultivation
 - Inoculation of virus into animals
 - Inoculation of virus into embryonated eggs
 - Tissue culture

Banana grit

- Scientists at the CSIR-National Institute for Interdisciplinary Science and Technology (NIIST) at Pappanamcode in Kerala have come up with a new product, banana grit or granules, developed from raw Nendran bananas.

- Billed as an ideal ingredient for a healthy diet, banana grit can be used for making a wide range of dishes, according to the NIIST. The product resembles to ‘rava’ and broken wheat.
- The Institute added that years of research on the Nendran variety helped it open up a new application for the starch-rich banana.
- Generally consumed ripe, Nendran banana also finds use in typical Kerala dishes such as avial and thoran. The granules can be used for making upma, or it can be mixed with banana powder for porridge, with milk or coconut milk for use as a health drink. Banana powder can be used for making cakes and breads, along with refined wheat flour.
- Developing new uses for Nendran also comes as a boon to farmers who have often been struggling against falling prices, according to the scientists.

Changalikodan Nendran Banana or famously known as Changalikodan is a banana variety originated and cultivated in Chengazhikodu village of Thrissur District in Kerala state of India. Changalikodan, now are cultivated on the banks of the Bharathapuzha river. It is grown in Erumapetty, Wadakkancherry, Muntoor, Kaiparambu, Desamangalam and Thayyur of Thrissur District.

- The technology had been transferred to Kochi-based Moza Organic and the product is expected to be in the market soon.

FSSAI slashes limit for transfat levels in foods

- The Food Safety and Standards Authority of India (FSSAI) 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 to the Food Safety and Standards (Prohibition and Restriction on Sales) Regulations.
- 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.

Trans fats are found in two forms — natural, which occur in some animal products and aren’t considered harmful, and artificial, which are hydrogenated vegetable oils and have serious health consequences.

- Transfats are associated with an increased risk of heart attacks and death from coronary heart disease.
- According to the World Health Organization, approximately 5.4 lakh deaths take place each year globally because of the intake of industrially produced trans fatty acids.

The WHO has also called for global elimination of trans fats by 2023

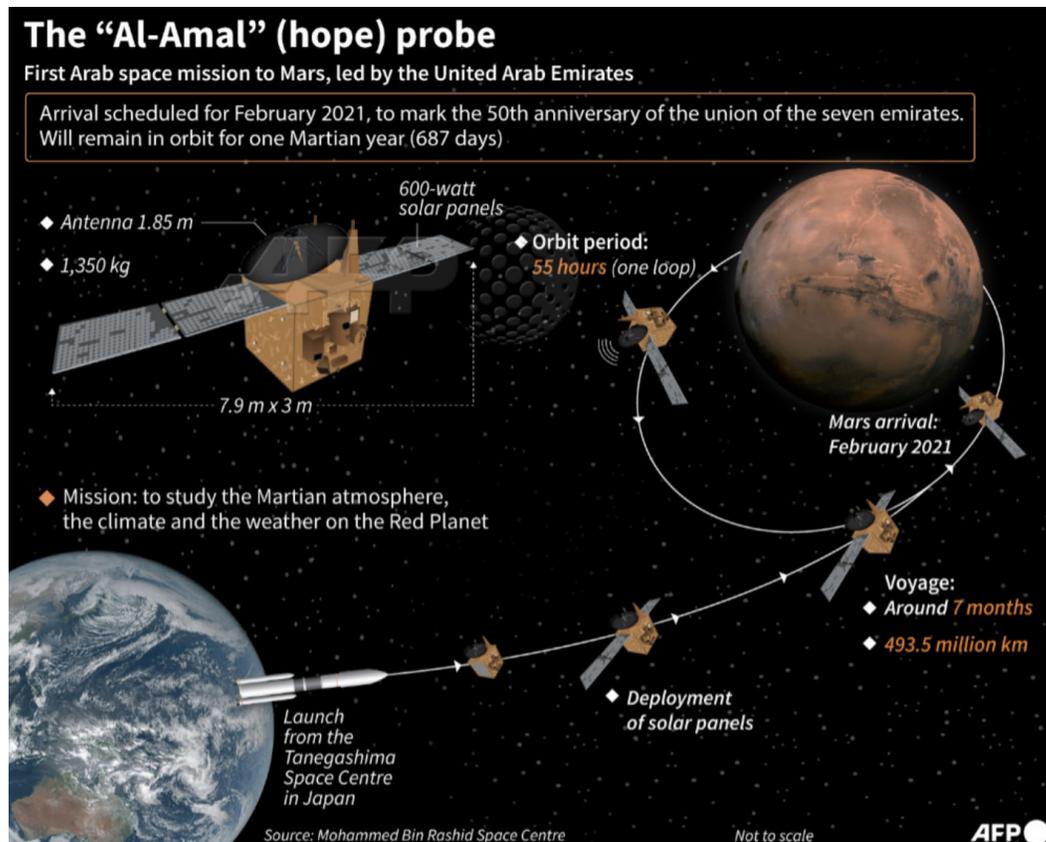


- While the regulation comes into effect immediately, industry players were made to take a pledge back in 2018 that they would comply with the WHO's call for action to reduce TFA by 3% by 2021 allowing them three years to comply with the latest norm.

- 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.

Arab world's first probe nears Mars

- The first Arab interplanetary mission is expected to reach Mars' orbit in what is considered the most critical part of the journey to unravel the secrets of weather on the Red Planet.
- The unmanned space probe — named “Al-Amal”, Arabic for “Hope” — blasted off from Japan last year, marking the next step in the United Arab Emirates’ ambitious space programme.
- The UAE has plans to launch an unmanned rover to the moon by 2024 and is also eyeing future mining projects beyond Earth, as well as space tourism.



- The Emirates Mars Mission has sent an unmanned spacecraft, or probe, into Martian orbit. As with other current Mars missions, run by China and the US — Tianwen-1 and Mars 2020, respectively — the UAE's mission launched in July 2020. That was when the Earth and Mars were especially close to one another, and that reduced travel time to the red planet by about two months.
- Hope is the UAE's first interplanetary mission. The operation aims to provide the global scientific community with novel data. The probe will fly around Mars in a way that's never been done before.

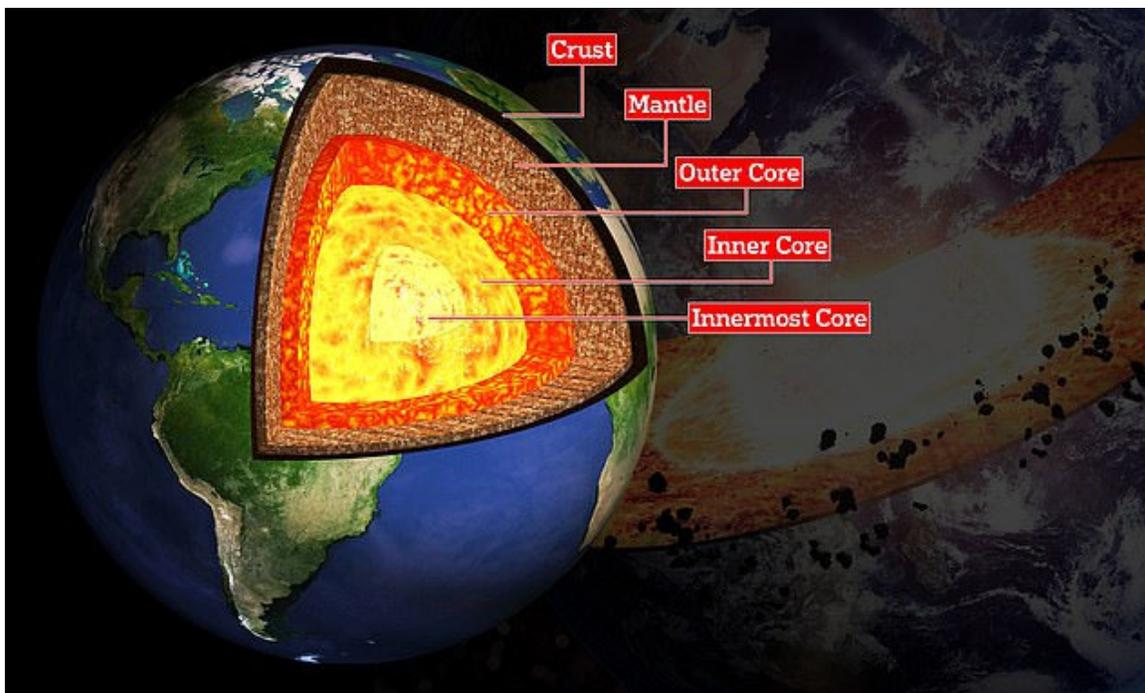
Earth's Hidden Layer

The news:

- Scientists have recently detected the signs of a hidden structure inside the core of Planet Earth. This sign has the potential to change the long-standing narrative of what lies at centre of Earth. This layer is being termed as the 'fifth layer'.

Background:

- As per the long-standing narrative, there exists four layers namely; crust, mantle, outer core and inner core. The scientists have also spotted reportedly some changes in the structure of iron within the inner core. These changes suggests that a new 'boundary line' is stretching for about 650 kilometres from centre of the Earth.



The fifth layer

- The Daily Mail reports that, the researchers are getting the sign of fifth layer for more than a decade. However, the detection was proved near to impossible. The data was captured by the International Seismological Centre.
- Following the data, the scientists and researchers used their new algorithm in order to search and discover the evidence of changes in structure of inner core of the Earth. Though it is difficult to detect the minute changes, the researchers somehow demonstrate that two separate cooling events occurred in the history of the planet.

What does the study imply

- This research study also implies that in the earliest phase of the Earth's evolution that is around 4.56 billion years ago, Earth underwent a dramatic and several unknown events.
- Though, these studies were indirect, the geologists determined that the Earth's inner core reaches the temperatures of more than 5,000 degrees Celsius. This is also relatively smaller in area accounting only 1% of the total volume of Earth.

Methylobacterium ajmalii

- Four species of bacteria have been discovered onboard the International Space Station (ISS), one of which has been named after Indian biodiversity scientist Seyed Ajmal Khan (*Methylobacterium ajmalii*).
- While one strain was identified as *Methylobacterium rhodesianum* bacteria, the other three strains were previously undiscovered.
- Members of the *Methylobacterium* genus are Gram-negative, rod-shaped bacteria.
- The genus consists of 45 recognized species, which are ubiquitously present in a wide variety of habitats including air, soil, freshwater, and sediments, and can exist either in free-form or associated with plant tissues.
- *Methylobacterium* species are involved in nitrogen fixation, phosphate solubilization, abiotic stress tolerance, plant growth promotion, and biocontrol activity against plant pathogens.
- The new bacterial strains discovered from different locations aboard the ISS flights may help in creating the "fuel" to help plants withstand such stressful situations.
- These bacteria aid in plant growth.

DEFENCE

Cross border tunnel in Jammu

- The Border Security Force unearthed a 30-foot-deep and 150-metre-long cross-border tunnel in Samba district in Jammu, the third such tunnel since last November.
- On a specific intelligence input, the BSF troops detected a tunnel in the Bobiya area in Samba sector. The tunnel has an opening of about 2-3 feet and is about 20 to 30 feet deep. The direction of the tunnel is towards the International Border, which is about 150 metres long from the point of incident.



- The origin of the tunnel is towards Pakistan territory.
- Sandbags recovered had Karachi-made markings. The tunnel seems to be a bit old. This finding was the direct result of BSF's anti-tunnel drive. Whether this tunnel was used by militants to infiltrate into this side is subject to investigation.
- The BSF had unearthed 10 such tunnels since 2011 in the Jammu region.

MISCELLANEOUS**AWARDS, INDICES AND REPORTS****World food price index**

- World food prices rose for a seventh consecutive month in December, with all the major categories, barring sugar, posting gains, according to United Nations food agency.
- The Food and Agriculture Organization's (FAO) food price index, which measures monthly changes for a basket of cereals, oilseeds, dairy products, meat and sugar, averaged 107.5 points last month versus 105.2 in November. For the whole of 2020, the benchmark index averaged 97.9 points, a three-year high and a 3.1% increase from 2019.

World Food Price Index

The FAO Food Price Index is a measure of the monthly change in international prices of a basket of food commodities.

It consists of the average of five commodity group price indices [cereal, vegetable, dairy, meat and sugar], weighted with the average export shares.

The index has become a critical and timely monthly indicator of the state of international food markets, gauging the change in food commodity prices over time in nominal and real terms.

- It was still down more than 25% from its historical peak in 2011.
- Vegetable oil prices continued recent strong gains, jumping 4.7% month-on-month in December after surging more than 14% in November. For the whole of 2020, the index was up 19.1% on 2019.
- The cereal price index posted a more modest 1.1% rise in December from the month before. For all of 2020, the index averaged 6.6% above 2019 levels.
- Export prices for wheat, maize, sorghum and rice all rose in December, moving higher in part due to concerns over growing conditions and crop prospects in North and South America as well as Russia, the Rome-based FAO said.
- The dairy index climbed 3.2% on the month, however, over the whole of 2020, it averaged some 1% less than in 2019. Bucking the rises in other indices, average sugar prices dipped by 0.6% in December. Last month, the FAO revised down its harvest forecast for the 2020 cereal season for a third month running, cutting it to 2.74 billion tonnes from a previous 2.75 billion tonnes.

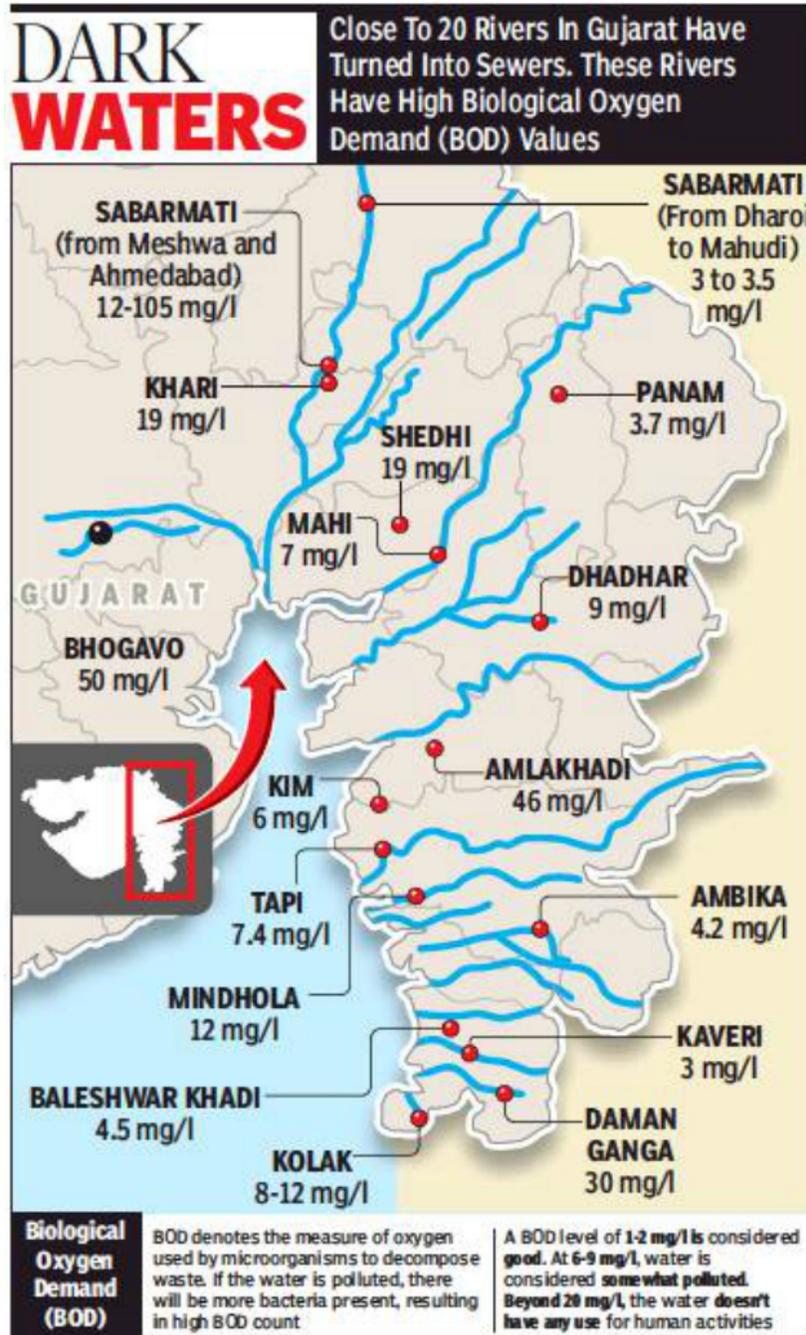
Highly polluted Rivers

- The unchecked flow of untreated industrial effluent into rivers in Gujarat has led to increasing pollution in the Sabarmati, Mahisagar, Narmada, Vishwamitri and Bhadar.
- According to data from the Ministry of Environment and Forest (MoEF), the Sabarmati is among the most polluted rivers in the country.
- Gujarat ranks fourth among the top five States with highly polluted rivers, with as many as 20 rivers in the critically polluted category. Recently, a thick froth on the Mahisagar, along a stretch of several kilometres, raised serious concern, prompting the Gujarat Pollution Control Board (GPCB) to constitute a high-level committee to study the rising level of pollution in the river.
- As per the official parameters, if the chemical oxygen demand (COD), which indicates organic pollutant load, is higher than 250 mg per litre, then it should not be released into the rivers.
- “Most of the Gujarat rivers where the effluents are dumped into, the COD level is in the range of 700 to 1000 mg per litre. While Dissolved Oxygen (DO) level [indicating the health of a river] in perennial rivers like Mahisagar should be in the range of 6 to 8 mg per litre, it is actually below 2.9 mg per litre.

STATE RANKINGS		Central funds to curb river pollution in Gujarat					
States with most polluted rivers							
State	Number of Polluted Rivers	Rivers	2014-15	2015-16	2016-17	2017-18*	Total amount**
➤ Maharashtra	49	Sabarmati and Mindola	44.00	24.12	71.40	62.00	201.52
➤ Assam	28						
➤ MP	21						
➤ Gujarat	20						
➤ West Bengal	17						
➤ Karnataka	15						
➤ Kerala	13						



*November 17; **Amount in Rs crore



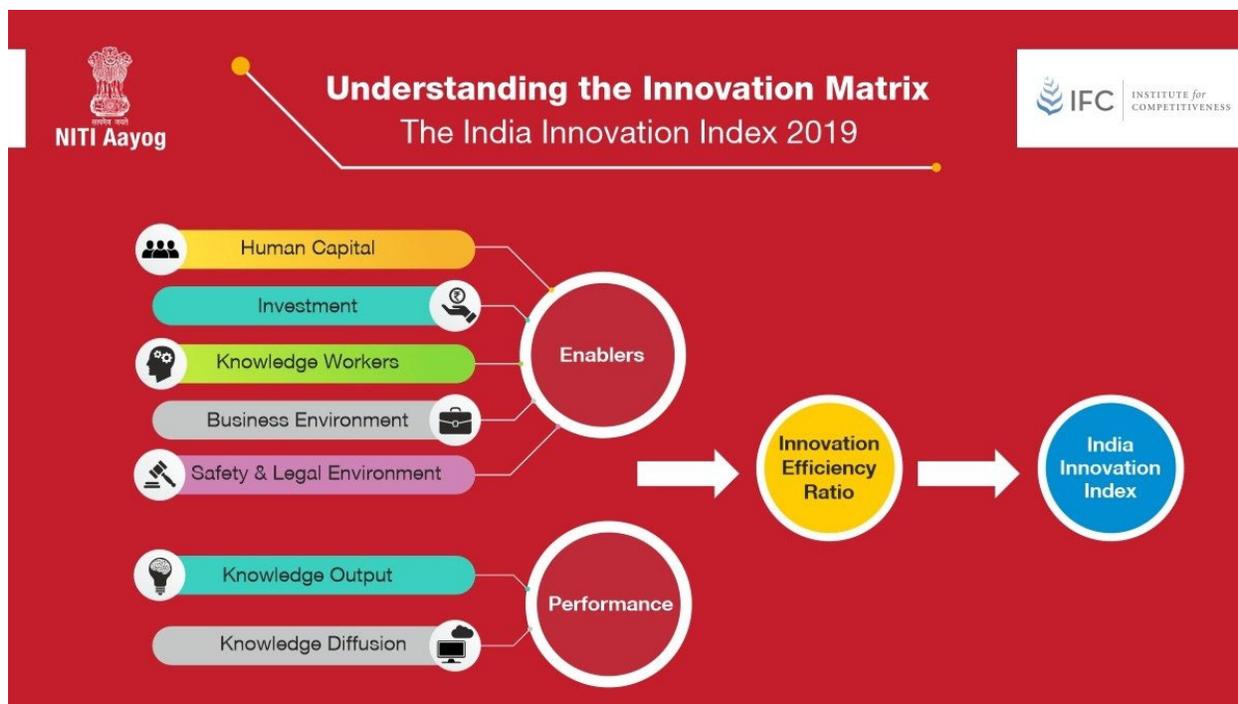
NITI Aayog index

- Karnataka retained its leadership position in the major States category in the second edition of India Innovation Index released by NITI Aayog.
- It was followed by Maharashtra, which moved past Tamil Nadu to occupy the second place.

- Other States in the top 10 are Telangana, Kerala, Haryana, Andhra Pradesh, Gujarat, Uttar Pradesh and Punjab. Barring Maharashtra, all other States in the top five are in the south.
- Jharkhand, Chhattisgarh and Bihar scored the lowest on the index, which put them at the bottom in the “major States” category.
- “Karnataka’s rank is attributable to its substantive number of venture capital deals, registered Geographical Indications and information and communications technology exports. Its high Foreign Direct Investment (FDI) inflow has also enhanced the innovation capabilities of the State.

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

Best performers
 Four of the five highest scoring major States in the India Innovation Index are from the south

- With the pandemic triggering an economic shutdown, the role of innovation to revitalise the economy has never been more important.

Best tableau award

- Uttar Pradesh was adjudged the best tableau among the 32 tableaux, 17 from States and Union Territories (UTs), nine from various Ministries, departments and paramilitary forces and six from Defence Ministry, that participated in the Republic Day parade, the Defence Ministry said.
- The tableau of Uttar Pradesh was based on the theme Ayodhya: Cultural Heritage of Uttar Pradesh. Minister of State for Youth Affairs & Sports and MoS, Minority Affairs Kiren Rijiju gave away the awards to the participants on Thursday. Tableau of Tripura and Uttrakhand were adjudged the second and third best respectively.



COVID-19 performance ranking

- New Zealand and Vietnam were ranked the best performing countries in their response to the pandemic, according to a COVID-19 “performance index” put together by the Lowy Institute, an Australian think tank, which sought to assess the impact of geography, political systems and economic development in assessing outcomes.
- The index, which was based on six different indicators, including confirmed cases and deaths per million people and the scale of testing, sought “to gauge the relative performance of countries”, assessing 98 countries in the 36 weeks that followed their hundredth case.
- Fewer reported cases and deaths, both in aggregate and per capita terms, point towards a better response to the virus. “More tests conducted on a per capita basis reveal a more accurate picture of the extent of the pandemic at the national level. Lower rates of positive tests, meanwhile, indicate greater degrees of control over the transmission of COVID-19.”

Statistics:

- India ranked 86 out of 98 countries, while the U.S. stood at 94 and Brazil at the bottom of the index. Taiwan, Thailand and Cyprus were in the top five. Sri Lanka was the best faring nation in South Asia, ranking 10, while the Maldives was at 25, Pakistan at 69, Nepal at 70, and Bangladesh at 84.

TOP 5	
RANKINGS	Score*
1. New Zealand	94.4
2. Vietnam	90.8
3. Taiwan	86.4
4. Thailand	84.2
5. Cyprus	83.3
BOTTOM OF THE PILE	
66. United Kingdom	37.5
86. India	24.3
94. United States	17.3
(Zero - worst performing; 100- best performing)	

- China was not included due to a lack of publicly available data on testing.
- Population size was one factor. Smaller countries with fewer than 10 million people “consistently outperformed their larger counterparts throughout 2020”.
- The level of economic development and regime-type were less significant than expected, which it attributed to the relatively ‘low-tech’ nature of the health measures used to mitigate the spread of the virus which may have created a more level playing field between developed and developing countries.
- “In general, countries with smaller populations, cohesive societies, and capable institutions have a comparative advantage in dealing with a global crisis such as a pandemic.

Padma awards - 2021

Padma Vibhushan			
S.No.	Name	Field	State/Country
1.	Shinzo Abe	Public Affairs	Japan
2.	S. P. Balasubramaniam (Posthumous)	Art	Tamil Nadu
3.	Dr. Belle Monappa Hegde	Medicine	Karnataka
4.	Narinder Singh Kapany (Posthumous)	Science and Engineering	The U.S.A.
5.	Maulana Wahiduddin Khan	Others- Spiritualism	Delhi
6.	B. B. Lal	Others- Archaeology	Delhi
7.	Sudarshan Sahoo	Art	Odisha

Padma Bhushan			
S.No.	Name	Field	State/Country
1.	Krishna Nair Shantakumari Chithra	Art	Kerala
2.	Tarun Gogoi (Posthumous)	Public Affairs	Assam
3.	Chandrashekhar Kambara	Literature and Education	Karnataka
4.	Sumitra Mahajan	Public Affairs	Madhya Pradesh
5.	Nripendra Misra	Civil Service	Uttar Pradesh

6.	Ram Vilas Paswan (Posthumous)	Public Affairs	Bihar
7.	Keshubhai Patel (Posthumous)	Public Affairs	Gujarat
8.	Kalbe Sadiq (Posthumous)	Others- Spiritualism	Uttar Pradesh
9.	Rajnikant Devidas Shroff	Trade and Industry	Maharashtra
10.	Tarlochan Singh	Public Affairs	Haryana

Gallantry medals:

Mahavir Chakra

- 1.Col Bikumalla Santosh Babu, 16 Bihar (Posthumous)

Vir Chakra

1. NB Sub Nuduram Soren, 16 Bihar (Posthumous)
2. Hav K Palani, 81 FD Regt (Posthumous)
3. Hav Tejinder Singh, 3 Med REGT
4. NK Deepak Singh, AMC, 16 Bihar (Posthumous)
5. Sep Gurtej Singh, 3 Punjab (Posthumous)

Kirti Chakra

1. Sub Sanjiv Kumar, 4 Para (SF) (Posthumous)

Shaurya Chakra

1. Maj Anuj Sood, Guards, 21 RR (Posthumous)
2. RFN Pranab Jyoti Das, 6 Assam RIF
3. PTR Sonam Tshering Tamang, 4 PARA (SF)

India is ‘partly free’, says U.S. thinktank

- Freedoms in India have reduced, according to a report from a U.S. thinktank, Freedom House, resulting in India being classified as ‘partly free’.
- India’s score was 67, a drop from 71/100 from last year (reflecting 2019 data) downgrading it from the free category last year (based on 2020 data).
- The private media are vigorous and diverse, and investigations and scrutiny of politicians do occur. However, attacks on press freedom have escalated dramatically and reporting has become significantly less ambitious in recent years citing the use of security, defamation, sedition and contempt of court laws to quiet critical media voices.
- Separately, revelations of close relationships between politicians, business executives and lobbyists on one hand and leading media personalities and owners of media outlets, on the other, have dented public confidence in the press.

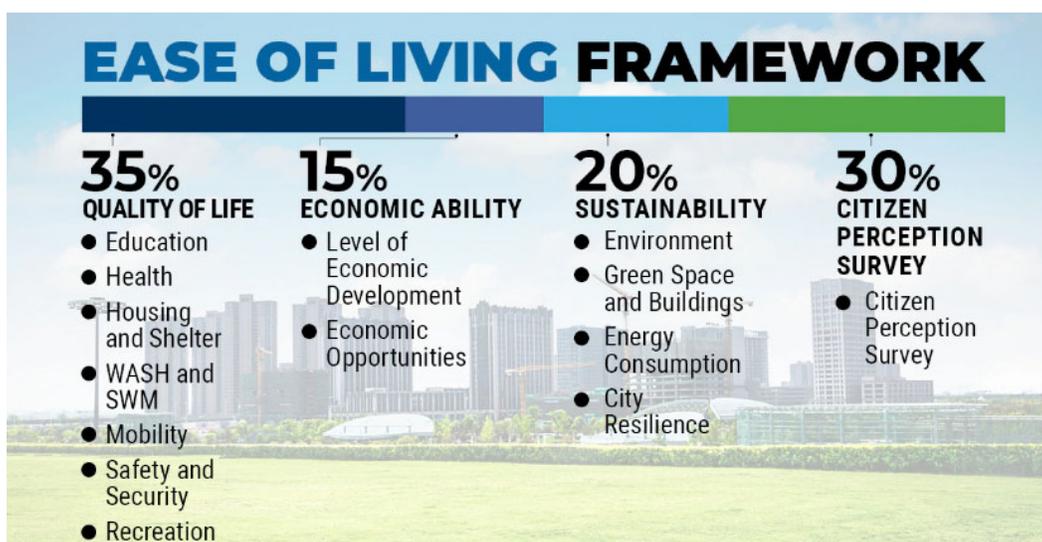
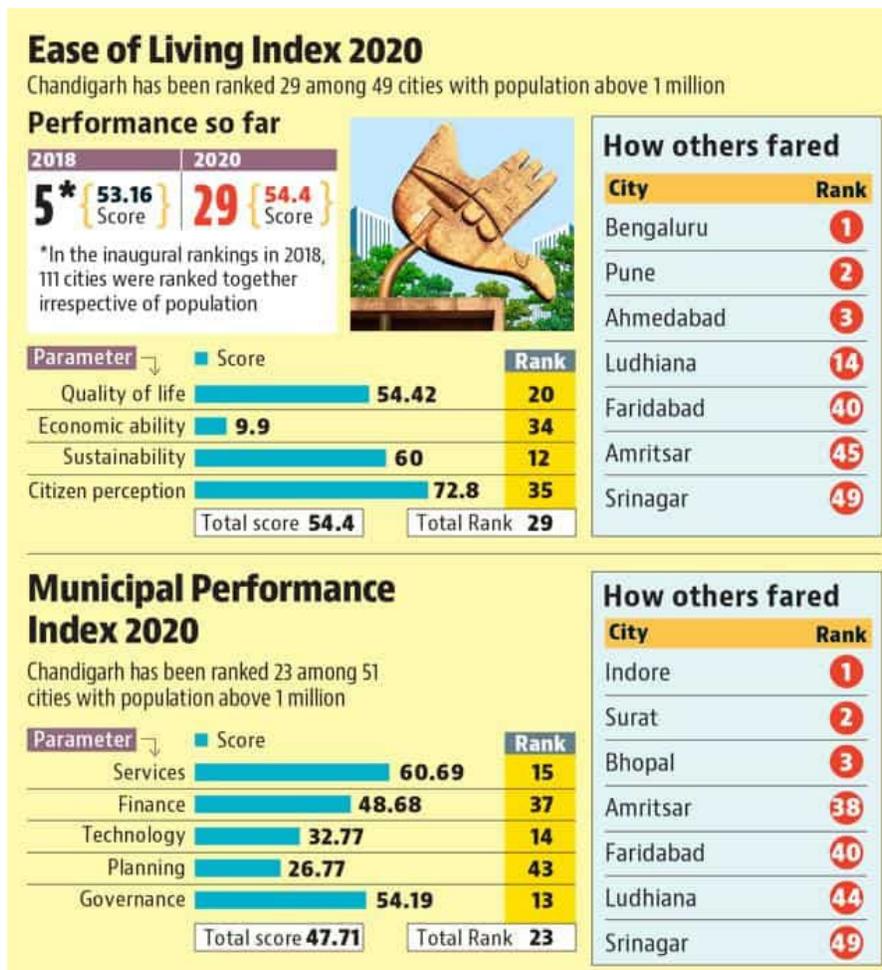


- On the U.S., the Freedom House said the risky state of American democracy was on display during the January 6 attack on the Capitol. It listed what it called the Trump presidency’s “unprecedented attacks” on American democracy (examples included were dismissing inspectors general to sowing mistrust over the electoral system). The U.S. dropped three points over one year, down to 83/100.
- China, classified as ‘not free’, dropped a point from last year going down to 9/100.

Bengaluru, Shimla ‘most liveable’ cities

- Bengaluru and Shimla were ranked as the most liveable in the categories of cities with more than and less than 1 million population respectively by the Union Housing and Urban Affairs Ministry’s Ease of Living Index.
- The Ease of Living Index 2020, in which 111 cities participated during the assessment in 2020 that included citizens’ feedback, had Bengaluru at the top, followed by Pune, Ahmedabad, Chennai, Surat, Navi Mumbai, Coimbatore, Vadodara, Indore and Greater Mumbai in the category of cities with over 1 million population.

- In cities with less than a million population, Shimla topped the list, followed by Bhubaneswar, Silvassa, Kakinada, Salem, Vellore, Gandhinagar, Gurugram, Davangere and Tiruchirappalli.



- The Ministry also released the Municipal Performance Index 2020, which rated 111 municipalities on their services, finance, policy, technology and governance.
- Indore topped the ranking of municipalities with over 1 million population, followed by Surat and Bhopal, and the New Delhi Municipal Council was the best among civic bodies with under a million population, followed by Tirupati and Gandhinagar.

IISc in top 100 list in natural sciences

- The Indian Institute of Science broke into the top 100 in the natural sciences category of the QS World University Rankings by Subject 2021, which were released on Thursday.
- With regard to subject rankings, there are two new entrants to the top 100 list: JNU's anthropology programme and O.P. Jindal Global University's law programme, which is also the only private institution on the list.
- In the broad engineering and technology category, only three institutions made it to the top 100 — the IITs Bombay, Delhi and Madras — in comparison to five institutions last year.
- In the other two broad categories, the University of Delhi was the highest ranked Indian institution in social sciences and management, but fell 48 places to drop out of the top 200. The All India Institute of Medical Sciences remained the only institution in the top 300 in life sciences and medicine, but also dropped more than 10 places.
- Overall, 25 Indian programmes from 12 institutions made it to the top 100 in their specific subject areas, two fewer than in 2020.
- The top-ranked Indian programme globally is the IIT Madras petroleum engineering programme which dropped one place to the 30th rank, followed by mineral and mining engineering at IITs Bombay and Kharagpur, which are ranked at 41st and 44th place in their field. The University of Delhi's development studies programme is the only other one in the top 50, sliding in at the 50th rank.
- QS Head of Evaluation Leigh Kamolins noted that India had a good performance in COVID-19 research, ranking fifth in the world in terms of the number of published research papers on the pandemic.

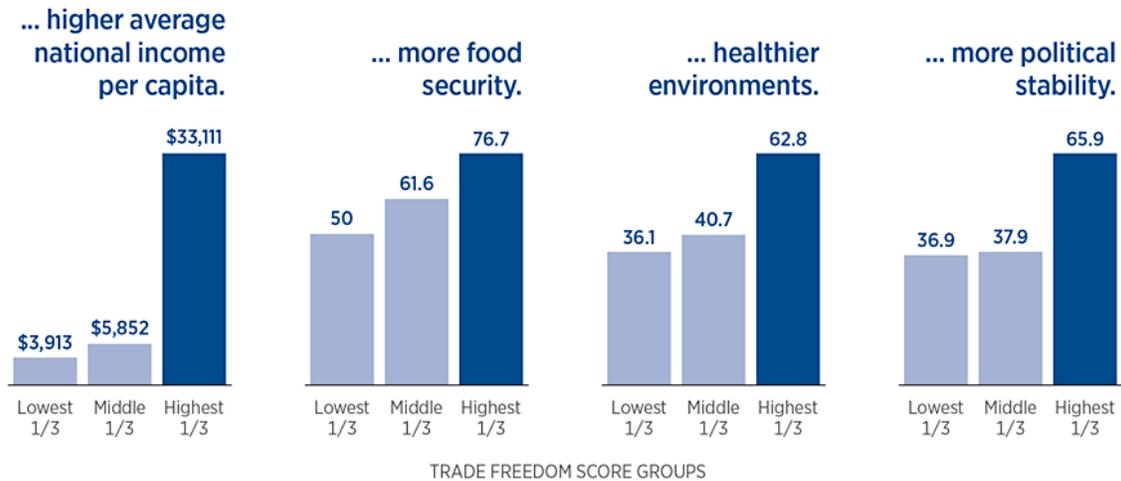
Economic Freedom Index 2021

The news:

- The Heritage Foundation, a US Conservative think-tank, recently launched the “Economic Freedom Index”. In the index, Singapore has topped the global ranking for the second consecutive year. The index was prepared by covering 184 countries this time for the period of July 2019 to June 2020.

Major Benefits of Free Trade

Nations with higher trade scores in the *2021 Index of Economic Freedom* also have ...



Details:

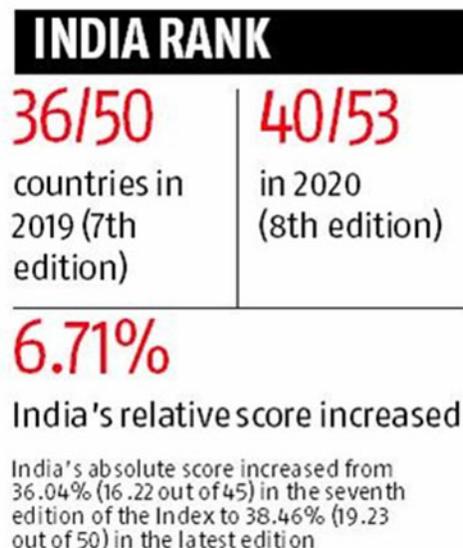
- The overall score of the Singapore was increased by 0.3 points to 89.7. The score was increased primarily because of the improvement in score for the government spending.
- The score obtained by Singapore is well-above the regional and the world averages. Hongkong was not considered to prepare this year's index for the first time which has topped the list for 25 years out of 26 years before this year's index. Hong Kong was kept outside, because, the Special Administrative Region & the economic policies of the country now come under the direct control of Beijing.
- The second place was obtained by New Zealand with its score of 83.9 points. Australia has obtained the third position with 82.4 points. Switzerland has scored 81.9 points and acquired the fourth position. While, the Ireland obtained the fifth position with 81.4 points.
- Among the major economies of the world, the United Kingdom has been ranked at 7th position with its score of 78.4 points.
- The United States has been ranked 20th with 74.8 points. Japan was ranked at 23rd and has obtained the score of 74.1 points.
- Germany obtained 72.5 points and was ranked 29th.
- China has been ranked at number 107 with its score of 58.4 points.
- India has obtained a score of 56.5 this year which is ranked at the middle among Asia-Pacific countries that is 26th out of 40 Asia-Pacific countries.

[Index of Economic Freedom](#)

It is an annual index and ranking. It was created in the year 1995 by the conservative think-tank called The Heritage Foundation and The Wall Street Journal. This index measures the degree of economic freedom among the world's nations. This index is inspired by Adam Smith's approach in The Wealth of Nations which states that the "basic institutions which protect the liberty of individuals to pursue their economic interests, in turn, result into the greater prosperity for bigger society".

International Intellectual Property Index

- The Index is released annually by 'US Chamber of Commerce Global Innovation Policy Centre (GIPC)'.
- It evaluates Intellectual Property rights across 53 global economies on the basis of patent, commercialisation of IP assets, copyright policies and ratification of international treaties.
- As per the index, overall global IP environment had improved in 2020. Positive score was increased in 32 economies of the 53 economies.
- India was ranked 40th in 2020. It has scored 38.4 out of 100 on 50 intellectual property-related indicators.
- Overall score of India has increased from 36.04 per cent in seventh edition to 38.46 per cent in eighth edition.
- Among BRICS countries, India registered the second-highest growth in nine editions with an overall improvement of over 13 per cent.
- India performance in the index has improved over past few years. Country has made several positive efforts which increased the score because of stronger enforcement efforts and precedent-setting court cases of copyright and trademark infringement.



Gandhi Peace Prize 2020

- According to the Ministry of the culture, government of India has conferred the Gandhi Peace Prize on Bangabandhu Sheikh Mujibur Rahman for 2020.
- The peace prize for the year 2019 was conferred on the late His Majesty Sultan Qaboos bin Said Al Said of Oman.
- The peace prize was conferred ahead of Prime Minister Narendra Modi's scheduled visit to Dhaka on March 26, 2021. He will be attending the celebrations of the golden jubilee of the independence and birth centenary of Bangabandhu Sheikh Mujibur Rahman.

Facts:

- Sheikh Mujibur Rahman was the first President and also became Prime Minister of Bangladesh, later. He is called as "Father of the Nation" or "Mujib". He was assassinated on August 15, 1975.

Sultan Qaboos bin Said Al Said

- Winner of the Gandhi Peace Prize 2019, Sultan Qaboos, was the longest-reigning leader of the modern Arab world. He died in the month of January 2020. The peace prize was given this year for the last two years that is 2019 and 2020. In the year 2018, it was announced for the last four years.

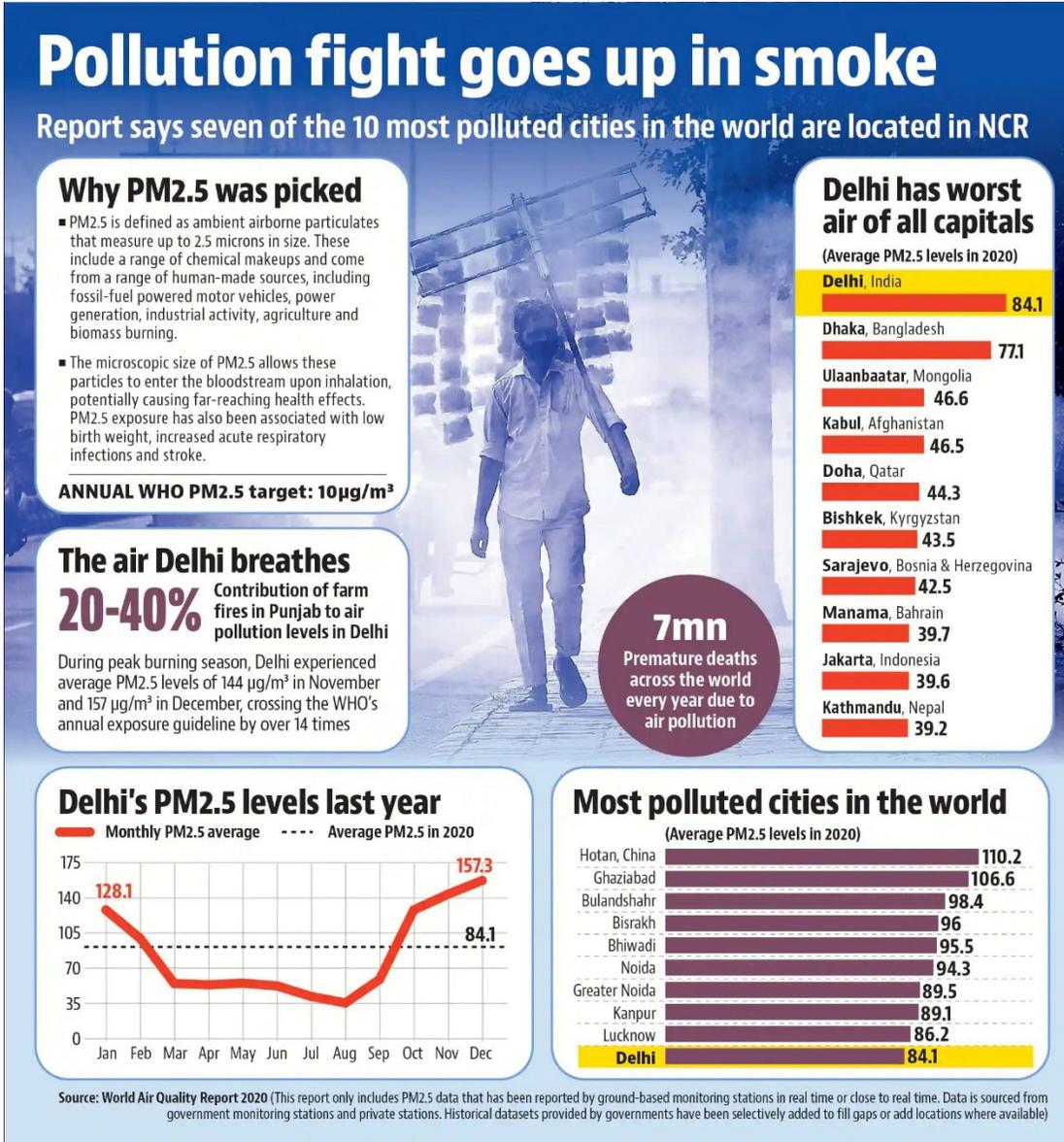
Gandhi Peace Prize

- This is an International Gandhi Peace Prize which has been named after Mahatma Gandhi. The award is presented by the Government of India. It is presented as a tribute to the Gandhian Ideals. This award was launched in the year 1995 on the occasion of the 125th anniversary of Mohandas Gandhi.
- This annual award is given to the individuals and institutions for their contributions in the political, social and economic transformation through non-violence and other Gandhian ideals. It comprises of rupees one crore in cash, a plaque and a citation. The award is open to all the persons regardless of their race, nationality, gender or creed.

'World Air Quality Report 2020'

The news:

- It is a report on air quality released by Swiss organisation, IQAir.
- The global cities ranking report is based on PM2.5 data from 106 countries, which is measured by ground-based monitoring stations, most of which are operated by government agencies.



In India:

- Delhi is the world's most polluted capital: Although Delhi's air quality improved by nearly 15 per cent from 2019 to 2020, the city still ranked as the 10th most polluted city in the world and the most polluted capital.
- 22 of the world's 30 most polluted cities including Delhi are in India.
- Ghaziabad is the second most polluted city in the world after Xinjiang in China.
- The eight Indian cities in the top 10 list are — Bulandshahr, Bisrakh Jalalpur, Noida, Greater Noida, Kanpur, Lucknow (all in UP), Bhiwari in Rajasthan and Delhi.

- Major sources of India's air pollution include transportation, biomass burning for cooking, electricity generation, industry, construction, waste burning and episodic agricultural burning.

Global Scenario:

- India is the third most polluted country in 2020, unlike in 2019, when its air was the fifth most noxious.
- Bangladesh and Pakistan were the countries in 2020 with worse average PM2.5 levels than India, said the report.
- China ranked 11th in the latest report.
- Of the 106 monitored countries, only 24 met the World Health Organization annual guidelines for PM 2.5.

BOOKS AND AUTHORS

March 2021

Authors Name	Book Name
Anindya Dutta	'Advantage India: The Story of Indian Tennis'
Evan Osnos	Joe Biden: American Dreamer
Shrabani Basu	'The Mystery of the Parsee Lawyer: Arthur Conan Doyle, George Edalji and the case of the foreigner in the English Village'
Rajiv Malhotra	'Artificial Intelligence and the Future of Power: 5 Battlegrounds'
Anant Vijay	'Dynasty to Democracy: The Untold Story of Smriti Irani's Triumph'
Prakash Javadekar	'The Green Queens of India- A Nation's Pride'
AS Pannerselvan	'Karunanidhi: A Life'
Susmita Mukherjee	'Baanjh: Incomplete Lives of Complete Women'
Ranjit Hoskote	'Hunchprose'

Shobha Tharoor Srinivasan	'Prince with a Paintbrush: The Story of Raja Ravi Varma'
Indra Nooyi	'My Life in Full: Work, Family and Our Future'
Jahnvi Barua	'Undertow'
Lt Gen AK Singh and Brig. Narendra Kumar	'Battle Ready for 21st Century'
Sanjaya Baru	'India's Power Elite: Caste, Class and Cultural Revolution'
Dr. Deepak Ravindran	'The Pain-Free Mindset: 7 Steps to Taking Control and Overcoming Chronic Pain'
Katharine Hayhoe	'Saving Us: A Climate Scientist's Case for Hope and Healing in a Dividend World'
Dr M Ramachandran	'Bringing Governments and People Closer'
Samir Soni	'My Experiments with Silence'
Danish Khan and Ruhi Khan	'Escaped: True Stories of Indian Fugitives in London'
Jeet Thayil	'Names of the Women'
Namit Arora	'Indians: A Brief History of a Civilization'
Vivek Wadhwa, Ismail Amla and Alex Salkever	'From Incremental to Exponential'
Vinod Kapri	'1232 km: The Long Journey Home'
Neha Sinha	'Wild and Wilful: Tale of 15 Iconic Indian Species'
Daribha Lyndem	'Name Place Animal Things'

February 2021

Authors Name	Book Name
Seth Rogen	'Yearbook'
Pavan C. Lall	'Yes Man: The Untold Story of Rana Kapoor'
Dalai Lama	'The Little Book of Encouragement'
Jhumpa Lahiri	'Whereabouts'
Vineet Bajpai	'1857- The Sword of Mastann'
Dr K N Bhandari	'Parliamentary Messenger in Rajasthan'
Hunter Biden (Son of US President Joe Biden)	'Beautiful Things' A Memoir
Sangeet Paul Choudary	'Platform Scale: For A Post-Pandemic World'
Former Vice President Mohammad Hamid Ansari	'By Many a Happy Accident: Recollections of a Life'
Meghna Pant	'The Terrible, Horrible, Very Bad Good News'
RP Gupta	'Turn Around India: 2020- Surmounting Past Legacy'
Priyanka Chopra Jonas	'Unfinished'
Peter Mukerjea	'Starstruck: Confessions of a TV Executive'
Dan Morain	'Kamala's Way: An American Life'
Ashwiny Iyer Tiwari	'Mapping Love'
Arun Karmarkar	'Tipane Kashmirchi (Notes on Kashmir), Untold Stories'

Irwin Allan Sealy	‘ASOCA: A Sutra
Kavita Kane	‘Sarasvati’s Gift’
Air Marshal Retd Bharat Kumar	‘The Epic Battle of Longewala’
Arun Kumar	‘Indian Economy’s Greatest Crisis: impact of Coronavirus and the Road Ahead’
Ashis Ghatak	‘Louiz Banks: A Symphony of Love’
Ramesh Kandula	‘Maverick Messiah: A Political Biography of N T Rama Rao’
Justice A K Rajan	‘Agriculture Acts 2020’
Shweta Taneja	‘They Found What/They Made What?’
Dr Darlie O Koshy	‘Runway to Skilled India’
Srikanth Ram	‘Leadership Lessons from 22 Yards’
Ram Madhav	‘Because India Comes First’
Kabir Bedi	‘Stories I Must Tell: The Journey of an Actor’
Olga Tokarczuk	‘The Lost Soul’
Karan Puri	‘#METOO’
Dr Avinuo Kire	‘The Last Light of Glory Days: Stories from Nagaland’
Snigdha Poonam	‘India: A Scamstar Born Every Minute’

January 2021

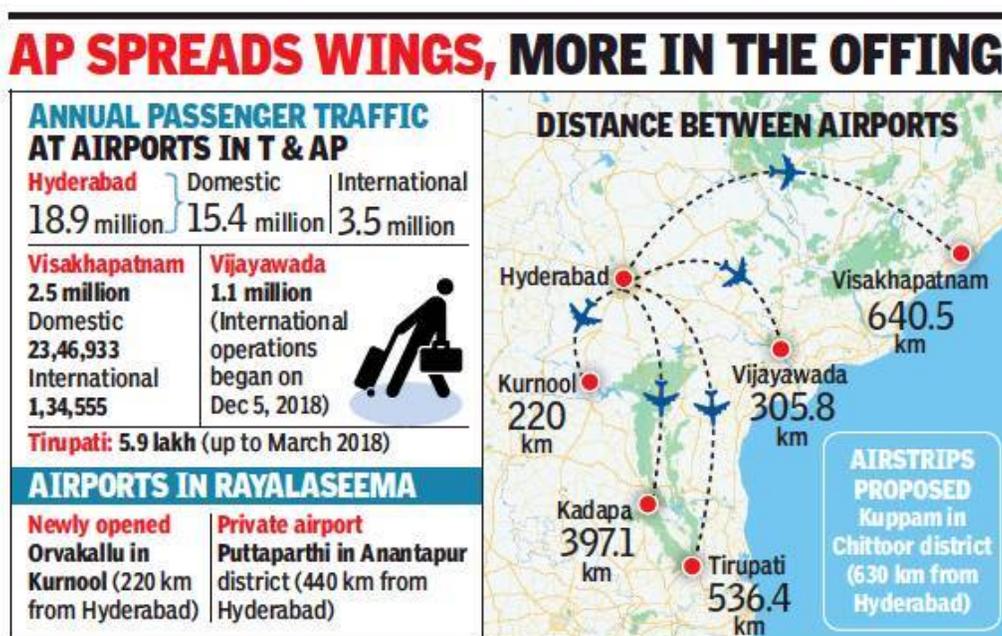
Authors Name	Book Name
KS Vijayanath	‘Sabarimala Vijnanakosham’
Alfredo Coveli	‘Vahana Masterclass’
R. Giridharan	Right Under Our Nose
R. Kaushik	India’s 71-Year Test: The Journey to Triumph in Australia
Lt. Gen. Konsam Himalay Singh	‘Making of a General-A Himalayan Echo’
Romila Thapar	‘Gazing Eastwards: Of Buddhist Monks and Revolutionaries in China, 1957’
S Y Quraishi	‘The Population Myth: Islam, Family Planning and Politics in India’
Vidhu Vinod Chopra and Abhijat Joshi’	‘Unscripted: Conversations on Life and Cinema’
Ramachandra Guha	‘The Commonwealth of Cricket’
Waman Subha Prabhu	‘Manohar Parrikar-Off the Record’
Dr APJM Nazema Maraikayar and Dr Y S Rajan	‘Abdul Kalam- Ninaivugalukku Maranamillai’
Mohamed Zeeshan	Flying Blind: India’s Quest for Global Leadership
Gautam Chikermane	‘India 2030: The Rise of a Rajasic Nation’
Dr Abhishek Singhvi and Prof. Khagesh Gautam	‘The Law of Emergency Powers: Comparative Common Law Perspectives’

Arun Sengupta and Partha Mukherjee	‘Soumitra Chatterjee: A Life in Cinema, Theatre, Poetry and Painting’
Andre De Grasse and Robert Budd	‘Race With Me!’

OTHERS

Orvakal airport

- The Orvakal airport on the outskirts of Kurnool city in Andhra Pradesh has got the approval of the Directorate General of Civil Aviation (DGCA) after completion of all the mandatory safety inspections and creation of infrastructure.



Orvakal is a village and a Mandal in Kurnool district in the state of Andhra Pradesh in India. It also forms a part of Kurnool Urban Development Authority.

Gujarat and dragon fruit

- The Gujarat government has decided to rename the dragon fruit as ‘kamalam’. According to Chief Minister Vijay Rupani, the fruit’s outer shape resembles a lotus, which is also the election symbol of the BJP.

- Farmers in Kutch, Navsari and other parts were growing the fruit and it should, therefore, have a local name too. “Though it is known as dragon fruit, it does not sound appropriate. The word ‘kamalam’ is a Sanskrit word and the shape of the fruit does resemble the lotus flower,” the chief minister said, adding that the renaming had nothing political about it.
- Another reason Mr. Rupani cited for renaming the fruit was that the word dragon reminded one of China.

<p>CASE FOR NAME CHANGE</p> <ul style="list-style-type: none"> ➤ Like lotus, dragon fruit also held in high esteem ➤ Shape & appearance resemble lotus ➤ Kutch farmers have already started branding it as kamalam 		<ul style="list-style-type: none"> ➤ Kamalam will have instant connect with people ➤ 150 farmers growing the fruit on 1,000 acre in Kutch
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Cultivation in India:

- Dragon fruit (*Hylocereus* spp.), a herbaceous perennial climbing cactus, widely known as Red Pitaya, has recently drawn much attention among the Indian growers, not only because of its attractive red or pink color and economic value as fruit, but also valued for its high antioxidant potential, vitamins and minerals content.
- Being a native of Southern Mexico, Guatemala and Costa Rica, dragon fruit was introduced in India during the late '90s and still the area under its cultivation is gradually increasing.
- Farmers in the Indian states of Karnataka, Kerala, Tamil Nadu, Maharashtra, Gujarat, Orissa, West Bengal, Andhra Pradesh and Andaman & Nicobar Islands have already taken up its cultivation, and the estimated total area under Dragon fruit cultivation in these regions may be less than 400 ha. Majority of the dragon fruits presently available in Indian markets are imported from Vietnam, Thailand, Malaysia and Sri Lanka.

Kashmir American Day

- A resolution petitioning New York State Governor Andrew Cuomo to declare February 5 as Kashmir American Day was passed by the State's Legislative Assembly on February 3.
- The 5th is also observed in Pakistan as Kashmir Solidarity Day and a social media post from the Consulate of Pakistan in New York suggests the country had a role in promoting the resolution.

- If the New York State Governor decides to recognise the day as suggested, it could potentially contribute to an understanding of the Kashmir issue that is out of kilter with the Indian government's positions and messaging.
- Kashmiri people living around the world speak the Koshur language and practice their distinct and ancient rites of Islam, Hinduism, and Sikhism; and in the recognition of their unique cultural identity and storied history, which has its roots in the Himalayan foothills and the Pir Panjal Range, helps to keep the Kashmiri identity alive.
- The State of New York endeavours to champion human rights including the freedom of religion, movement, and expression for all Kashmiri people, which are embedded within the United States Constitution, through the recognition of diverse cultural, ethnic, and religious identities.
- Following the government's reorganisation of Jammu and Kashmir via a dilution of Article 370, and the restrictions instituted on August 5, 2019, the Kashmir issue has gained attention in the U.S. It was the main focus of a hearing organised by an Asia-focused committee of the U.S. House of Representatives in October 2019.

New PM of Italy

- Former European Central Bank chief Mario Draghi was formally sworn in as Italy's new Prime Minister, against the backdrop of the deadly coronavirus pandemic and a crippling recession.
- The appointment of the 73-year-old known as "Super Mario" capped weeks of political instability for the country still in the grips of the health crisis that has killed more than 93,000 people.
- In 2012, the former European Central Bank chief won international acclaim after pledging to do "whatever it takes" to save the euro from collapse, a promise that served as a turning point in the continent's sovereign debt crisis.
- Mr. Draghi was parachuted in by Mr. Mattarella after the previous centre-left coalition under premier Giuseppe Conte collapsed, leading Italy rudderless amid the worst recession since the Second World War.
- Mario Draghi has promised an ambitious reform programme that will "deliver a better and fairer country for our children and grandchildren" in his first speech as leader of Italy's new national unity government.

WTO head

- Nigeria's Ngozi Okonjo-Iweala was appointed as the first female and first African head of the beleaguered World Trade Organization (WTO), saying a stronger WTO would be vital for the global COVID-19 recovery.
- The WTO called a virtual special General Council meeting at which member states officially selected the former Nigerian Finance Minister and World Bank veteran as the global trade body's new Director-General.

- She will take up her post on March 1 and her term, which is renewable, will run until August 31, 2025.
- The near-paralysed institution desperately needs a kick-start — something Ms. Okonjo-Iweala immediately addressed after being confirmed in the job.

[About Ngozi Okonjo-Iweala:](#)

- She was a developmental economist in World Bank for 25 years. Ngozi rose to the No. 2 position of Managing Director of Operations. As MD, she successfully led several initiatives to assist low-income countries, in particular raising around 50 billion US dollars in 2010 from donors for the International Development Association, the World Bank's fund for the poorest nations.
- Another notable work of hers was leading an initiative which negotiated to write-off debt worth 18 billion US dollars in 2005 for Nigeria, helping the country obtain its first ever sovereign debt rating. Moreover, her economic reforms had a far-reaching impact and saved Nigeria's crippling economy.
- Okonjo-Iweala served twice as Nigeria's Finance Minister and also as Minister of Foreign Affairs. She was the first female to hold the positions. She left her high-paying job at World Bank from Washington DC to serve her country.
- During her ministry, she imposed reforms which were intended to bombard a crackdown on corruption in the fuel sector.
- Okonjo-Iweala is the founder of Nigeria's first indigenous opinion-research organisation, NOI-Polls. She also founded the Center for the Study of Economies of Africa, a development research think tank based in Abuja, the capital city of Nigeria.
- She also serves as a member of numerous national, international, corporate and non-profit organisations such as Twitter, Standard Chartered Bank, Global Alliance for Vaccines and Immunization, African Risk Capacity and many more. Moreover, she was one of the special envoys of African Union to mobilise international economic support for the continental fight against COVID-19.

Assam's Red rice export

- The first consignment of 'red rice' was flagged off on March 4, 2021 to the United States. This adds on to the India's rice exports potential. The rice was sourced by leading rice exporter called 'LT Foods'.
- The ceremony of the flagging-off of the export consignments was carried out by APEDA Chairman Dr. M. Angamuthu in Haryana.
- The APEDA is involved in promoting rice exports with the help of several stakeholders along the value chain. The government had also set up a "Rice Export Promotion Forum (REPF)" under the parent head of APEDA.




Which Rice is best ?
 White, Brown, Black, Red Rice

GOOD	BETTER	BEST
		
Brown Rice <ul style="list-style-type: none"> • Better than White Rice • High fiber 	Black Rice <ul style="list-style-type: none"> • Low Glycemic Index • Stronger Flavor • High in Iron and Protein 	Red Rice <ul style="list-style-type: none"> • Most Nutritious Rice • High Fiber • Anthocyanins

- The red rice is rich in Iron and is grown in the Brahmaputra valley of Assam. It is grown without using any chemical fertilisers. This variety of rice is called as the ‘Bao-dhaan’, which is an integral part of foods in Assam.
- The commerce ministry of India said that, the non-basmati rice exports of India have increased to Rs 26,058 crore for the months of April-January 2020-21 as compared to the exports of Rs 11,543 crore for the same period in the fiscal year 2019-2020.
- APEDA is the Apex-Export Trade Promotion Active government body. The body was set up by the “Ministry of Commerce and Industry”. It was set up under the APEDA Act. The Act was passed in December 1985. Following that, the apex body was established and came into effect from February 1986.

Rice Export Promotion Forum (REPF)

- The REPF was set up by the Government of India to boost the rice exports. The forum takes up the collaborative steps so as to identify and document particulars. It also reaches out to the stakeholders along the entire production or supply chain of export of rice.
- In this way, it enhances the exports at the global market. REPF comprises of the representatives of the exporters, officials from APEDA, rice industry, ministry of commerce, and directors of agriculture from the major rice-producing states like Uttar Pradesh, Punjab, West Bengal, Telangana, Haryana, Assam, Andhra Pradesh, Odisha and Chhattisgarh.

World's highest railway bridge

- It is being constructed over the Chenab river in Jammu and Kashmir.
- The Rs.1,250-crore bridge will be 359 metres above the Chenab river bed.
- The rail line is expected to be 35 metres taller than the Eiffel Tower.
- Once completed, it will surpass the record of the Beipan river Shuibai railway bridge (275 m) in China.



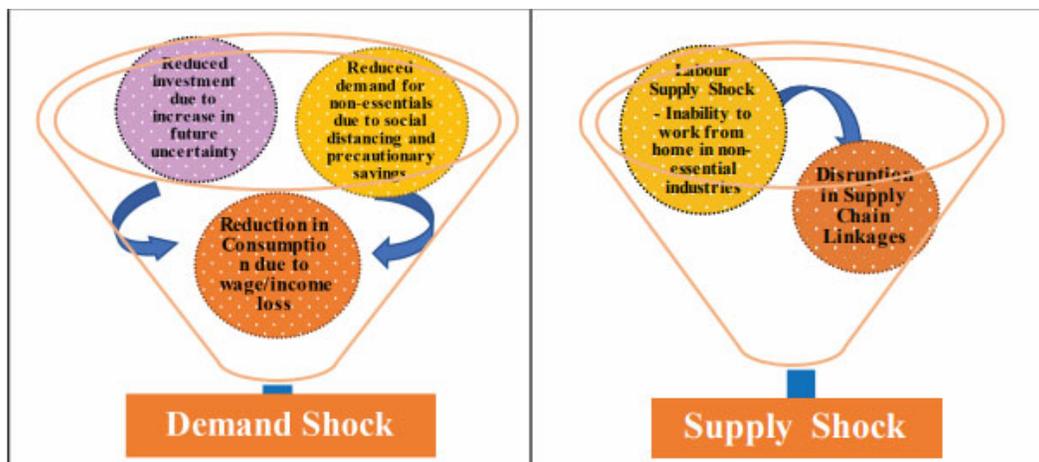
ECONOMIC SURVEY 2020-2021

The Economic Survey of India is an annual document of the Ministry of Finance, Government of India. The Department of Economic Affairs, Ministry of Finance presents the Survey in the Parliament every year, just before the Union Budget. It is prepared under the guidance of the Chief Economic Adviser of India. This document is presented to both Houses of Parliament during the Budget Session.

Report Summary

The Finance Minister, Ms Nirmala Sitharaman tabled the Economic Survey 2020-21 on January 29, 2021. Key highlights of the Survey include:

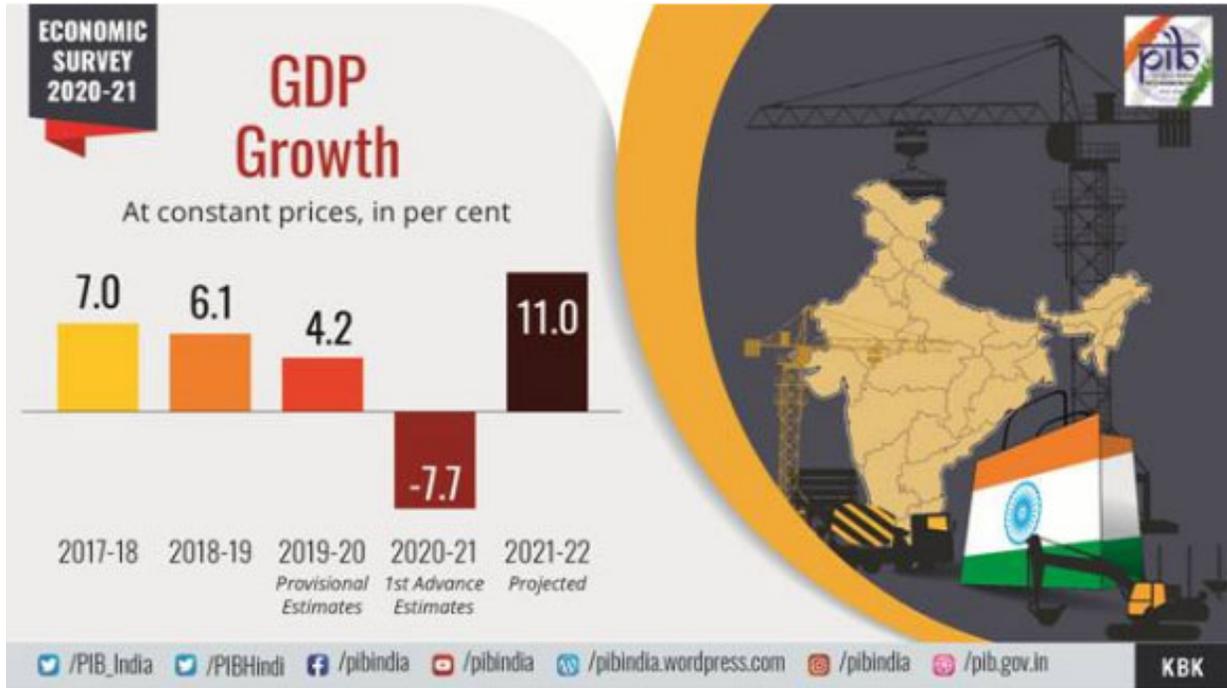
In March 2020, COVID-19 was declared a pandemic by the World Health Organisation, and a nationwide lockdown was imposed in India to contain the spread of the virus. The survey noted that early use of intense lockdowns delayed the time taken to reach the peak and reduced the magnitude of the peak. This led to a low mortality rate and also allowed for a sharp (V-shaped) recovery in economic activities.



KEY HIGHLIGHTS

State of the economy

Gross Domestic Product (GDP): The survey estimates nominal GDP growth of 15.4% and real GDP growth of 11% in 2021-22. In 2020-21, GDP declined by 23.9% in the first quarter and by 7.5% in the second quarter. Overall, GDP is expected to decline by 7.7% in 2020-21 as compared to the growth of 4.2% in 2019-20.

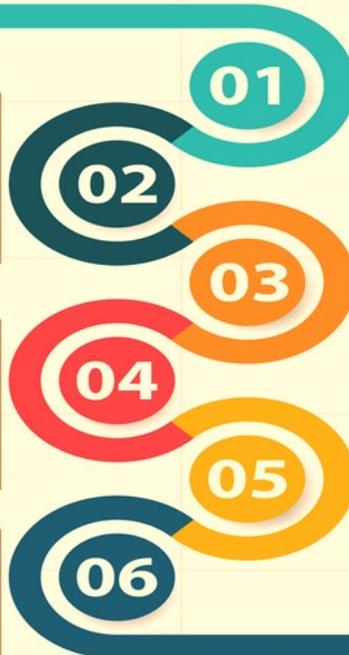


Humane and Visionary policy transformed lives vs livelihoods to saving lives & livelihoods

While GDP growth will recover (and it has), lost human lives cannot be brought back!

Calibrated demand-side policies: Push the accelerator only when the brakes are removed

Mega vaccination drive should enable recovery in services



01 India focused on saving lives & livelihoods... took short-term pain for long-term gain

03 Only country to announce a slew of structural reforms

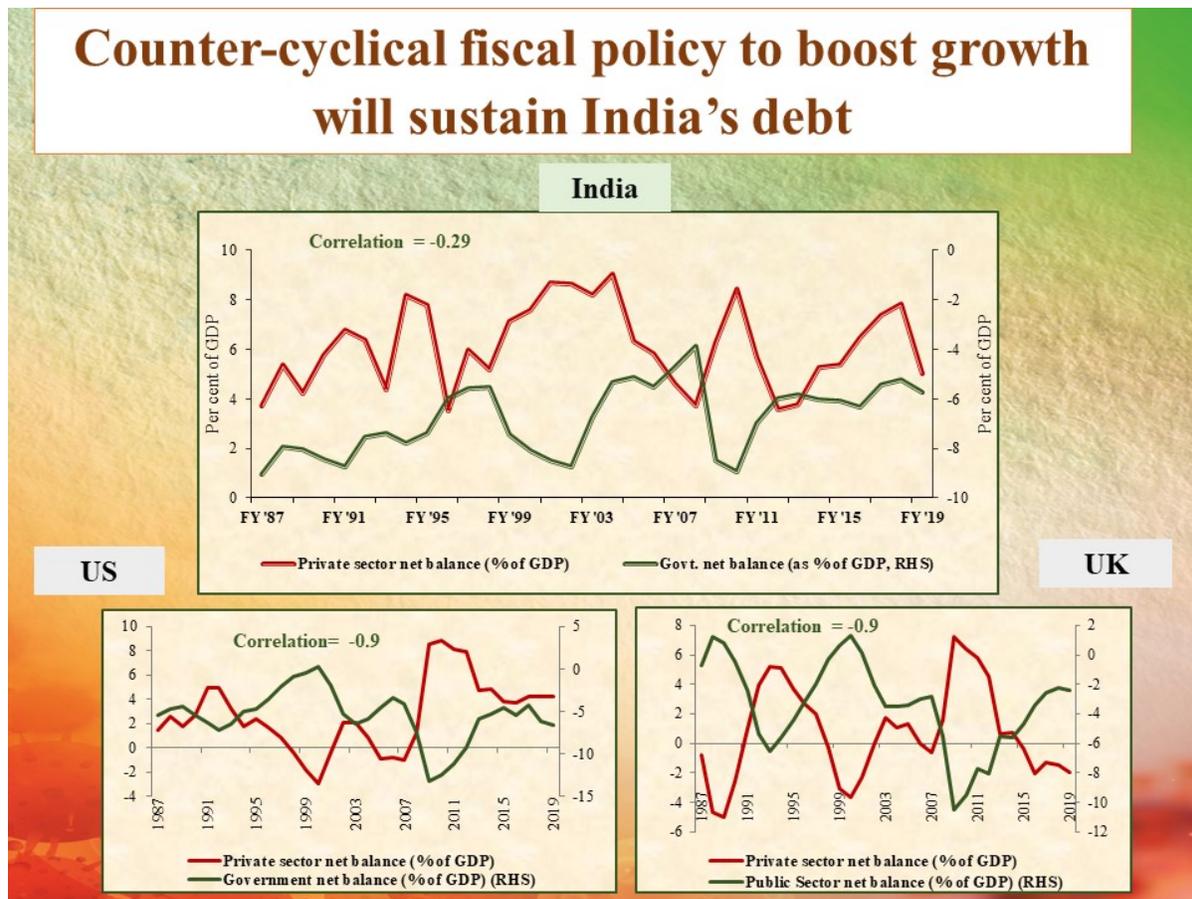
05 V-shaped economic recovery without a 2nd wave makes India a *sui generis* case in mature policymaking

Inflation: The Consumer Price Index (CPI) based inflation was 6.6% in 2020-21 (April-December). The inflation mainly due to food inflation which increased from 6.7% in 2019-20 to 9.1% in 2020-21 (April-December).

Current account surplus: In the first half of 2020-21, the current account surplus was 3.1% of GDP. The survey expects current account surplus to be at least 2% of the GDP by end of 2020-21. If achieved, this will break a 17-year trend of current account deficits.

The surplus is due to reduction in merchandise imports and lower expense on travel services, which led to higher decline in current payments (30.8%) as compared to the decline in current receipts (15.1%).

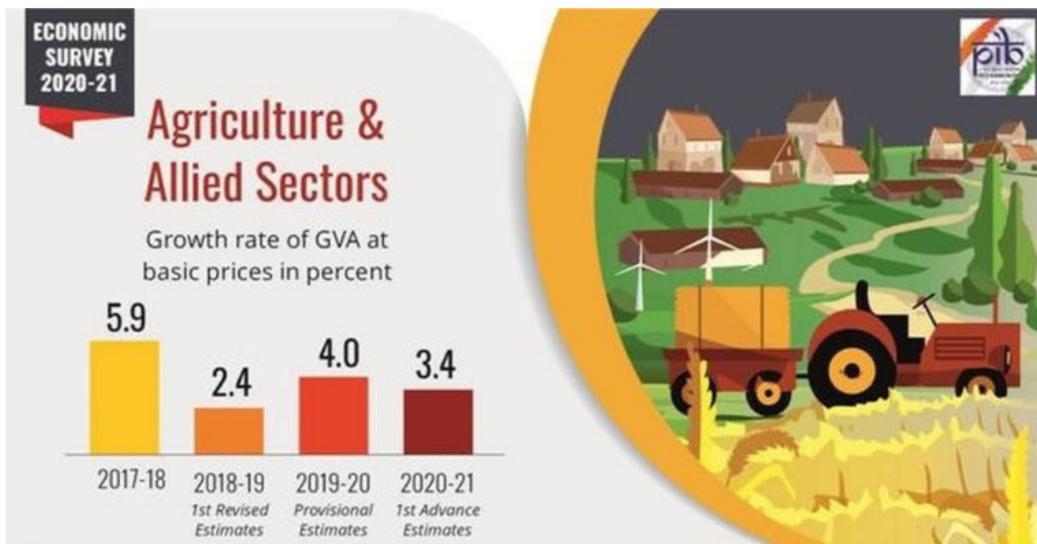
Fiscal deficit: As of November 2020, the fiscal deficit was 135.1% of budget estimate. In comparison, between April to November 2019, fiscal deficit was 114.8% of the budget estimate. The survey noted that the country was fiscally strained due to the disruptions caused by the COVID-19 pandemic.



Agriculture and allied activities

- In 2020-21, the growth rate of agriculture is estimated to be 3.4%. While the contribution of the sector to Gross Value Added (GVA) declined from 18.3% to 17.8% between 2014-15 and 2019-20, it is estimated

to increase to 19.9% in 2020-21. This is because the agricultural sector faced fewer disruptions on account of the COVID-19 pandemic as compared to non-agricultural sectors.



- Under National Food Security Act, 2013, the central government provides rice and wheat at subsidised rates (called central issue price (CIP)). The difference between the CIP and the market price gives quantum of food subsidy.
- While the CIP of wheat and rice has not been revised since the introduction of the Act, the economic cost of wheat increased from Rs 1,908.32 per quintal in 2013-14 to Rs 2,683.84 in 2020-21 (an increase of 41%).
- In addition, the economic cost of rice increased from Rs 2,615.51 per quintal in 2013-14 to Rs 3,723.76 per quintal in 2020-21 (an increase of 42%). The survey observes that revision of CIP to reduce the rising expenses on food subsidy bill.

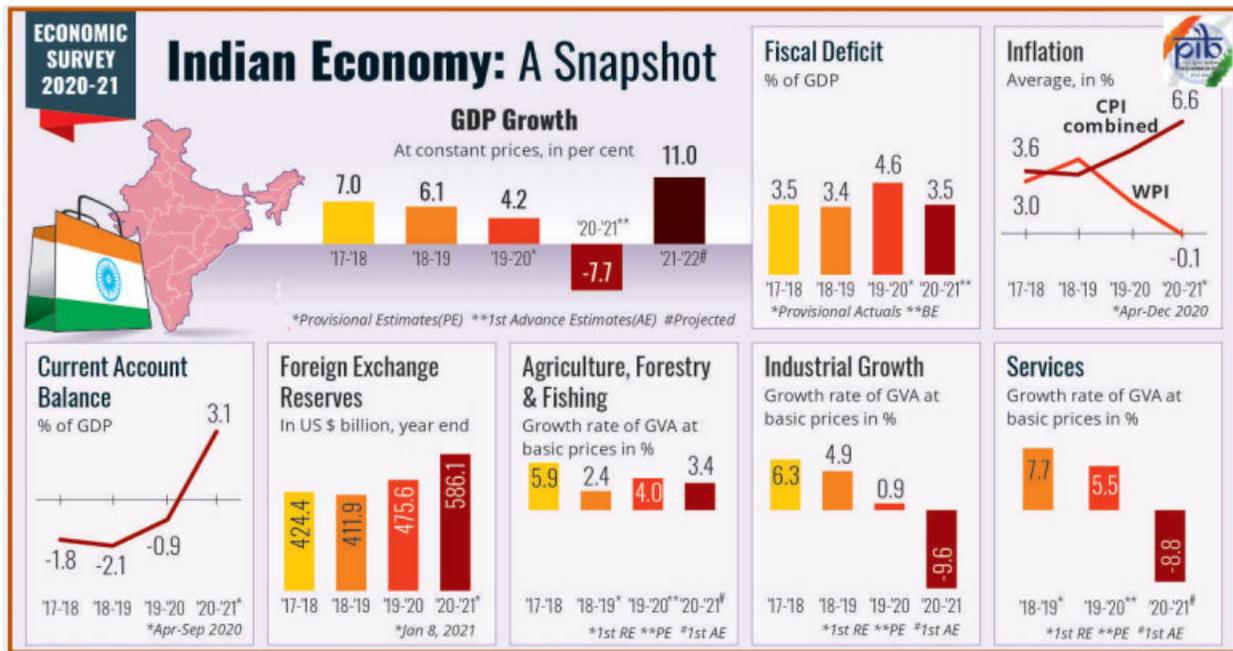
Industry and infrastructure

- The industrial sector is estimated to decline by 9.6% in 2020-21. Within the sector, highest decline is estimated in construction (12.6%) and mining (12.4%). The contribution of the industrial sector to GVA has declined from 32.5% in 2011-12 to 25.8% in 2020-21.
- The Index of Industrial Production (IIP) growth declined by 15.5% between April-November 2020 as compared to growth of 0.3% during same period in 2019. IIP is a measure of industrial performance that assigns a weight of 78% to manufacturing, 14% to mining, and 8% to electricity. Out of 407 items in IIP, the number of items which observed growth increased from 28 in April 2020 to 171 in November 2020, thereby, indicating a sharp economy recovery.
- The National Infrastructure Pipeline was launched with an investment plan of Rs 111 lakh crore over five years (2020-25). The project is aimed at increasing growth, competitiveness, and employment. The state

governments, central government, and the private sector will invest 40%, 39%, and 21% in the project, respectively. The major share of the funds will be given to: (i) energy sector (24%), (ii) roads (18%), (iii) urban infrastructure (17%), and (iv) railways (12%).

Service sector

- In 2020-21, the service sector is estimated to contract by 8.8% (with trade and hospitality contracting the most (21.4%)) as compared to 5.5% growth in 2019-20. Software services was the only sub-sector with positive growth (3.6%) in the period of April-September 2020.
- While the pandemic led to a global slowdown in trade, the Indian service sector export remained resilient. The net services export receipts in first half of 2020-21 was USD 41.67 billion, which is 3% higher than the service export receipts in first half of 2019-20 (USD 40.47 billion).



Gig economy:

- The lockdown gave a boost to the gig economy, while it had an “inevitable impact on the vulnerable and informal sector,” the Economic Survey for 2020-21 noted.
- “During the period of COVID-19 induced lockdown, the increasing role of the gig economy was evident with significant growth of online retail business,” it stated.
- Gig or platform workers had lacked basic rights and social security till the recent Code on Social Security was introduced. “COVID-19 has exposed the vulnerability of urban casual workers, who account for 11.2% of urban workforce (All-India) as per PLFS, January-March, 2020, a significant proportion of them are supposed to be migrants who were impacted by the lockdown,” the survey noted.

- “In order to incentivise more women to join the labour force, investment in institutional support to affordable and quality child care facilities, paid paternal leave, family-friendly work environment, and support for elderly care needs to be made” besides promoting non-discriminatory norms.

Defence budget:

- The allocated capital budget for defence has been fully utilised since 2016-17, reversing the previous trends of surrender of funds, as per the Economic Survey.
- “The trend of underutilisation of defence budget has also been reversed from financial year 2016-17,” the Survey stated. The allocation for defence budget, including civil estimates and pensions for 2020-21, was Rs.4,71,378 crore or Rs.40,367.71 crore more than the budget estimates of 2019-20.
- On account of the lengthy procurement process and delays in finalising deals, in the past, unused funds had been returned at the end of the financial year.
- Last year, the armed forces went for a series of emergency procurements since the stand-off with China in May along the Line of Actual Control (LAC) in Eastern Ladakh. At the Army Day address on January 15, Army Chief General Manoj Naravane said that last year, 38 deals were executed through ‘emergency and fast track’ route and these were worth about Rs.5,000 crore. In addition, capital procurements worth Rs.13,000 crore were concluded.
- On efforts to boost indigenisation of weapons systems, the Economic Survey said Defence Public Sector Undertakings (DPSU) and Ordnance Factories (OFs) were striving to increase the indigenous content of the equipment and products manufactured by them.
- “The indigenous content as on March 31, 2020 was 74.56%,” it noted.
- On efforts to boost private sector participation in domestic manufacturing, it said that as a policy, the DPSUs and OFs have been outsourcing many of their requirements and ‘the value of outsourcing, in terms of value of production, for the FY 2019-20 stands at 41.70%.’
- Further, over the years, a wide vendor base had been developed. Exports from the Ordnance Factory Board (OFB), the DPSUs and the private sector had increased from Rs.4,682 crore in 2017-18 to Rs.9,116 crore in 2019-20.
- Since the opening of defence sector to private participation in 2001, 44 Foreign Direct Investment (FDI) proposals and joint ventures have been approved for manufacture of various equipment, both in the public and the private sectors.

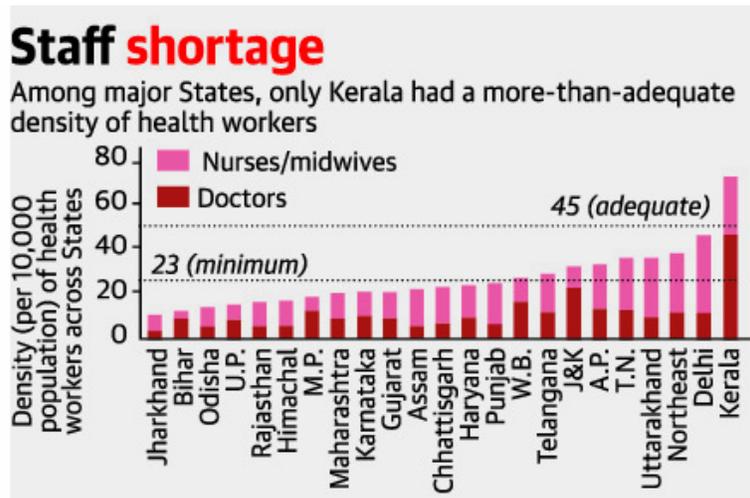
Inequality and growth:

- India must keep its focus on economic growth, rather than trying to alleviate inequality, says the Economic Survey, arguing given India’s current stage of development, redistribution of wealth is not feasible without growing the overall pie.
- Unlike the developed world, in India, economic growth and inequality both have similar correlations with socio-economic indicators such as health, education, fertility rates, crime and drug usage.
- The Survey also draws on the Chinese experience to suggest in countries with high growth rates and high levels of absolute poverty, there is no trade-off between growth and inequality. It said questions regarding conflict between growth and inequality become more pertinent “especially because of the inevitable focus on inequality following the COVID-19 pandemic.”
- An Oxfam report had showed Indian billionaires increased their wealth by 35% during the lockdown at a time when a quarter of the country was earning less than Rs.3,000 per month.

Health:

Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PM-JAY)

- The ongoing pandemic has showcased how a healthcare crisis can get transformed into an economic and social crisis, noted the Economic Survey 2020-21. It said the healthcare policy must not become beholden to ‘saliency bias’, where policy overweighs a recent phenomenon. “To enable India to respond to pandemics, the health infrastructure must be agile,” it said.

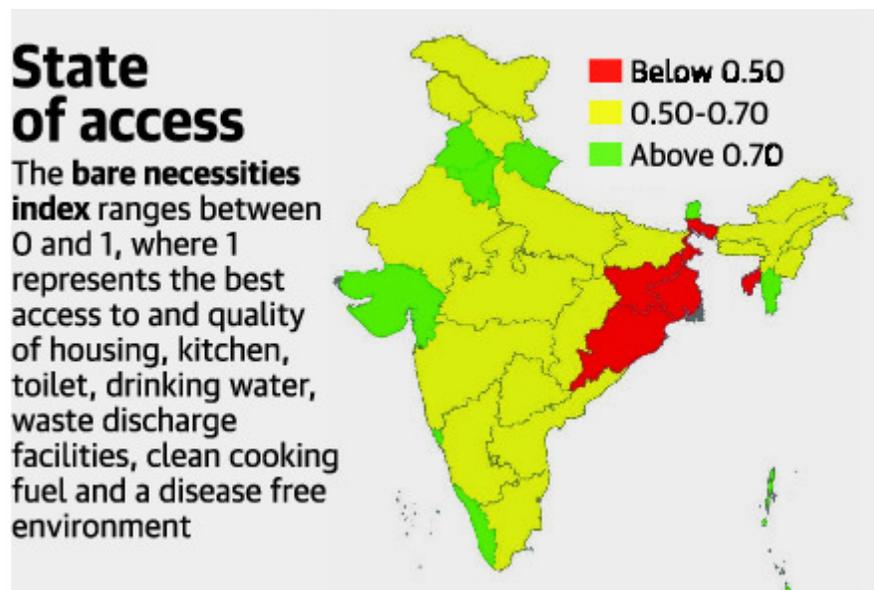


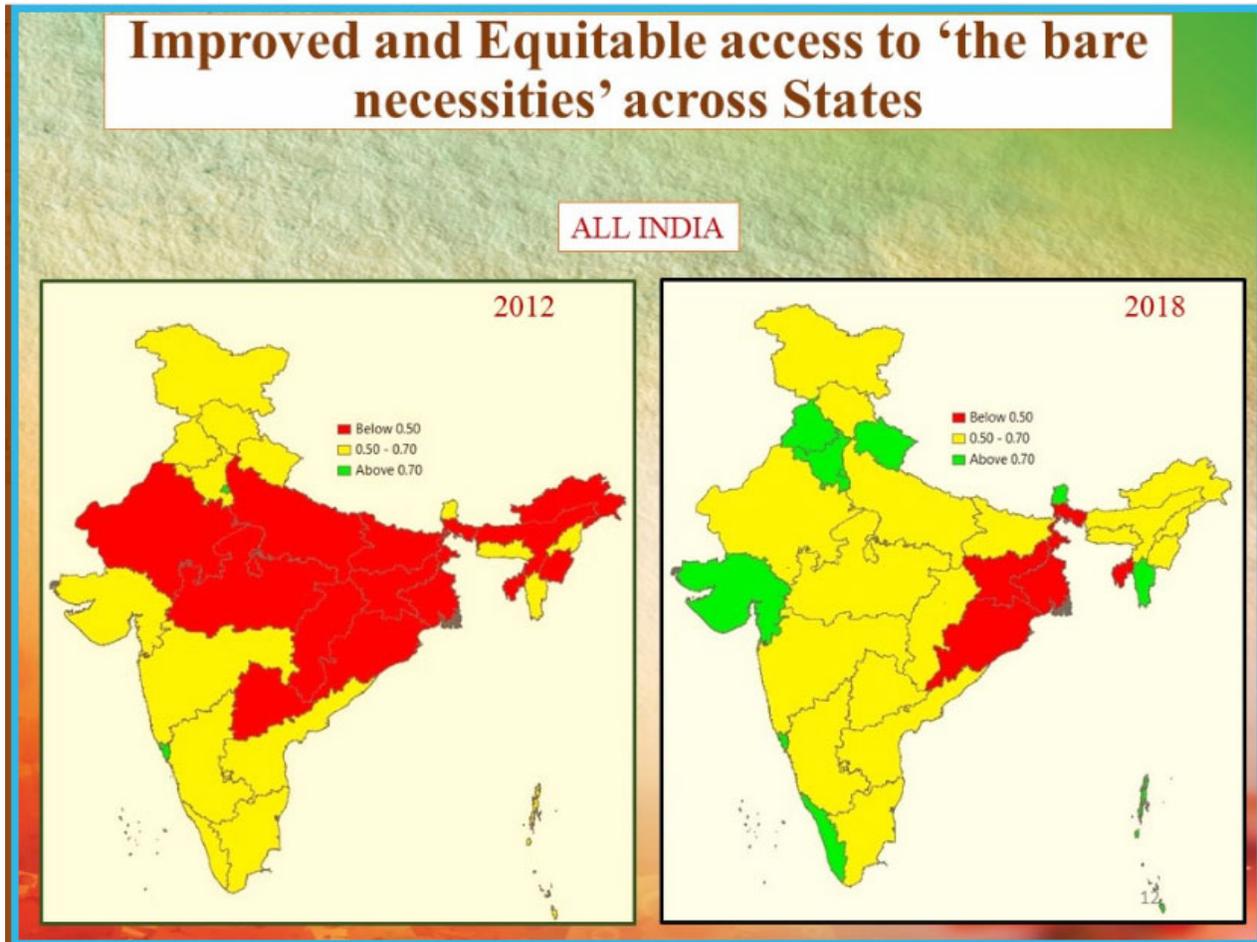
- The survey notes that Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB-PM-JAY) enhanced health insurance coverage. The proportion of health insured households between 2015-16 to 2019-20 increased by 54% in states that implemented AB-PM-JAY and decreased by 10% for states which did not implement the scheme.

- During this period, infant mortality rate decreased by 20% in states that implemented AB-PM-JAY whereas in states that did not implement AB-PM-JAY, infant mortality rate declined by 12%.
- The survey further notes that better access to bare necessities (such as housing, water, sanitation, electricity, and cooking fuel) lead to an improvement in health indicators.
- Poorer States have reduced the gap with rich States in providing citizens with access to the basics of daily life — housing, water, power, sanitation, cooking gas — according to a new ‘Bare Necessities Index’ (BNI) in the Economic Survey 2020-21.
- States such as Kerala, Punjab, Haryana and Gujarat top the index, while eastern Indian States of Odisha, Jharkhand, West Bengal and Tripura occupy the lowest rungs. States which showed significant improvement include Uttarakhand, Rajasthan, Uttar Pradesh, Bihar, Madhya Pradesh and Chhattisgarh.

Bare necessities

- Inter-State disparities in the access to ‘the bare necessities’ have declined in 2018 when compared to 2012 across rural and urban areas.





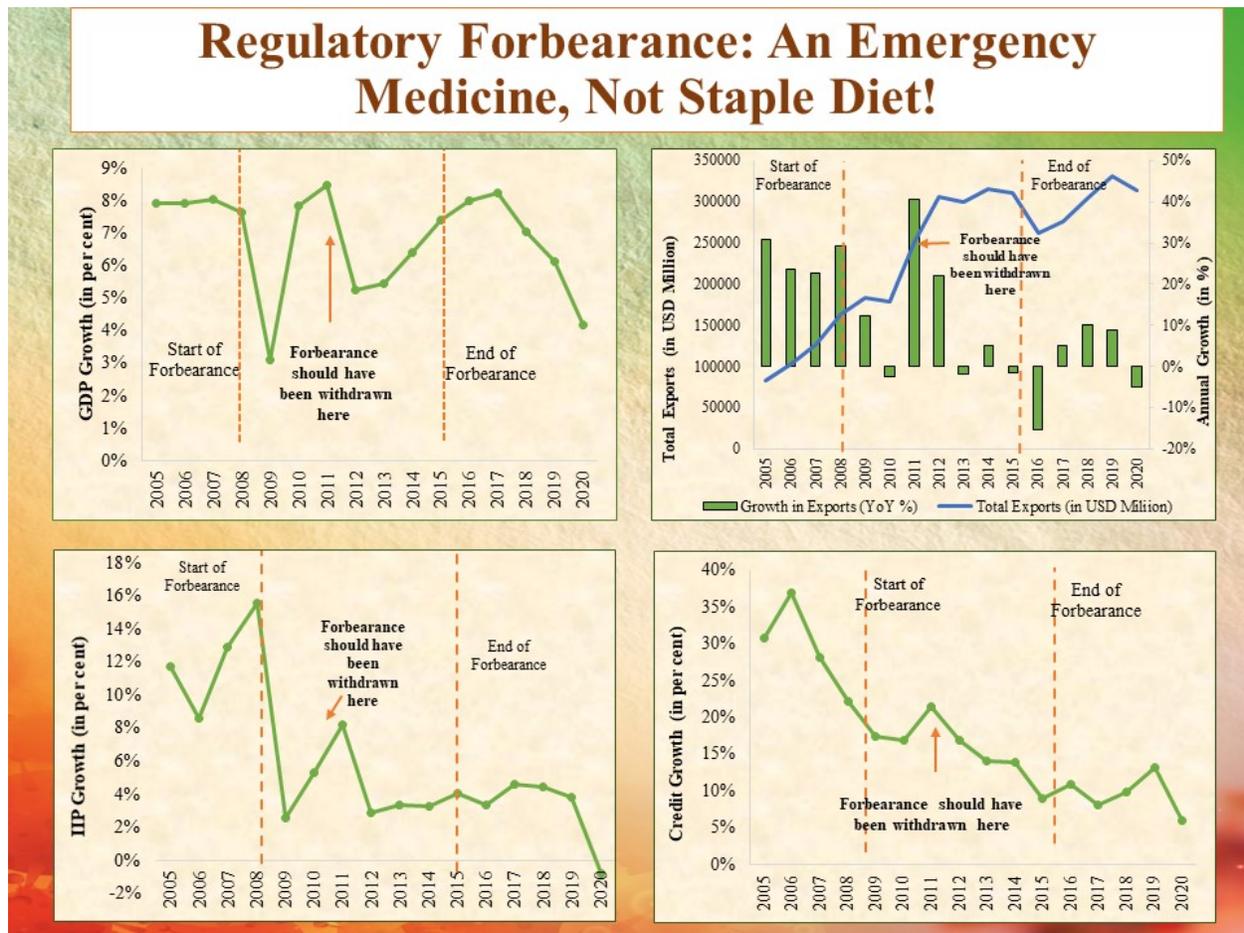
Health expenditure

- India has one of the highest levels of out-of-pocket expenses (OOPE) as a share of total health expenditure. The survey observes that increasing the spending on public health from 1% of GDP to 2.5-3% of GDP will help in reducing the out-of-pocket expenses from 65% to 30%.
- The Survey states about 65% of deaths in India are now caused by non-communicable diseases (NCDs) with ischemic heart diseases, chronic obstructive pulmonary disease (COPD) and stroke being the leading causes.
- The Survey observes that the health of a nation depends critically on its citizens having access to an equitable, affordable and accountable healthcare system. The OOPE, as a share of total health expenditure, drops precipitously when public health expenditure increases.
- The Survey also underlines that OOPE for health increases the risk of vulnerable groups slipping into poverty because of catastrophic health expenditures. The life expectancy in a country correlates positively with per capita public health expenditure.

- The survey noted that mitigating information asymmetry in the healthcare sector will help in achieving lower insurance premiums and better welfare of people. It recommends setting up a regulator for the healthcare sector to prevent market failures due to information asymmetry (specifically in private healthcare sector).

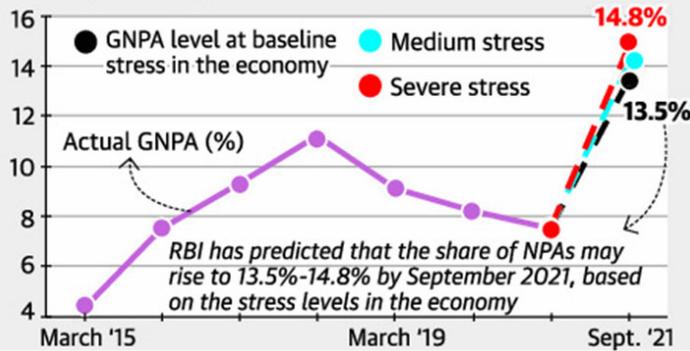
Banking sector

- The Economic Survey 2020-21 has prescribed an early withdrawal of the regulatory forbearance that was adopted in the wake of the pandemic to ward off the threat of financial sector failures impacting the real economy.
- Regulatory forbearance includes measures such as allowing banks to restructure certain loans rather than change the asset classification. The survey suggests that such measures must be withdrawn in a timely manner. It was noted that regulatory forbearance was adopted after the Global Financial Crisis in 2008 for seven years.



Present perfect, future tense

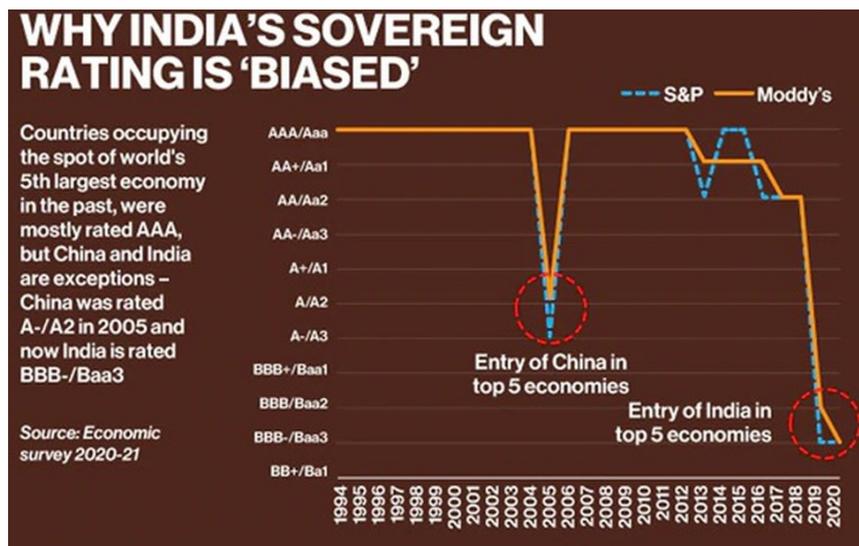
The NPAs of scheduled commercial banks surged after the RBI carried out an expansive asset quality review in 2015. The share of bad loans came down in the last two years. However, the effect of the COVID-19 related lockdown is not known yet as a high share of loans are under moratorium



- This led to an increase in non-performing assets and reduced credit growth once the measures were withdrawn. The survey observed that withdrawal of regulatory forbearance must be followed by a review of the quality of the bank’s assets, and capitalisation to ensure growth in lending.

Credit Rating

- The survey noted that India’s credit rating does not reflect the country’s fundamentals in terms of GDP growth, inflation, government debt as a % of GDP, among others.
- It observed a bias in ratings against emerging economies like India and China. Credit rating maps the probability of default, reflecting the willingness and ability of borrower to meet debt obligations.



- India has no history of sovereign default (demonstrating willingness to pay), and the foreign exchange reserves are greater than the total external debt of the country (demonstrating ability to pay). Poor sovereign credit ratings have adverse impact on inflow of foreign investments.
- Never in the history of sovereign credit ratings has the fifth-largest economy in the world been rated as the lowest rung of the investment grade (BBB-/Baa3). Reflecting the economic size and thereby the ability to repay debt, the fifth-largest economy has been predominantly rated AAA. China and India are the only exceptions to this rule

Innovation

- India ranked 48 in Global Innovation Index in 2020, which makes it first among Central and South Asian countries, and third among the lower middle-income economies. However, India's gross domestic expenditure on research and development (GERD) is lowest amongst larger economies. India spends 0.7% of GDP on GERD as compared to the expenditure of over 2% of GDP by China and over 2.5% of GDP in the United States of America.
- Currently, the government sector contributes 56% of the total GERD, which is higher than the contribution of the government sector (20%) in top ten economies (such as China, United Kingdom, and Japan).
- The contribution by business sector to GERD in India is 37%, which is significantly lower than the contribution of the sector in other large economies (68%). The survey observes that GERD should be increased to over 2% of GDP by enhancing research and development facilities, especially in the private sector.

Social Infrastructure, Employment and Human Development

- Expenditure on social services (education, health and other social sectors) by Centre and States combined as a proportion of GDP increased from 6.2 to 8.8 per cent during the period 2014-15 to 2020-21 (BE).
- The access to data network, electronic devices such as computer, laptop, smart phone etc. gained importance due to online learning and remote working during the pandemic.
- Formal skill training showed an improvement across all socio-economic classification including rural, urban and gender classification.
- Females spending disproportionately more time on unpaid domestic and care giving services to household members as compared to their male counterparts.
- Need to promote non-discriminatory practices at the workplace like pay and career progression, improve work incentives, including other medical and social security benefits for female workers.
- NFHS-5 (Phase-I), results show improvement in immunization coverage for children, institutional birth, infant mortality rate and under-five mortality rate in most of the selected States.