

August 2020

part - I

Current Affairs (consolidation)

www.goaltideias.com goaltideforprelims@gmail.com +91 8512 889 220

Introduction

Hello Everyone,

Every year more than 50 percent of the Prelims Paper is based on Current Affairs. It become important for us to have very good command on Current Affairs. Hundreds of publications are available in market. Aspirants are always confused how to prepare Current Affairs and most of the times they end up choosing wrong publications. We will not let you fall in this trouble. Three important courses are running simultaneously on our website for Current Affairs from Monday to Friday- Daily Quiz section, Daily Current Affairs section and Daily News Section.

Daily Quiz will help you do the best preparation to handle any question in UPSC Prelims Exam, Daily News section contains best opinion based Articles important for your Mains Exam and Daily Current Affairs section will give you best Current Affairs which is relevant for you Exam from all important sources (PIB+ all government websites, The Hindu+ 10 different newspaper, etc.). Nothing will be missed. This document is related to Current Affairs section.

You might find it bulky but don't worry. It contains lot of images to simplify your understanding.

Hope you enjoy reading.

Thanks,

Abhishek Agarwal

Founder, GoalTide IAS Prelims Academy

Contents

CA1. What are the laws in India for which a person be arrested for social media posts?	5
CA2. India's Falling Female Labor Participation	8
CA3. GST Compensation released by the Central Government	12
CA4. What Does NASA's New 'Perseverance' Rover Plan to Do on Mars?	15
CA5. China's Presence Near Ecuador Waters	17
CA6. Scientists find evidence of cancer in dinosaur that lived 76 million years ago	19
CA7. Status of Palm Oil in India	20
CA8. Electronic Vaccine Intelligence Network (eVIN)	25
CA9. India has invoked the peace clause of the World Trade Organisation	26
CA10. Population composition in India	30
CA11. What is ammonium nitrate, the chemical that exploded in Beirut?	33
CA12. Aadhaar Authentication for Good Governance Rules' Notified	34
CA13. GST collection of different states during and post lockdown.	36
CA14. New Guinea has the most plant species of any island	43
CA15. Discovery could lead to new malaria treatments	43
CA16. New Species Found/discovered.	45
CA17. Nagara Architecture of Ayodhya's Ram Mandir:	46
CA18. Saving India's only pitcher plant	47
CA19. Members of Parliament Local Area Development Scheme (MPLADS)	48
CA20. Tsunami Ready Programme: UNESCO-IOC	52
CA21. Abanindranath Tagore	53
CA22. Priority Sector Lending (PSL):	55
CA23. Landslide near Eravikulam National Park	56
CA24. MSMEs in India	59
CA25. Loya Jirga: Grand Assembly of Afghanistan	63
CA26. New grasshopper species named after Indian researcher	64
CA27. Weird Shape of our solar system	65
CA28. Cellular structure identified in coronavirus replication	66
CA29. Surveys Released recently by RBI	67
CA30. Pradeep Kumar Joshi appointed as UPSC chairman	72
CA31. Agriculture Infrastructure Fund	75

CA32.	Collapse of Canada's last remaining ice shelf raises global warming fears	77
CA33.	6,600-year-old gravesites in Poland suggest wealth gap existed earlier than thought	78
CA34.	State Development Loans (SDLs)	79
CA35.	Seagrasses	82
CA36.	Planet-Sized Sunspot Confirms New Solar Cycle	85
CA37.	Council of Architecture (Minimum Standards of Architectural Education) Regulations Notified	87
CA38.	Mauritius oil spill	. 88
CA39.	Asia Pacific Centre for Arbitration & Mediation (APCAM)	90
CA40.	Health of the Schedule Commercial Banks in the Latest Financial Stability Report (FSR)	93
CA41.	PM Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi)	98
CA42.	New study sheds light on genetic affinities of Gujjars and Ladakhis	99
CA43.	Hornbill Habitat Loss	100
CA44.	Is It Constitutional to Declare Wild Animals to Be 'Vermin'?	101
CA45.	Universal Ratification to Child Labour Convention	104
CA46.	Understand Everything about the National Flag, Anthem & Emblem	105
CA47.	African Swine Flu	109
CA48.	Naval Innovation and Indigenization Organisation (NIIO) launched	111
CA49.	BharatNet program	115
CA50.	Recent examples of rising Temperatures of Earth	118
CA51.	NALSA Launches Campaign for Empowering Women Through Legal Awareness	120
CA52.	Israel-UAE Peace Deal	122

CA1. What are the laws in India for which a person be arrested for social media posts?

So many arrests in recent days due to unusual social media postings as per the law. We will important laws which facilitates such arrests.

Whenever, we read about any arrest due to post on social media, first thing which comes to our mind is section 66A id the IT Act, 2000. **IT HAS BEEN REVOKED BY SC IN 2015.**

The provisions of the Section 66A (which was inserted through IT (Amendment) Act, 2008) can be read in the picture below (snapshot of IT Act, 2000). In the IT Act, it is now mentioned that Section 66A has been struck down by the Supreme Court's Order on 24 March 2015 in the Shreya Singhal vs. Union of India case. See below:

¹[66A. Punishment for sending offensive messages through communication service, etc.—Any person who sends, by means of a computer resource or a communication device,—

- (a) any information that is grossly offensive or has menacing character; or
- (b) any information which he knows to be false, but for the purpose of causing annoyance, inconvenience, danger, obstruction, insult, injury, criminal intimidation, enmity, hatred or ill will, persistently by making use of such computer resource or a communication device;
- (c) any electronic mail or electronic mail message for the purpose of causing annoyance or inconvenience or to deceive or to mislead the addressee or recipient about the origin of such messages,

shall be punishable with imprisonment for a term which may extend to three years and with fine.

Explanation.—For the purposes of this section, terms "electronic mail" and "electronic mail message" means a message or information created or transmitted or received on a computer, computer system, computer resource or communication device including attachments in text, image, audio, video and any other electronic record, which may be transmitted with the message.]



But it was found that there are various other provisions in the Indian Penal Code and other laws under which a person can be arrested for posting specific content on social media. Some of those provisions can be read below:

Section 54 of the Disaster Management Act, 2005:

Various news reports regarding people getting arrested under this act for posting fake news on social media can be found on the internet. The tweets from the Rachakonda Police regarding the arrests of various people under this section can be found here.



@BhongirTownps arrested 3 people for spreading_fake_news of death of person due to Corona. Under #NDMA_2005 section 54 they are arrested where 1 year imprisonment and fine is punishment.#CP_Rachakonda has warned regarding creating fake news.

Also, **one can be arrested for spreading false information on social media** regarding diseases like COVID-19 under the Epidemic Diseases Act, 1897.

ndmindia.nic.in/images/The%20Disaster%20Management%20Act,%202005.pdf

own use or disposes of such money or materials or any part thereof or wilfully compels any other person so to do, shall on conviction be punishable with imprisonment for a term which may extend to two years, and also with fine.

54. Punishment for false warning.—Whoever makes or circulates a false alarm or warning as to disaster or its severity or magnitude, leading to panic, shall on conviction, be punishable with imprisonment which may extend to one year or with fine.

Various IPC Sections:

A news article regarding the arrest of a person in Assam for a Facebook post critical of PM Modi and Delhi riots can be found on the 'India Today' website. In the article, it can be read that he was **booked under sections 295(A), 153(A), 507 of the Indian Penal Code** and **section 66 of the IT Act (not Section 66A).** Also, in another incident, a person was booked **under sedition (IPC 124(A))** and other provisions of IPC for his comment **('disrespecting' UP CM Yogi Adityanath) on a Facebook post.**

Home / India / Man booked for sedition for online comment on Yogi Adityanath

Man booked for sedition for online comment on Yogi Adityanath

Police said that Anup Singh has been booked under IPC sections 124-A (sedition), 500 (defamation), 188 (disobedience to order duly promulgated by public servant) and section 66 of the Information Technology Act.

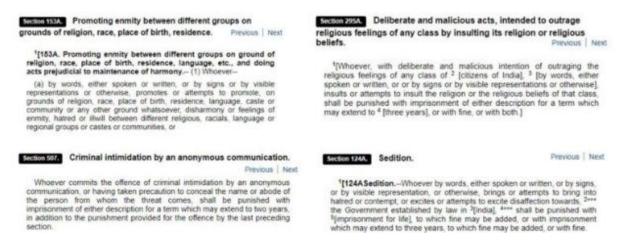
Assam: Guest lecturer arrested in Silchar for Facebook post critical of PM Modi, Delhi riots

The guest lecturer was arrested after college students lodged an FIR against him for writing a "derogatory" Facebook post.





There are many other incidents where people have been arrested under various other sections of IPC for their posts on social media. Whether some of those sections should be used or not for such incidents is debatable and it is for the courts to decide but the details regarding some of those IPC sections can be read below:



Other sections of IT Act, 2000:

While Section 66A of IT Act has been revoked, there are other sections in the IT Act, 2000 under which a person can be arrested for spreading specific type of content like obscene pictures on social media. A news article regarding the rising cases under Section 67 of IT Act, 2000 can be read here.

- 67 Punishment for publishing or transmitting obscene material in electronic form.—Whoever publishes or transmits or causes to be published or transmitted in the electronic form, any material which is lascivious or appeals to the prurient interest or if its effect is such as to tend to deprave and corrupt persons who are likely, having regard to all relevant circumstances, to read, see or hear the matter contained or embodied in it, shall be punished on first conviction with imprisonment of either description for a term which may extend to three years and with fine which may extend to five lakh rupees and in the event of second or subsequent conviction with imprisonment of either description for a term which may extend to ten lakh rupees.
- 6 A. Punishment for publishing or transmitting of material containing sexually explicit act, etc., in electronic form.—Whoever publishes or transmits or causes to be published or transmitted in the electronic form any material which contains sexually explicit act or conduct shall be punished on first conviction with imprisonment of either description for a term which may extend to five years and with fine which may extend to ten lakh rupees and in the event of second or subsequent conviction with imprisonment of either description for a term which may extend to seven years and also with fine which may extend to ten lakh rupees.
- 67B. Punishment for publishing or transmitting of material depicting children in sexually
 - (a) publishes or transmits or causes to be published or transmitted material in any electronic form which depicts children engaged in sexually explicit act or conduct; or

So, you keep in mind such laws, no need to go in much detail about IPC sections. 66A has been stuck down by the Supreme Court in 2015, still there are various provisions in other laws under which a person can be arrested for posting specific content on social media violative of these other laws.

CA2. India's Falling Female Labor Participation

Link: https://thediplomat.com/2020/07/women-left-behind-indias-falling-female-labor-participation/

Various reports have been aggregated at one place. Important for Prelims and Mains both. Read full points.

- a. Four out of five women are not working in India. Only Yemen, Iraq, Jordan, Syria, Algeria, Iran, and the West Bank and Gaza have a lower female labor force participation (FLFP) rate than India. In 1990, India's FLFP was 30.3 percent. By 2019, it had declined to 20.5 percent, according to the World Bank. While the men's labor force participation rate slightly decreased over time, too, it is four times that of women at 76.08 percent in 2019.
- b. **Despite a rising GDP and increasing gender parity** in terms of falling fertility rates and higher educational attainment among Indian women, **India's FLFP continues to fall.** India's job stagnation and increasing unemployment in the past few years a problem that is aggravated by the COVID-19 pandemic could further worsen this situation.
- **c.** According to a <u>2019 report by Google and Bain & Company</u>, women were already the worst hit by India's unemployment crisis. While the overall Indian unemployment rate was at 7 percent before India's March lockdown, **it was already**

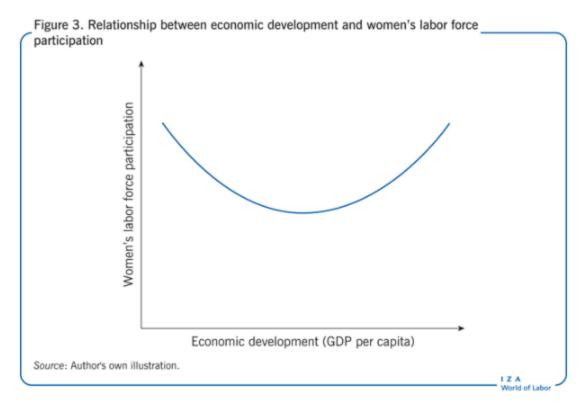
- **as high as 18 percent for women**. A preliminary study found that **Indian women** have already lost more jobs than men during the COVID-19 pandemic.
- **d.** While labor force participation is declining globally on average, women's participation has increased in high-income countries that have instituted gender-focused policies like parental leave, subsidized childcare, and increased job flexibility.
- e. On the Global Gender Gap Index by the World Economic Forum (WEF), **India has fallen four places from 2018, now ranking 112 of 153 countries,** largely due to its economic gender gap.
- **f.** In less than 15 years, India has fallen 39 places on the WEF's economic gender gap, from 110th in 2006 to 149th in 2020.
- **g.** Among its South Asian neighbors, India now has the lowest female labor force participation, falling behind Pakistan and Afghanistan, which had half of India's FLFP in 1990.





Possible Explanations for India's Declining FLFP

a. While greater education leads to greater economic participation for men, it is not the same for women. Researchers have observed a <u>U-shaped relationship</u> between education and labor force participation in India. According to which women's labor force activity is very high in the early stages of economic development as they tend to participate in subsistence agriculture, declines as the economy becomes more manufacturing-based, and then increases again as women gain education and move into white-collar jobs.



- b. Women with no education and women with tertiary education display the highest rates of labor force participation among Indian women. The lack of demand for moderately educated women and occupational segregation could explain the Indian paradox of increasing female education and decreasing women's employment despite India's economic growth.
- c. **Indian women are often required to prioritize domestic work**, particularly if they are married due to the cultural and societal expectations of women as caregivers.
- d. **In the Indian National Sample Survey (NSS) for 2011-2012**, over 90 percent of women who did not work were primarily engaged in domestic duties.
- e. Social stigma against women working outside the house, especially for the those who can afford not to work, continues to influence women's presence in the labor market.
- f. **Indian women also struggle with well-meaning but discriminatory government policies** like the amended India's Maternity Benefit Act 2017, which increased women paid maternity leave from 12 weeks to 26 weeks. This act reinforces women's role as primary caregivers and increases employer bias, especially in the absence of similar benefits for fathers.
- g. **Women in India are also not allowed to work in any factory overnight**, with Section 66(1)(b) of the Factories Act 1948 specifically stating that women can only work in a factory between the hours of 6 a.m. and 7 p.m. There are no such restrictions on men.

- h. To combat the economic downturn brought on by COVID-19, some states have proposed changes in labor laws like the Minimum Wages Act, Maternity Benefit Act, Equal Remuneration Act (ERA), and more. Suspension of many of these labor laws could push even more women out of the workforce as employers extend work hours, widen the gender pay gap without the safety of the ERA, and reduce women's mobility by taking away health and safety mechanisms.
- i. Recent studies have shown that **violence against women in public places**, particularly the risk of sexual assault and unsafe work environment, discourages Indian women from entering the labor market.
- j. Another big impediment to women's labor force participation is the **gender wage gap.** The report finds that women are paid 34 percent less than men for the same job with the same qualifications, despite India's Equal Remuneration Act of 1976 that mandates equal pay for same work and prohibits hiring discrimination.

CA3. GST Compensation released by the Central Government Link: https://pib.gov.in/PressReleasePage.aspx?PRID=1641537

Central Government has recently released GST Compensation of Rs. 13,806 crores to States for March'2020. Taking this amount into account, entire compensation up to 2019-20 has been released to States.

Why does the Centre pay GST Compensation to States? In this document we take a look at Centre's GST Compensation to the States and look at trends over the last three years since GST came into effect.

Compensation is paid to States for any loss of revenue due to implementation of GST

The provisions of Goods & Services Tax Act (GST) came into force from 01 July 2017, with an intention to implement a simplified, self-regulating and non-intrusive indirect tax compliance regime. At the Central level, Service Tax, Custom Duties, Central Excise (except for products of Petroleum & Tobacco) etc. were subsumed by GST. Since GST is a consumption-based tax, it was believed that manufacturing states might tax revenue. Therefore, to compensate for the loss of revenue, The Goods and Services Tax (Compensation to States) Act, 2017 was passed.

For the purpose of calculation of GST Compensation to be paid to the states:

- **a.** The Financial Year (FY) ending 31 March 2016, is taken as the base year.
- b. The base year revenue for a State is the Sum of Revenue collected by the State and local bodies on account of the taxes levied. These taxes include among others VAT, Sales Tax, purchase tax, Central Sales Tax, entry tax, octroi, taxes on luxuries, entertainment etc., excise duties etc.

- **c.** The exclusions from the tax revenue include tax on sale and purchase of petroleum products & alcohol.
- d. For any state, the projected nominal growth rate of the revenue that is subsumed by GST during this transition period is taken as 14% per annum. Projected revenue is calculated by applying this growth rate over the base year revenue. A bit technical here. Just see. If you don't understand, leave.

6 Projected revenue for any year.
The projected revenue for any year in a State shall be calculated by applying the projected growth rate over the base year revenue of that State.

Illustration.—If the base year revenue for 2015-16 for a concerned State, calculated as per section 5 is one hundred rupees, then the projected revenue for financial year 2018-19 shall be as follows—

Projected Revenue for 2018-19=100 (1+14/100)3

Provision for levy and collection of Cess for GST compensation

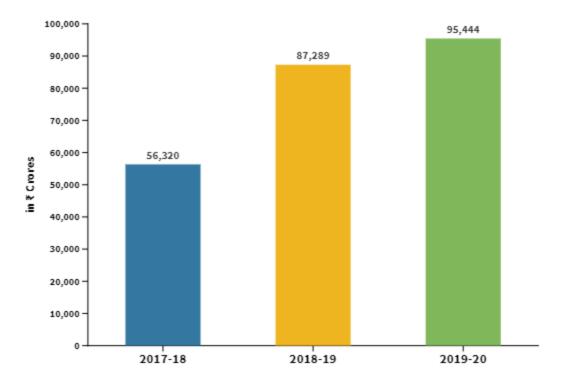
- a. Section 8 of GST (Compensation to States) Act -2017, provides for levying of Cess on Intra-state and Inter-state supply of Goods & Services, for the purpose of providing compensation to the States, for any loss of revenue due to the implementation of GST. The time provision for collection of this levy is initially proposed to be for 5 years, which can be reviewed by the GST council.
- 8. (1) There shall be levied a cess on such intra-State supplies of goods or services or both as provided for in section 9 of the Central Goods and Services Tax Act, and such inter-State supplies of goods or services or both as provided for in section 5 of the Integrated Goods and Services Tax Act, and collected in such manner as may be prescribed, on the recommendations of the Council, for the purposes of providing compensation to the States for loss of revenue arising on account of implementation of the goods and services tax with effect from the date from which the provisions of the Central Goods and Services Tax Act is brought into force, for a period of five years or for such period as may be prescribed on the recommendations of the Council:

Levy and collection of cess.

- b. **Section -10 of GST (Compensation to States) Act- 2017, states** that the proceeds of the cess levied would be credited to Goods & Services Tax Compensation Fund, which is a non-lapsable fund.
 - The compensation amount that is paid to the states is paid out of this fund. The act further states that if there is any amount remaining unutilized at the end of the GST transition period, 50 % of the same shall be transferred to the Consolidated Fund of India and the balance to be distributed among States & UTs as per the ratio of their GST revenues.

Marginal Increase in the GST Compensation Cess collected in FY 2019-20

In the Financial Year (2017-18), which is the first full financial year in GST regime, the GST compensation cess collection increased by 54% to reach ₹ 87.2 thousand crores. There was only a marginal increase in the collection of cess in 2019-20 with a collection of ₹ 95.3 thousand crores.



Over this 3-year period, the highest GST Compensation Cess was collected from Uttar Pradesh, totalling to ₹ 32.6 thousand crores followed by Maharashtra with ₹ 30.5 thousand crores.

Maharashtra received the highest GST Compensation for 2019-20 followed by Karnataka

Among the states, Maharashtra has received the highest amount of GST compensation for 2019-20 with ₹ 19.23 thousand crores. Another traditional high revenue state, Karnataka received ₹ 18.62 thousand crores as GST Compensation. These two states are also among the states which have collected the highest GST Cess.

Karnataka has received the highest GST Compensation till date

GST Compensation released to States for 2019-20 was more than double the amount released for 2018-19. For 2019-20 a total of \mathbf{T} 1.65 lakh crores was transferred, while it was only \mathbf{T} 81.8 thousand crores in 2018-19.

Financial Year	GST Compensation released to States (in ₹ Crores)
2017-18	49,276
2018-19	81,888
2019-20	1,65,302

The highest GST Compensation till date (from July'2017 to March 2020) was released to Karnataka, amounting to ₹ 38.7 thousand crores, of which around 18 thousand crores were released for 2019-20.

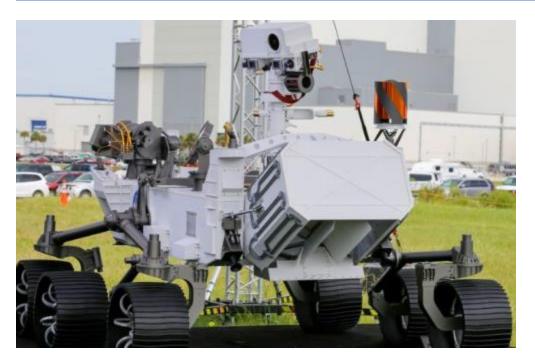
Meanwhile, Maharashtra received the second highest GST compensation with ₹ 31.67 thousand crores.

Economic Slowdown could have a serious impact on Centre's commitment towards GST compensation

Although there is a near double increase in the GST compensation payment for 2019-20, **there has been extreme delay in the payment of this compensation**. The payment due for 2019-20, was paid 4 months into the next financial year. Meanwhile there are allegations from opposition ruled states that the Centre is delaying the GST dues, thereby impacting State-level Schemes.

CA4. What Does NASA's New 'Perseverance' Rover Plan to Do on Mars?

Link: https://science.thewire.in/space/nasa-perseverance-rover-mars/



On July 30, NASA launched its most sophisticated and ambitious spacecraft to Mars: the aptly named Perseverance rover. This will be the third launch to Mars this month, following the UAE's Hope and China's Tianwen-1 spacecraft. Perseverance will look for signatures of ancient life preserved in Mars rocks. And, for the first time, this rover will collect rock samples that will be brought back to Earth, where they can be scrutinized in laboratories for decades to come.

How it is different from previous mission to Mars?

The Perseverance mission differs from previous ones in the fact that earlier, rovers were sent to determine if Mars has habitable conditions more broadly whereas this one aims to look for signs of historical microbial life. As such, it marks the first time NASA has designed a rover to conduct experiments related to astrobiology on Mars.

A new technology:

Advanced exploration technology

Perseverance will have many new capabilities that will transform how we explore Mars. The rover carries Ingenuity, a small helicopter that will be the first aircraft to fly on another planet. Because Mars' atmosphere today is so thin – only 1% of the Earth's – Ingenuity has to be extremely lightweight (4 lbs) with very large blades (4 feet tip-to-tip) to get off the ground. Ingenuity will take images of the distant landscape and help us scout the rover's traverse; future Mars missions could adopt this model of rovers and aircraft working in tandem.

Looking even further ahead, Perseverance will help prepare for future human missions to Mars. One of many challenges for astronauts will be the packing list for a two-year roundtrip journey, which includes air, water and rocket fuel to get home. If these resources could be harvested on Mars, human missions would be much more feasible. Perseverance will test a process for creating oxygen from Mars' carbon dioxide atmosphere. In the future, similar instruments could be sent ahead of astronauts, so that breathable air and liquid oxygen rocket propellant are waiting when they arrive.

Gesting the samples back to Earth

The most immediate goal of the mission is to search for evidence of past life, and Perseverance's <u>science payload</u> will allow the rover to search for organic materials and microbial textures at the scale of a grain of salt. However, finding definitive evidence of microbial life is <u>extremely difficult</u>. Ultimately, we will need to look at samples from Jezero with advanced instruments on Earth. This is why Perseverance will also collect pencil-sized rock cores that will be returned to Earth by a <u>series of missions</u> in the late 2020s.

CA5. China's Presence Near Ecuador Waters

Link: https://indianexpress.com/article/explained/explained-why-ecuador-was-angered-by-a-chinese-flotilla-near-its-waters-6536211/

Ecuador was on alert earlier this week as a flotilla of 260 mostly **Chinese fishing vessels**—what some called a "floating city"—was sighted near the **Galapagos archipelago**, a UNESCO World Heritage Site, whose acquatic species such as manta rays and sharks have been endangered by commercial fishing.

Two important things we found in this topic:

- a. Map of Galapagos Island
- b. Why are cold and warm current mixing zones the good fishing grounds?



Reasons sited was Chinese ships are frequent in Ecuador's waters during august month of the year as the **cold Humboldt Current brings in nutrients that lead to a high congregation of marine species.**



Why are cold and warm current mixing zones the good fishing grounds?

- a. Algae and other plants are able to photosynthesize to produce organic material from inorganic nutrients.
- b. And the organic material forms the building block for all animals higher up in the food chain.
- c. Almost all biomass in the ocean is derived from the phytoplankton and to a lesser extent the benthic algae (found on the bottom of a sea or lake).

- d. However, there is a fundamental problem phytoplankton in the open ocean have to face. **They need both sunlight and nutrients** (such as nitrate and phosphate) to be able to photosynthesize.
- e. Sunlight is only available in the uppermost layers.
- f. During photosynthesis, the nutrients are quickly used up by phytoplankton, so they are not available for long periods in the upper layers under normal circumstances.
- g. This is indeed the case in tropical waters, and as a result they are very unproductive.
- h. To escape this problem the seawater needs to be mixed regularly to bring the nutrient rich deep waters up to the sunlight zone where the phytoplankton can grow.
- i. This is one of the **reasons why cold and warm currents convergence zones** [mixing happens the collision of currents causes mixing] and **upwelling zones are very productive.**

CA6. Scientists find evidence of cancer in dinosaur that lived 76 million years ago



Link: https://www.hindustantimes.com/science/scientists-find-evidence-of-cancer-in-dinosaur-that-lived-76-million-yrs-ago/story-4YIfc608lv8SqMBhfRhdkK.html

This deformed bone is the first clear example of a malignant tumor diagnosed in a dinosaur. The partial fibula—a bone from the lower leg—belonged to a horned, planteating Centrosaurus that lived roughly 76 million years ago in what is now Dinosaur Park in southern Alberta in Canada.

Paleontologists initially thought the bone's strange shape was due to a fracture that hadn't healed cleanly. But a new study, published today in The Lancet Oncology, compares the internal structure of the fossil (above) with a bone tumor from a human patient to seek a diagnosis. The conclusion: **The dinosaur suffered from osteosarcoma, a cancer** that, in humans, primarily attacks teens and young adults. The disease causes tumors of immature bone tissue, frequently in the long bones of the leg.

This isn't the first-time cancer has been found in fossil remains. Scientists have identified benign tumors in Tyrannosaurus rex fossils and arthritis in duck-billed hadrosaurs, as well as an osteosarcoma in a 240-million-year-old turtle. But the researchers say their study is the first to confirm a dinosaur cancer diagnosis at the cellular level.

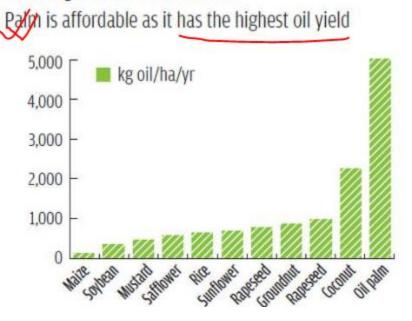
CA7. Status of Palm Oil in India.

Link: https://science.thewire.in/environment/expanding-oil-palm-plantations-in-the-northeast-could-exact-a-long-term-cost/

Last week, Prime Minister Narendra Modi appealed to farmers in India's northeast to cultivate oil palm, and to the eight state governments in the region to set up oil palm missions. environmentalists have expressed concerns about potentially unplanned expansion, especially considering both the Centre and state governments are yet to undertake any feasibility assessments. **But our concern is Palm oil. We go through important points relevant for exam.**

India is one of the major growers of oilseeds. Its vegetable oil economy is the fourth largest after the US, China and Brazil. Yet the country relies on imports to meet over 70 per cent of its vegetable oil requirements; almost 60 per cent of the requirement is met through palm oil. The reason is simple. Palm oil is cheap—it costs 20 per cent less than most vegetable oils—as well as versatile.

Cheap and versatile



Apart from being used as common cooking medium, it is used for making a vast array of food and consumer products, right from vanaspati (hydrogenated vegetable oil), ice creams to lipsticks, soaps and shaving foams. Since 2001, palm oil consumption in the country has increased from 3 million tonnes to nearly 10 million tonnes—that is a growth of over 230 per cent.

Efforts taken by the government:

The government had anticipated this growth in demand as early as in the 1980s and had set up a committee to identify potential areas for growing the crop.

By 2012, the government had identified 2 million ha across the country for oil palm cultivation and decided to implement the National Mission on Oilseeds and Oil Palm (NMOOP) under the 12th Five Year Plan (2012-17). Under the mission, farmers were provided training and given subsidised plant materials and input assistance. Private companies were also invited to set up processing factories in oil palm growing areas to facilitate procurement as well as to provide agriculture extension services.

In 2018, the National Food Security Mission prepared a brief note on oil palm.

According to the note, the Department of Agriculture, Cooperation and Farmers Welfare (DAC&FW) had identified 19.33 lakh ha of land as being suitable for oil palm cultivation, including 2.18 lakh ha in the northeast. And in the northeast, Mizoram, Assam, Arunachal Pradesh, Nagaland and Tripura have been encouraging oil palm plantations with targeted programmes and subsidies. Mizoram is way ahead of the rest, with its programme dating to 2005.

Area upder oil palm cultivation

State	Area achieved in 2017-18 (ha)	Total area up to March 2018 (ha)	Total potential area (ha)
Assam	814	1849	25,000
Mizoram	885	28,295	61,000
Arunachal Pradesh	843	1416	25,000
Nagaland	800	1973	50,000
Tripura	0	530	7000
Meghalaya	-	NaN	50,000

Source: 2018 Brief Note, NFSM

Every year, the states under NMOOP set a target of bringing additional area under the crop. Though the Mission received an initial enthusiasm, the targets have been routinely missed (see 'Targets missed, over and again', below).

Targets missed, over and again

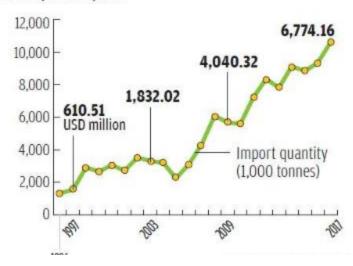
Despite several initiatives, the government has failed to meet its annual target of increasing area under oil palm



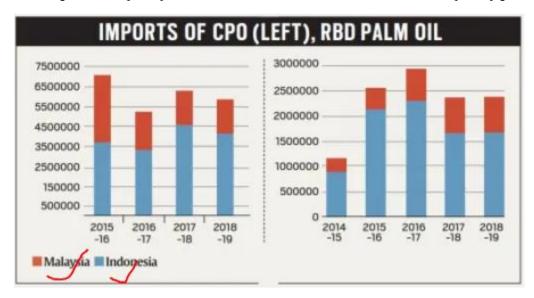
See the import of India below. It has been consistently increasing.

Import continues

India's import of palm oil has increased over 20 times in the past 25 years



India imports Palm oil mainly from Malaysia and Indonesia: Below are CPO and RBD: crude palm oil (CPO) and refined, bleached and deodorized (RBD) palm oil



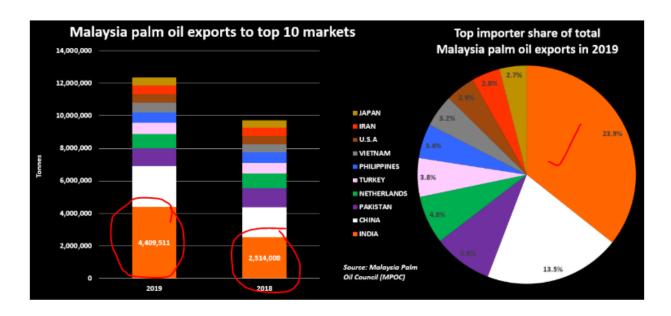


If you remember this news, India's move to restrict palm oil imports from Malaysia which has criticized India's internal policy decisions.



India's import curbs deal big blow to Malaysian palm oil

It was a huge blow to Malaysia. Malaysia exports large part to India. Now, it has resumed imports. So, don't mess with India. **See below image.**



CA8. Electronic Vaccine Intelligence Network (eVIN)

News:

The Electronic Vaccine Intelligence Network (eVIN) is being used by the State/UT governments in India to monitor the supply chain of Covid response material. We will learn **Electronic Vaccine Intelligence Network (eVIN).**

Three images below to explain eVIN: Very important.



Immunization against vaccine preventable childhood diseases is the right of each and every child. India, being a signatory of Sustainable Development Goals (SDG), is committed to achieve SDG3 encompassing target of infant mortality rate below 25/1000 live births. The Universal Immunization Programme of the country is one intervention with the potential to achieve the desired target. It is one of the largest public health programme in the world, which caters to a birth cohort of 2.6 crore infants and around 3 crore pregnant women every year utilizing a cold chain network of more than 27,000 cold chain points with 95% of it situated below the district level. This is not a small task in a nation with the largest and most ambitious immunization program in the world which aims to immunize this huge birth cohort.

The innovative Electronic Vaccine Intelligence Network (eVIN) is at present being implemented across 12 states of India. The technology aims to support the Government's Immunization Program by providing real time information on vaccine stock and flows, and storage temperature across all cold chain points in these states. The technological innovation is implemented by Ministry of Health and Family Welfare, Govt. of India and UNDP being the implementing partner. Integrating innovation with health care, eVIN aims to strengthen the vaccine supply chain to ensure equity in vaccine availability.

In 2015, India implemented the electronic vaccine intelligence network (eVIN) —an indigenous, smart and easy-to-use technology—aimed at digitizing vaccine stocks in the country. eVIN empowers the state cold chain network by building the capacities of cold chain handlers; and deploying vaccine and cold chain managers in every district for constant support to estimate vaccine requirements, supervise cold chain handlers and coordinate with cold chain technicians across the district. eVIN empowers the cold chain handlers by building technical capacities, while providing a robust decision-making tool for cold chain managers through a complete overview of vaccine replenishment times, supply and consumption patterns.

Coverage:

eVIN has reached 32 (in image, it is given 12, change it to 32) States and Union Territories (UTs) and will soon be rolled-out in the remaining States and UTs of Andaman & Nicobar Islands, Chandigarh, Ladakh and Sikkim. At present, 23,507 cold chain points across 585 districts of 22 States and 2 UTs routinely use the eVIN technology for efficient vaccine logistics management. Over 41,420 vaccine cold chain handlers have been introduced to digital record-keeping by training them on eVIN. Nearly 23,900 electronic temperature loggers have been installed on vaccine cold chain equipment for accurate temperature review of vaccines in storage.

Link: https://pib.gov.in/PressReleasePage.aspx?PRID=1643172

CA9. India has invoked the peace clause of the World Trade Organisation

Link: https://krishijagran.com/agriculture-world/india-raises-peace-clause-as-it-stands-behinds-its-farmers/

India has invoked the peace clause of the World Trade Organisation to extend the ceiling to its farmers who grow rice. This move has raised a strong objection from developed economies like the US and the EU. The peace clause exempts the country which invoked it from sanctions of the WTO.

India has announced that its drive production in 2019-20 at \$43.67 billion and India is offering a subsidy of \$5 million which is excess according to the rules of WTO as member countries can provide subsidy to only 10 % of the total production.

We will see some WTO provisions:

The WTO's Agreement on Agriculture (AoA) classifies policies for agriculture into three: tariff (market access), domestic support (domestic subsidies) and export subsidies. But the most controversial as well as the important one is the set of domestic support measures for agriculture. These domestic support measures are nothing, but subsidies given by the member countries to their agricultural sector.

What are domestic supports? How are they classified?

Domestic supports are subsidies given by member countries to promote their agricultural sector. Different types of subsidies are given to support the agricultural activities – including input subsidies, subsidies for R&D, subsidies for food security etc. The AoA classifies domestic support into trade distorting (reducible or to be reduced) and non-distorting (which are non-reducible or need not be reduced) categories. **For trade distorting type of subsidies, the WTO sets limit beyond which members can't give support (de minimis box).** Often domestic support related issues are a cause for conflict at various Ministerial Conferences.

Different types of subsidies

The Agreement on Agriculture classifies domestic subsidies into different types.

- a. Green box support
- b. Blue box support
- c. Aggregate Measurement of Support (AMS) or Amber box which includes product specific and non-product specific support
- d. Special and differential (S&DT) treatment box.
- e. De minimus support

Green Box is domestic support measures that doesn't cause trade distortion or at most causes' minimal distortion.

Blue box supports are subsidies that are tied to programmes that limit production. Hence it is an exemption to the general rule related to agricultural support. The Blue box subsidies aim to limit production by imposing production quotas or requiring farmers to set aside part of their land.

The AMS **represents trade distorting domestic support measures**. It is referred as the "amber box" in the Agreement on Agriculture. The **AMS means annual level of support (subsidies)** expressed in monetary terms, provided for an agricultural product in favour of the producers (product specific) of the basic agricultural product and non-product specific support provided in favour of agricultural producers in general.

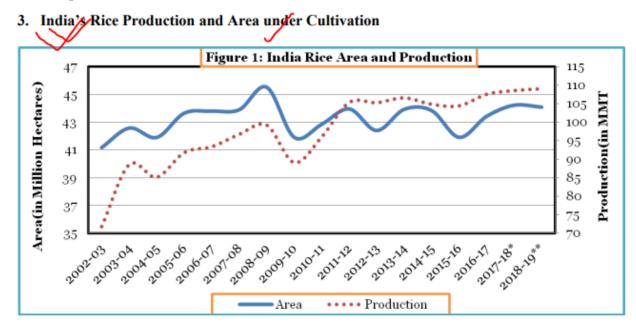
Special and Differential Treatment Box (S&DT)

WTO gives special concessions to the developing countries under the S &DT box given the backwardness of their agricultural sector. The S&DT measures generally comprises of (i) investment subsidies like tractors and pump sets to farmers (ii) agricultural input services like fertilizers to farmers. These subsidies should be provided only to low income and resource poor producers (or poor farmers) in developing countries.

De-minimis support

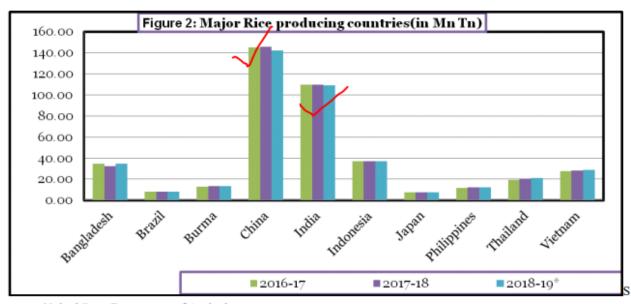
De minimis support indicate the minimum level of trade distorting (AMS) subsidies that can be given by a country to its agricultural sector. This de minimis subsidy is expressed as percentage of the country's agricultural GDP. **The de minimis level is 5 per cent of agricultural GDP for developed countries** whereas for the developing countries including India, **the de minimis ceiling is 10 per cent.**

Some important data about Rice:



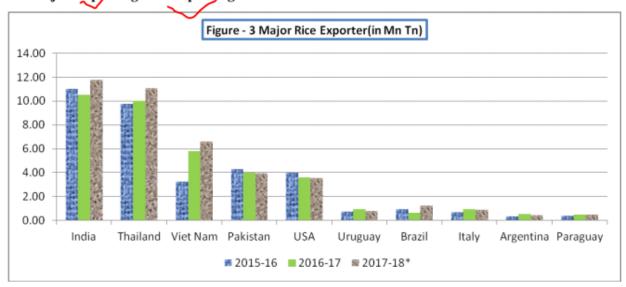
Source: Directorate of Economics & Statistics (DES)

4. Global Production

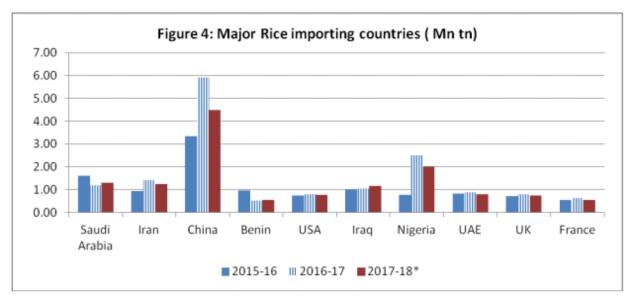


ource: United State Department of Agriculture

5. Major Exporting and Importing Countries of Rice in the world



Source: USDA



Source: USDA

CA10. Population composition in India

This is the third topic we are covering from Sample Registration System survey 2018, which was released recently. **Two topics already covered IN OUR Previous Current Affairs section**.

- 1. Frferferf. Click here to READ.
- 2. Fydfydfydfy, CLICK HERE TO Read.

Now we will cover the current topic.

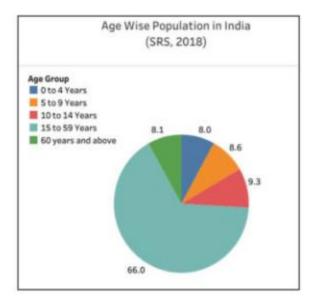
Age is one of the vital demographic characteristics, which is useful for the government to formulate policies or to plan developmental and health programs.

Since India gained independence, there has been considerable improvement in its health parameters such as life expectancy, healthcare facilities and education, and drop in fertility and mortality rates, which have contributed by and large to the demographic changes witnessed since then. Since 1971, proportion of India's population under the age of 14 years has declined from 41.2% to 25.9% in 2018. Simultaneously, the proportion of elderly population, aged 60 years and above has increased from 5.3% to 8.1%.

About two thirds of India's population belong to the working age group

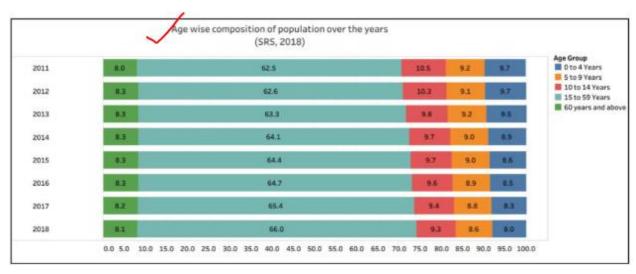
India's working population aged between 15 to 59 years constituted 66% of total population of the country. In contrast to the population composition of children (under 14) in the respective states, the states of Andhra Pradesh and Telangana have reported more than 70% of population falling in the working category as against Bihar, which reported the least, less than 60% of the population in the working category. A total of 8.1%

of the India's population were aged above 60 years, ranging from 6.3% in Bihar to close to 13% in Kerala.



Slight drop in the share of elderly population compared to 2016

The share of elderly population (60 years & above) has gradually increased since 1971. However, data from the past eight years indicates that the percentage of elderly persons in the population increased from 8% in 2011 to 8.3% in 2012 and stayed consistent till 2016. Compared to 2016, it has slightly decreased to 8.1% in SRS 2018.



Meanwhile, the share of those of those aged between 0 to 14 years has dropped significantly, from 29.4% in 2011 to 25.9% in 2018. The working population (15 to 59 years) has increased from 62.5% in 2011 to 66% in these eight years.

Southern states have lower share of population in the 0-14 age group

State-wise data indicates that the share of population in the 0 to 14 years is lower in southern states compared to the rest of the country. For instance, in 2018, the share of population in the 0-14 age group in southern states was between 19.8% in Andhra Pradesh and 23% in Karnataka. The highest such share in Karnataka (23%) is still lower than the national average of 25.9%.

Share of Females more than Male counterparts in working age and elderly categories

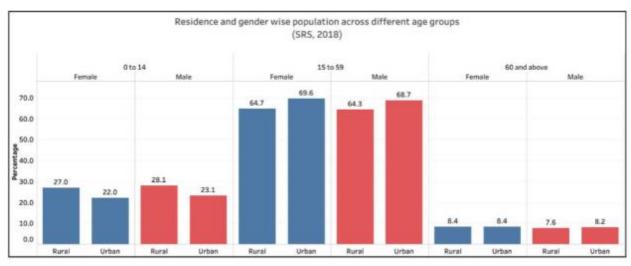
In 2018, a total of 64.7% of females in rural areas and 69.6% of females in urban areas fell in the working age category of 15 to 59 years. This was higher than that of their male counterparts- 64.3% in rural areas, and 68.7% in urban areas.

The sex ratio at birth i.e. number of females per 1000 males, is lower in urban areas as compared to rural areas since 2012. Between 2016-18, the child sex ratio at birth was 900 in rural areas and 897 in urban areas.

A greater share of persons in the working age group are in Urban areas than in Rural areas

The data also indicated that the **proportion of persons in urban areas was higher than that in rural areas** in case of persons in the working age and senior citizens. At the same time, there were more children (under-15) in rural areas, than in urban areas. This may be the result of lower fertility rate in urban areas compared to rural areas.

Also, the **proportion of women was more in the working age group and elderly category as against the proportion of men.** Urban areas accounted for a greater share of persons than rural areas in these two categories. One reason for this might be the migration of rural population to urban areas seeking better opportunities in the working age group.



Conclusion:

Prime Minister Narendra Modi had indicated that population explosion may pose challenges to the future generations during his Independence Day speech in 2019. However, if the current trends continue, the proportion of persons in the working age will decrease and the proportion of elderly persons will increase in the long run as health facilities and life expectancy improves. Furthermore, inter region disparities can also lead to increased influx of migrants into the southern states. For instance, Bihar which has a higher share of children now will have more persons in the working population in the coming 20 to 30 years, unlike in the southern states.

CA11. What is ammonium nitrate, the chemical that exploded in Beirut?

Link: https://www.downtoearth.org.in/news/pollution/what-is-ammonium-nitrate-the-chemical-that-exploded-in-beirut--72661



News:

The Lebanese capital Beirut was rocked on Tuesday evening local time by an explosion that has killed at least 78 people and injured thousands more. The country's prime minister Hassan Diab said the blast was caused by around 2,700 tonnes of ammonium nitrate stored near the city's cargo port.

Ammonium nitrate has the chemical formula NH_4NO_3 . Produced as small porous pellets, or 'prills', it's one of the world's most widely used fertilisers. It is also the main component in many types of mining explosives, where it's mixed with fuel oil and detonated by an explosive charge.

What could have caused the explosion?

- **a.** Ammonium nitrate does not burn on its own.
- **b.** Instead, it acts as a source of oxygen that can accelerate the combustion (burning) of other materials.
- **c.** For combustion to occur, oxygen must be present. Ammonium nitrate prills provide a much more concentrated supply of oxygen than the air around us. This is why it is effective in mining explosives, where it's mixed with oil and other fuels.
- **d.** At high enough temperatures, however, ammonium nitrate can violently decompose on its own. This process creates gases including nitrogen oxides and water vapour. It is this rapid release of gases that causes an explosion.
- **e.** Ammonium nitrate decomposition can be set off if an explosion occurs where it's stored, if there is an intense fire nearby. The latter is what happened in the 2015 Tianjin explosion, which killed 173 people after flammable chemicals and ammonium nitrate were stored together at a chemical's factory in eastern China.

CA12. Aadhaar Authentication for Good Governance Rules' Notified

Link: https://www.livelaw.in/news-updates/aadhaar-authentication-for-good-governance-rules-2020-161016

Aadhaar Authentication for Good Governance (Social Welfare, Innovation, Knowledge) Rules, 2020, have been notified.

These Rules have been framed invoking powers conferred by Section 53(1) and 53(2) (aa) Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services Act, 2016 which empowers the Central Government to frame Rules regarding the purpose for which a requesting entity may be allowed by the Authority to perform authentication under Section 4(b)(ii).

MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY NOTIFICATION

New Delhi, the 5th August, 2020

G.S.R.490(E).—In exercise of the powers conferred by sub – section (1) of section 53 read with clause (aa) of sub-section (2) of section 53 of the Aadhaar (Targeted Delivery of Financial and Other Subsidies, Benefits and Services) Act, 2016 (18 of 2016), the Central Government, in consultation with Unique Identification Authority of India, hereby makes the following rules, namely:–

 Short title and commencement.— (1) These rules may be called the Aadhaar Authentication for Good Governance (Social Welfare, Innovation, Knowledge) Rules, 2020.

Section (4) provides that an entity may be allowed to perform authentication, if the Authority is satisfied that the requesting entity is—

- a. compliant with such standards of privacy and security as may be specified by regulations.
- b. (i) permitted to offer authentication services under the provisions of any other law made by Parliament; or (ii) seeking authentication for such purpose, as the Central Government in consultation with the Authority, and in the interest of State, may prescribe.

Authentication is a process by which the Aadhaar number along with demographic information or biometric information of an individual is submitted to the Central Identities Data Repository for its verification and such Repository verifies the correctness, or the lack thereof, on the basis of information available with it.

Requesting entity" means an agency or person that submits the Aadhaar number, and demographic information or biometric information, of an individual to the Central Identities Data Repository for authentication.

As per these Rules notified now, the Central Government may allow Aadhaar authentication by requesting entities in the interest of good governance, preventing leakage of public funds, promoting ease of living of residents and enabling better access to services for them, for the following purposes:

- usage of digital platforms to ensure good governance.
- prevention of dissipation of social welfare benefits; and
- enablement of innovation and the spread of knowledge.

The Rules further provides that a Ministry or the Department of the Government of India or the State Government, as the case may be, desirous of utilizing Aadhaar authentication for a purpose specified (**all three points above**) shall prepare a proposal with justification in regard to such purpose for which Aadhaar authentication is sought and submit the same to the Central Government for making a reference to the Authority.

Link: https://www.livelaw.in/pdf_upload/pdf_upload-379514.pdf

CA13. GST collection of different states during and post lockdown.

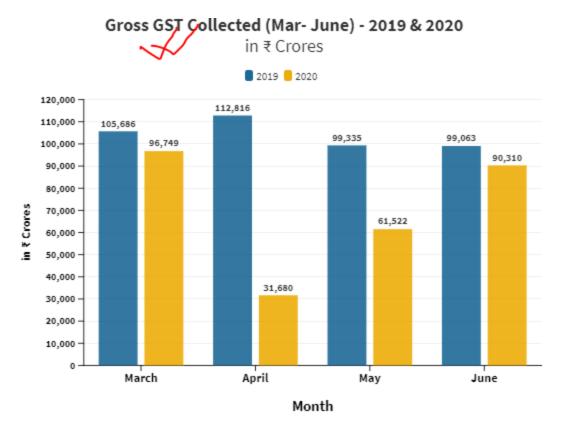
This article will give you an idea about GST collections of different states during and post lockdown. Nothing to memorize, just a rough idea.

As per the <u>release of data (PIB)</u> dated 01 August 2020, the gross GST revenue collected for July 2020 was ₹ 87.4 thousand crores. **This is 86% of the GST revenue collected during the same month last year.** As we all know, **Unlock 2.0, was effective from 01 July 2020**. Unlock 2.0 opened up more economic and business activities. However, the gross GST **collection for July'2020 was less than that of June'2020,** where in it was Rs 90.9 thousand crores.

Here, we will do a detailed comparison of GST revenues collected during and in the aftermath of Lockdown, with the same period last year, along with analyzing **how different States fared in terms of GST revenue collection during this period, compared to the last year.**

Gross GST Collection during 1st Quarter FY 2020-21 is 58% of the collection in 2019-20

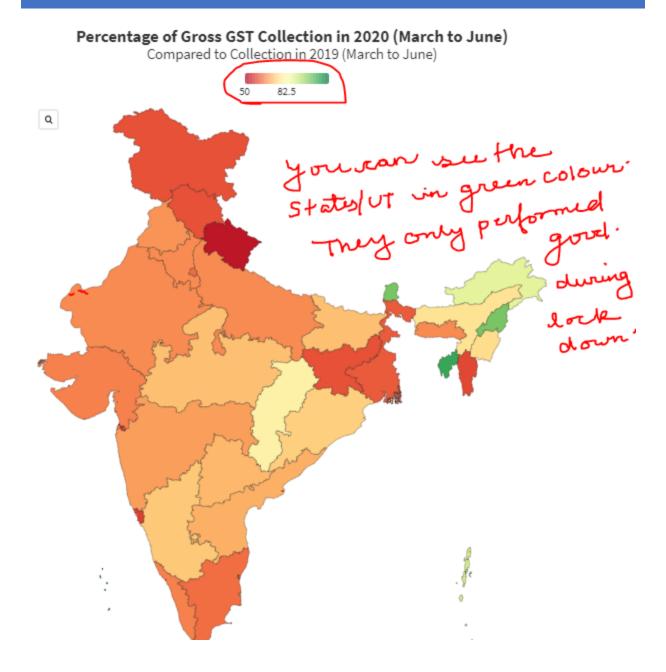
Lack of Economic activity during the ensuing months had a severe impact of the GST collection. Overall, during the first quarter of FY 2020-21, the gross GST collected was ₹ 1.83 lakh crores. This is nearly 41% less than the collection of Q1 of 2019-20, during which the Gross GST collection was ₹ 3.11 lakh crores.



Gross GST Collection of 27 States/UTs fell by more than a quarter during March-June 2020, compared to 2019

While the numbers at the national levels indicate a major fall in GST collection during the first quarter of 2019-20, it is not even across the states, with few states performing better while others recording a major dent in their GST collection compared to that of last year.

We take a look at the Gross GST collection for each of the States for the four-month period March-June'2020.

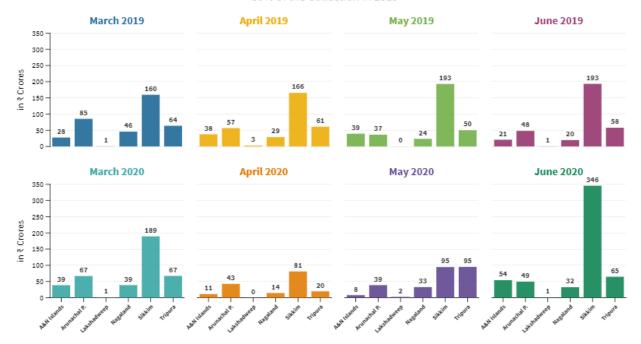


No major fall in GST collection of few of the smaller States /UTs

Gross GST collection of Lakshadweep and Tripura for period March-June'2020 was higher than the collection during same period in 2019. **Sikkim has comparatively higher GST collection among the smaller states** and it managed an on-par GST Collection between March-June'2020 compared to the same period in 2019. **Most of the North-Eastern states performed well.**

Gross GST Collection in States 2019 & 2020

> 80% of the Collection in 2019



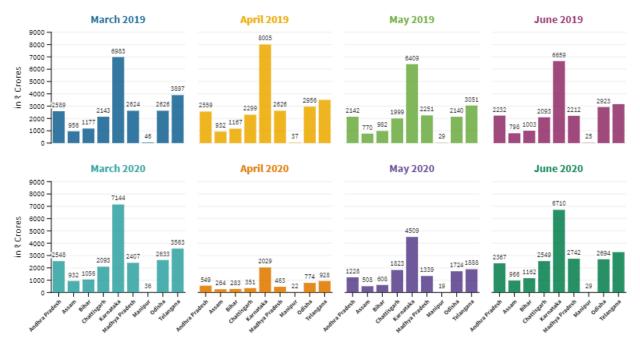
Chhattisgarh, Bihar, Andhra Pradesh, Telangana, Madhya Pradesh, Assam, Karnataka and Odisha are among such states that have managed to keep the fall in GST collections during March-June 2020 to less than 30% of the collection during 2019. A common feature of these states is the comparatively a smaller number of COVID-19 cases during March-June'2020 period

Karnataka, which is among the largest GST collecting states also experienced a major shortfall in April'2020 with just over ₹ 2 thousand crores collected compared to more than ₹ 8 thousand crores in April'2019.

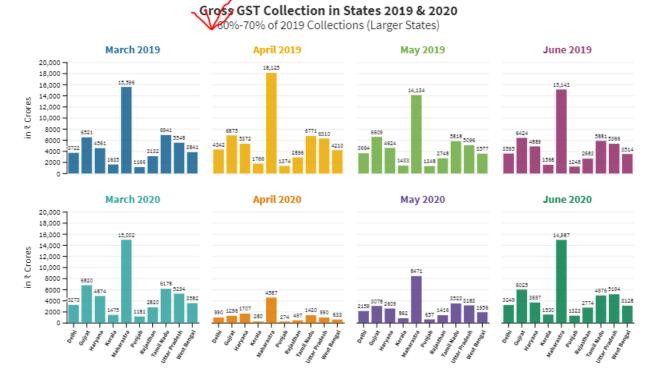
Andhra Pradesh, Madhya Pradesh, Chhattisgarh, Bihar, Odisha are among the states which have managed to cover up for the shortfall of GST collection during April'2020 with an increased collection in June'2020.

Gross GST Collection in States 2019 & 2020

70%-80% of the Collection in 2019

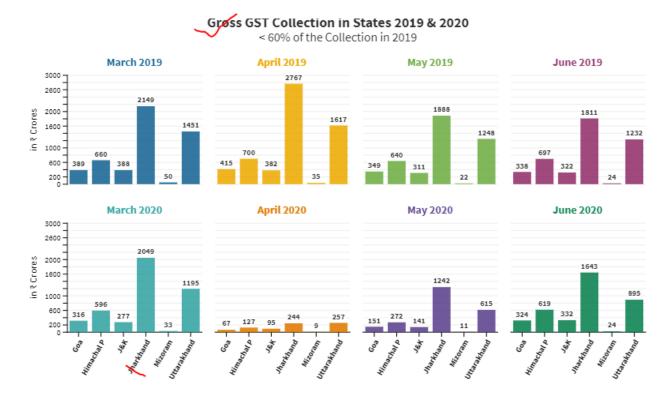


Maharashtra has the highest number of COVID-19 cases with its key cities among the larger COVID-19 positive clusters. Tamil Nadu, Rajasthan & Delhi are among the early states to have recorded a higher number of COVID-19 cases. This is also reflected in their GST collection during March-June 2020. Gujarat, UP & West Bengal also display a similar trend with GST collections improving in June'2020 but not enough to coverup for the shortfall of previous months.



GST collection of **Jharkhand was severely affected** during lockdown, with the GST collection for April'2020 being less than 9% of the collection during the same month last year. Although there is an increase in the GST collection in May & June'2020, it is still lower than that of same months in 2019.

Uttarakhand also presents a similar case, with shortfall of GST collection even in May & June'2020. Being a tourism reliant state could be one of the reasons for this shortfall even post lockdown. **Himachal Pradesh and J&K are among the lower GST collecting states** with the impact of April'20 continuing even in subsequent months.



Increasing number of COVID-19 cases could severely impact future GST collections in many States

Data from multiple states indicates a strong **correlation between the lockdown and GST collection**, with nearly all the states recording a slump in the GST collection during April'2020.

GST collection in May 2020 has seen a slight improvement compared to April, though the collections were way below the 2019 levels. Post the easing of lockdown regulations and the extension of timeline to pay the arrears, an increase in GST collection is seen in most of the states in June 2020. Some of the states have been more proactive in lifting the lockdown measures while few others like Maharashtra continue to have a large number of containment zones affecting the regular economic activity.

Though the national level GST numbers for June 2020 indicated some semblance of recovery, the collection for July 2020 fell by close to 15% compared to 2019. This fall coincided with the huge increase in COVID-19 cases in July 2020. Currently, more than 50 thousand new cases are being reported daily.

All this means a tough choice for the Centre as well as the States between containment of COVID-19 infection and resumption of normal economic activity. Strategies at micro-level appear to be a better way forward which identify and differentiate risk-free zones for business activity and infection-prone areas for containment.

CA14. New Guinea has the most plant species of any island Link: https://news.mongabay.com/2020/08/new-guinea-has-the-most-plant-species-of-any-island/

New Guinea is the planet's most floristically diverse island, reports a comprehensive assessment of vascular plant species *published in the journal Nature*.

The species list, which was compiled by 99 botanists from 56 institutions across 19 countries, verified the identity of over 23,000 plant names from over 704,000 specimens collected from New Guinea since the 1750s.

The research concludes New Guinea has 13,634 species of plants from 1742 genera and 264 families. That gives **New Guinea**, the world's second largest island, **the highest plant diversity of any island on Earth, surpassing Madagascar** (11,832 species), Borneo (11,165 species), and Sumatra (8,391 species). New Guinea's diversity of plants is greater than that of the entire archipelago of the Philippines (9,432 species).





CA15. Discovery could lead to new malaria treatments

Link: https://medicalxpress.com/news/2020-08-discovery-malaria-treatments.html



A study led by researchers at The Australian National University (ANU) **could lead to new treatments for combating drug-resistant malaria**, as well as boost existing drugs. **Malaria is caused by Plasmodium parasites**, which are spread to people through the bites of infected mosquitoes. Just read what scientists have to say:

According to the lead authors, Dr. Rowena Martin and Ph.D. student Sarah Shafik, the ongoing evolution of parasites that are resistant to existing drugs is a significant threat to the control and elimination of malaria.

Dr. Martin's team looked at PfCRT, a protein that is pivotal to multidrug resistance in the malaria parasite and is also itself a promising drug target.

"For 20 years, researchers around the world have been trying to understand the function of PfCRT and why it is essential for parasite survival. We have succeeded in answering these long-standing questions," Dr. Martin said.

"There is a real need to identify new drug targets for malaria, as well as to learn more about the parasite's biology and the proteins responsible for multidrug resistance," Ms Shafik said.

"Our study of PfCRT contributes to all of these goals."

The research shows PfCRT can be inhibited by drugs, indicating its natural function is a 'druggable' target, as well as paving the way for the design of novel therapies.

"Knowing how PfCRT functions will help develop drugs that block it," Dr. Martin said.

"In addition to killing the parasite outright, these drugs could be used in combination therapies to nullify the multidrug resistance caused by PfCRT and thereby restore the activities of existing drugs.

CA16. New Species Found/discovered.

The Large-antlered muntjac



12 species of muntjac, the so-called barking deer because of its unique auditory calls, are found only in Asia. **The Large-antlered muntjac is Critically Endangered** with members of its scant, rarely seen population inhabiting areas bordering the Lao People's Democratic Republic, Vietnam and Cambodia.

New land snail species discovered in Hawaii offers 'gem of hope'

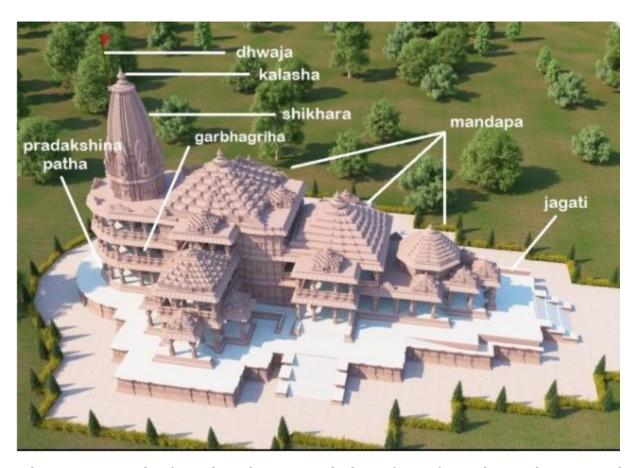


Auriculella gagneorum. The light brown snail is a juvenile. Image by Norine Yeung,

Scientists recently announced a **new species of land snail**, *Auriculella gagneorum*, which was found living in the Waianae Mountains in Hawaii. Hawaii once had 752 species of land snails, but more than half of them are believed to have gone extinct due to habitat loss and invasive species

CA17. Nagara Architecture of Ayodhya's Ram Mandir:

News: The grand temple at Rama Janmabhoomi in **Ayodhya will follow the Nagara style of temple architecture.**



What is Nagara style of temple architecture? The basic form of a Hindu temple contains the following architectural elements:

- a. **Garbhagriha** the small room where the principle deity/deities of the temple reside
- b. **Mandapa** the portico or hall at the entrance of the temple generally designed to house a large number of people

- c. **Shikhara** the mountain like spire which can have different shapes from pyramidal to curvilinear
- d. **Vahana** the mount of the main deity placed generally in line of sight from Garbhagriha

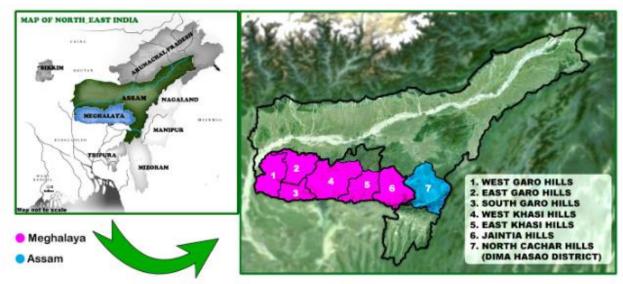
Now, we want you to read the Temple Architecture of NCERT. Please read. It has lot of examples of Temples of different region of various styles. Important for Prelims. <u>Click here to read.</u> It is bit long, so select your time.

CA18. Saving India's only pitcher plant

Link: https://india.mongabay.com/2020/08/captivating-carnivores-saving-indias-only-pitcher-plant/

Pitcher plants are carnivorous plants that attract, kill and digest insects. **Found mainly in the state of Meghalaya, India's only pitcher plant species Nepenthes khasiana is endangered,** facing threats from mining, shifting cultivation, and excessive collection, among others.

India's only known pitcher plant species **Nepenthes khasiana** is an evergreen shrub considered endemic to **Meghalaya**. But in 2016, it was reported in Dima Hasao district in the neighbouring state **of Assam**. It is mostly distributed in Meghalaya's west and east Khasi Hills, west and south Garo Hills and Jaintia Hills at an altitude of about 1000 to 1500 metres.



Distribution of N. khasiana in Meghalaya and Assam

The endangered tropical pitcher plant, Nepenthes khasiana, is found in the Garo, Khasi, and Jaintia Hills of Meghalaya as well as in the Dima Hasao district of Assam. Photo by Albert Sajem Betlu/Wikimedia.

Pitcher plants are carnivorous plants that attract, kill and digest insects. The plants have evolved modified leaves consisting of **jug-like pitchers**, which function as pitfall traps that 'hunt' prey, mainly insects that curiously approach the pitcher rims and **end up falling inside**. Often unable to escape the slippery inner walls and sticky fluid inside the pitcher, the unfortunate victims die and enzymes at the bottom of the pitcher **digest them to release nutrients needed by the plant**.

Because it is at risk of extinction, the plant is included in the **Negative List of Exports of the Government of India and it is a Schedule VI species under the Wildlife Protection Act, 1972**. It is also listed under **Appendix I of CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora)**, prohibiting the trade of this species.

To conserve this species, methods such as tissue culture, micropropagation and germplasm preservation have been carried out primarily by government institutions. Villagers and students have been involved in various conservation initiatives.

CA19. Members of Parliament Local Area Development Scheme (MPLADS)

The Members of Parliament and Local Area Development (MPLAD)Scheme was launched on 23rd December 1993, to provide a mechanism for the Members of Parliament to recommend works of developmental nature for creation of durable community assets and for provision of basic facilities, including community infrastructure, based on locally felt needs.

The **annual allocation of the Members of Parliament under MPLADS has increased** over the years as shown in Table:

Table 1.1 Entitlement per annum			
Year	Entitlement (in Rs. crore)		
1993-94	~ 0.05		
1994-95 to 1997-98	1.00		
1998-99 to 2010-11	2.00		
2011-12 onwards	5.00		

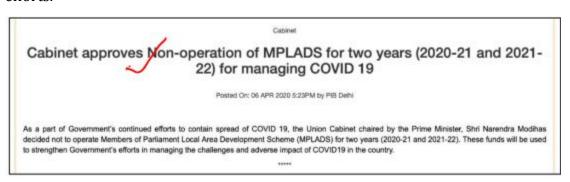
Ministry of Statistics and Programme Implementation, as the Nodal Ministry, is responsible for policy formulation, release of funds and monitoring the implementation of the Scheme.

The Members of Parliament Local Area Development Division is entrusted with the responsibility of implementation of Members of Parliament Local Area Development Scheme (MPLADS). Under the scheme,

- **a. Each MP has the choice to suggest to the District Collector** for works to the tune of Rs.5 Crores per annum to be taken up **in his/her constituency.**
- b. The **Rajya Sabha Members of Parliament** can recommend works **in one or more districts in the State** from where he/she has been elected.
- c. The Nominated Members of the Lok Sabha and Rajya Sabha may select any one or more Districts from any one State in the Country for implementation of their choice of work under the scheme.

One recent decision about MPLADS:

On 06 April 2020, the Union Cabinet took a decision **to keep on hold the operation of MPLADS (Members of Parliament Local Area Development Scheme) for the next two years** i.e. 2020-21 & 2020-21. This decision was taken in view of the COVID-19 situation in the country, where-in the funds earmarked for MPLADS, will be now at the disposal of Ministry of Finance and can be made available for COVID-19 related containment and relief efforts.



This decision would effectively result in the following.

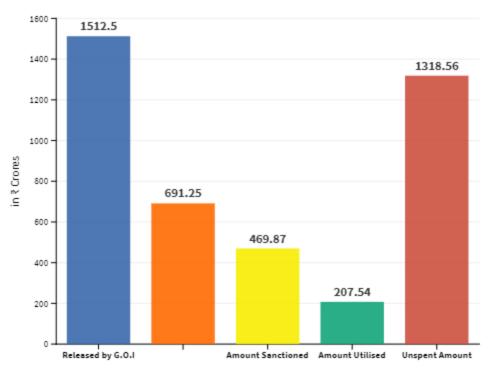
- a. There would be no further release of MPLADS instalments for period of two years.
- b. Any works which are already sanctioned can be completed using the available funds and no more funds would be released within these two years.
- c. MPs not to make any new recommendations for works.

Members from the opposition parties have said that it is a unliteral decision by government and such centralization can be detrimental to parliamentary democracy. There is also an opinion that earlier track record of Central Government, the delays in devolution funds, could hamper targeted local level works which MPLADS used to take care off.

However, what does the available data and information about MPLADS say about this scheme?

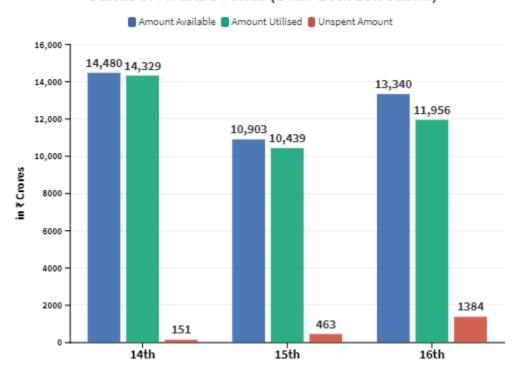
86% of released funds unspent during the first year of 17th Lok Sabha





Nearly 2000 crores of unspent amount from the past three Lok Sabhas, with another 1600 crores unspent by Rajya Sabha members.

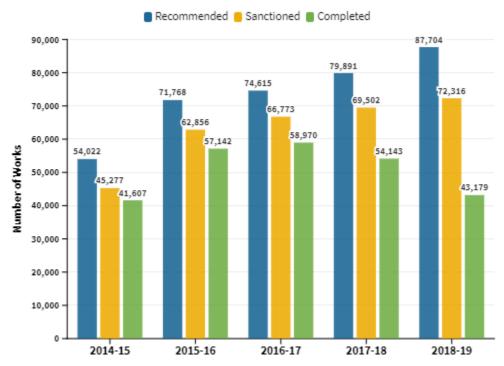
Status of MPLADS Funds (14th -16th Lok Sabha)



Around 31% of the works recommended in 16th Lok Sabha remain unfinished

During the 16th Lok Sabha, around 3.72 lakh works were recommended by MPs of which nearly 2.57 lakh works were completed over the five years. Nearly 31% of the recommended works remain unfinished.





Discipline in planning and execution needed to ensure the purpose of MPLADS is met

- a. MPLADS was introduced in 1993, to provide MPs with a mechanism to take up works that are developmental in nature and to create durable community assets.
- b. Taking up local development works without the need to wait for Central or State Level budgetary grants was the key idea behind this scheme.
- c. Accordingly, the allocation was increased from ₹ 5 lakhs per year to ₹ 5 crores over a period of time. As per the data in the latest published annual report of 2016-17, the percentage of utilization of the funds ranged around 88-92% over a period of ten years, while the completion of works was on average around 90%.
- d. However, as observed earlier, most of the work happens during the last years of a Lok Sabha tenure.
- e. A more planned approach could help in ensuring that the projects are initiated earlier and completed on time, rather than remaining pending at the end of a tenure.

With the two-year suspension of MPLADS, it is a good opportunity to complete the pending works and utilize the unspent amount. It is also a good time to review the implementation of the MPLADS scheme, before charting the further course of the scheme.

CA20. Tsunami Ready Programme: UNESCO-IOC

Link:

https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1643749#:~:text=Virtual%20Event%20on%20UNESCO%2DIOC,Communities%20on%2007%20Aug%202020&text=It%20has%20been%20observed%20that,losses%20and%20speed%20up%20response.

Recently, the **Intergovernmental Oceanographic Commission (IOC) of UNESCO** (also known as UNESCO-IOC) has approved the recognition of two communities of Odisha viz., **Venkatraipur and Noliasahi as Tsunami Ready Communities**. With this recognition, India has become the first country in the Indian Ocean Region to achieve the honor from the UNESCO-IOC.

Odisha is the first state in India to have such recognised community.

Tsunami Ready:

It is a community performance-based programme initiated by the Intergovernmental Oceanographic Commission (IOC) of UNESCO to promote tsunami preparedness through active collaboration of public, community leaders, and national and local emergency management agencies.

The main objective of this programme is to improve coastal community's preparedness for tsunami emergencies, to minimize the loss of life and property and to ensure a structural and systematic approach in building community preparedness through fulfilling the best-practice indicators set by the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG/IOTWMS) of UNESCO-IOC.

Implementation in India:

Tsunami Ready in India is implemented by the National Board (Ministry of Earth Sciences- under the Chairmanship of Director, Indian National Centre for Ocean Information Centre (INCOIS) with members drawn from MoES, National Disaster Management Authority (NDMA), Ministry of Home Affairs (MHA), Odisha State Disaster Management Authority (OSDMA), Andaman & Nicobar Islands Directorate of Disaster Management (DDM) and INCOIS.

About Intergovernmental Oceanographic Commission (IOC) of UNESCO

The Intergovernmental Oceanographic Commission of UNESCO (IOC-UNESCO), established in 1960 as a body with functional autogomy within UNESCO, is the only competent organization for marine science within the UN system.

The purpose of the Commission is to promote international cooperation and to coordinate programmes in research, services and capacity-building, in order to learn more about the nature and resources of the ocean and coastal areas and to apply that knowledge for the improvement of management, sustainable development, the protection of the marine environment, and the decision-making processes of its Member States. In addition, IOC is recognized through the United Nations Convention on the Law of the Sea (UNCLOS) as the competent international organization in the fields of Marine Scientific Research (Part XIII) and Transfer of Marine Technology (Part XIV).

CA21. Abanindranath Tagore

Link:

https://pib.gov.in/PressReleseDetailm.aspx?PRID=1643849#:~:text=Press%20Information%20Bureau,-

 $\frac{Government\%20of\%20India\&text=National\%20Galary\%20of\%20Modern\%20Art, Tagore~\%20on\%207th\%20August\%202020.$

The National Gallery of Modern Art (NGMA), New Delhi has organised a virtual tour titled "The Great Maestro - Abanindranath Tagore" to commemorate the 150th birth anniversary of Abanindranath Tagore on 7th August 2020.

The Master: Abanindranath Tagore

'It is only to admit that modern Indian art originated from the revaluation of Indian art.

Each artist is surrounded by the ideas and environment of his time".

(Abanindranath Tagore)

Abanindranath Tagore, the nephew of Rabindranath Tagore, was one of the most prominent artists of Bengal school of art in India. He was the first major supporter of swadeshi values in Indian art.

The contribution of Abanindranath Tagore towards Indian art and culture are:

Bengal School of Art:

- a. He first created the 'Indian Society of Oriental Art' and later went on to establish Bengal school of art.
- b. He believed that Indian art and its art forms gave importance to spirituality as opposed to the West which stressed on materialism, thus rejecting it.
- c. His idea of modernizing Mughal and Rajput paintings eventually gave rise to modern Indian painting, which took birth at his Bengal school of art.
- d. Most of his works revolved around Hindu philosophy.
- e. In his later works, Abanindranath started integrating Chinese and Japanese calligraphic traditions into his style. The intention behind this move was to construct an amalgamation of the modern pan-Asian artistic tradition and the common elements of Eastern artistic and spiritual culture.

Famous paintings are:

Bharat Mata, The Passing of Shah Jahan (1900), My Mother (1912–13), Fairyland illustration (1913), Journey's End (circa 1913).

Literature:

- a. Abanindranath is also regarded as a proficient and accomplished writer.
- b. Most of his literary works were meant for children. Some of his books like 'BudoAngla', 'KhirerPutul' and 'Rajkahini' are best examples of Bengali children's literature.
- c. William Rothenstein helped Rabindranath Tagore to publish his work 'Gitanjali' in English.

Abarindranath Tagore's work on the basis of traditional compositional motifs is noteworthy.

He adapted to the stylistic or syntactic norms of old treatises, be it Hindu, Mughal or European. He painted deities of the Hindu pantheon, Buddhist legends and the fall of the Mughal empire. He also added new goddesses to the pantheon 'Bharat mata'. He also did book illustrations for 'Swapanaprayana' and Rabindranath's dance drama 'Chitrangada'. Abanindranath distrusted formulae. He held that the roots of art should be in 'aw-less, self-dependent delight'. He states, 'Art is not made to justify the Shilpa Shastras, but the Shastras are made to explain art'.

Other important points:

- a. Abanindranath imbibed and absorbed not only from his own native tradition but also from the world culture at large, viz Western, Persian, Mughal and the Oriental.
- b. His quest for innovation found a new release in the creation of "Khuddur Ramayana or Khuddur Jatra" a cut and paste small scrap book. This Epic Ramayana here was composed with the contemporary notions of "appropriation" or borrowing of popular imagery from comic strips, magazines, newspapers, advertisements and other mass media in general.
- c. **Katum Kutum Sculptures** is associated with Abanindranath Tagore.

CA22. Priority Sector Lending (PSL):

Link: https://economictimes.indiatimes.com/small-biz/startups/newsbuzz/rbi-grants-priority-sector-lending-status-to-

startups/articleshow/77405157.cms#:~:text=RBI%20grants%20Priority%20Sector%20Lending%20status%20to%20startups,-

<u>SECTIONS&text=MUMBAI%3A%20The%20Reserve%20Bank%20of,status%20to%20India's%20startup%20sector.&text=the%20central%20bank.-</u>

News:

The Reserve Bank of India has assigned priority sector lending (PSL) status to India's startup sector.

Significance of the move:

RBI opening up more funds for lending to startups is a very positive step. Startups have not had easy access to debt, stymied by traditional lender metrics of creditworthiness. This is a huge booster as sufficient funding and user adoption are two primary challenges for Indian entrepreneurs.

Besides, Startups have mostly relied on expensive venture debt. This move will help startups free up their equity and raise low cost debt.

What is Priority Sector Lending?

It means those sectors which the Government of India and Reserve Bank of India consider as important for the development of the basic needs of the country and are to be given priority over other sectors. The banks are mandated to encourage the growth of such sectors with adequate and timely credit.

RBI guidelines for PSL for scheduled commercial banks:

- a. 40% of the total net bank credit should go to a priority sector advances.
- b. 10% of the priority sector advances or 10% of the total net bank credit, whichever is higher should go to weaker section.
- c. 18% of the total net bank credit should go to agricultural advances. Within the 18 percent target for agriculture, a target of 8 per cent of Adjusted Net Bank Credit (ANBC) or Credit Equivalent Amount of Off-Balance Sheet Exposure, whichever is higher is prescribed for Small and Marginal Farmers, to be achieved in a phased manner.
- d. 5 of ANBC or Credit Equivalent Amount of Off-Balance Sheet Exposure, whichever is higher should go to Micro enterprises.

Priority Sector includes the following categories:

- Agriculture
- Micro, Small and Medium Enterprises (MSME)
- Export Credit
- Education
- Housing
- Social Infrastructure
- Renewable Energy
- Others

Priority Sector Lending Certificates (PSLCs):

Priority Sector Lending Certificates (PSLCs) are a mechanism to enable banks to achieve the priority sector lending target and sub-targets by purchase of these instruments in the event of shortfall. This also incentivizes surplus banks as it allows them to sell their excess achievement over targets thereby enhancing lending to the categories under priority sector.

Go through link of RBIwebsite to read more. Click here.

CA23. Landslide near Eravikulam National Park

Link: https://www.tribuneindia.com/news/nation/15-killed-in-kerala-landslide-123528

News:

Recently, landslides have been reported at the Nayamakkad tea estate at Pettimudy which is located about 30 km from Munnar, adjacent to the Eravikulam National Park (ENP), Kerala.

Introduction to Landslides in India.

India is vulnerable to different types of landslides which cause significant destruction in terms of loss of lives and property. As per GSI, about 0.42 million km2 covering nearly 12.6% of land area of our country is prone to landslide hazards. Mountainous region of the North-Western Himalayas, the Sub-Himalayan terrain of the North-East, the Western and Eastern Ghats are prone to landslides covering 22 States and 2 Union Territories. Majority of landslide prone areas are located in the earthquake prone seismic Zone-IV and V.

You will remember rough map of Landslide prone areas of India.

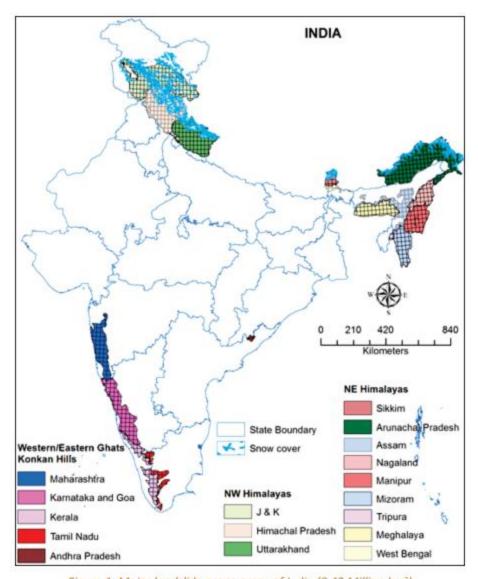


Figure 1: Major landslide prone areas of India (0.42 Million km²)

A Checklist of Causes of Landslides Ground Causes: very important for UPSC exam.

- a. Weak, sensitivity, or weathered materials
- b. Adverse ground structure (joints, fissures etc.)
- c. Physical property variation (permeability, plasticity etc.)

Morphological Causes

- a. Ground uplift (volcanic, tectonic etc.)
- b. Erosion (wind, water)
- c. Vegetation removal (by forest fire, drought etc.)

Physical Causes

a. Prolonged precipitation

- b. Rapid draw-down
- c. Earthquake
- d. Volcanic eruption
- e. Thawing
- f. Shrink and swell
- g. Artesian pressure

Man-made Causes

- a. Excavation (particularly at the toe of slope
- b. Loading of slope crest
- c. Draw -down (of reservoir)
- d. Deforestation
- e. Irrigation
- f. Mining
- g. Artificial vibrations
- h. Water impoundment and leakage from utilities

Features of Eravikulam National Park:

It is located in the High Ranges (Kannan Devan Hills) of the Southern Western Ghats in the Devikulam Taluk of Idukki District, Kerala. It spreads over an area of 97 square km and hosts South India's highest peak, Anamudi (2695 m), in its southern area.

In Tamil Naidu Disaster Management site, we found one information:

An **overall evaluation of the pattern and nature of landslides occurrences in the Kerala part of Western Ghats** and its corresponding eastern flank falling within Tamil Nadu reveals the following main features:

- a. Almost all mass movements occur during monsoons (SW and NE monsoon) in the western flank of western Ghats and during occasional cyclonic events in the eastern flank indicating that main triggering mechanism is the over- saturation of overburden caused by heavy rains.
- b. There seems to be a relation between intensity of rainfall and slope failures.
- c. Majority of the catastrophic mass movements is confined to the overburden without affecting the underlying bedrock.
- d. Improper land use practices such as heavy tilling, agricultural practices and settlement patterns have contributed to creep and withdrawal of toe support in many cases
- e. A common factor noticed in most of these vulnerable slopes' deforestation in the recent past, cultivation of seasonal crops and increase in settlements.
- f. In all the vulnerable slopes terracing/ contour bounding is adopted mainly to prevent soil erosion and to enhance percolation during dry season for cultivation of cash crops as well as seasonal crops. Invariably, in all these cases, natural drainage

- lines on slopes are blocked or modified without adequate provision for surface drainage of excess storm water during high intensity rains prevalent in the area.
- g. In some areas developmental activities like construction of buildings, road cutting, embankments, cut and fill structures causes modification of natural slopes, blocking of surface drainage, loading of critical slopes and withdrawal to toe support promoting vulnerability of critical slopes.

CA24. MSMEs in India

Link: https://msme.gov.in/sites/default/files/Annualrprt.pdf#page=32

MSMEs account for around 30% of India's GDP. MSMEs account for a major share of India's GDP. They are spread across various sectors including manufacturing & services and service both domestic and global market.

As per the data provided in Annual Report 2018-19, of the Ministry of Micro Small and Medium Enterprises, the volume GVA (Gross Value Addition) of MSMEs have increased over the five year period of 2012-17, however their share in the total GVA and GDP has slightly reduced.

Table 2.1: Contribution of MSMEs in Country's Economy at Current Price

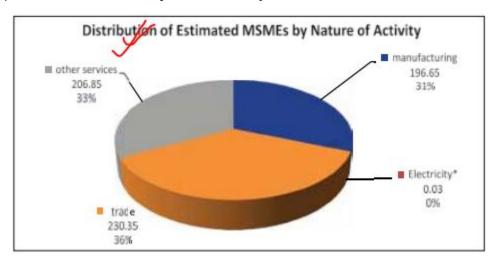
1	(Figures in Rs. Crores adjusted for FISIM³ at current prices)							
Year	MSME GVA	Growth (%)	Total GVA	Share of MSME in GVA (%)	Total GDP	Share of MSME in GDP (in %)		
2011-12	2622574	-	8106946	32.35	8736329	30.00		
2012-13	3020528	15.17	9202692	32.82	9944013	30.40		
2013-14	3389922	12.23	10363153	32.71	11233522	30.20		
2014-15	3704956	9.29	11504279	32.21	12467959	29.70		
2015-16	4025595	8.65	12566646	32.03	13764037	29.20		
2016-17	4405753	9.44	13841591	31.83	15253714	28.90		

Source: Central Statistics Office (CSO), Ministry of Statistics & Programme Implementation

Around 11 crore people employed by MSMEs as per 2015-16 survey

As per National Sample Survey (NSS) 73rd round conducted during 2015-16, **MSMEs created around 11.1 crores jobs.** Out of these, a **majority are employed in Trade** with 3.87 crores. MSMEs involved in Manufacturing employ around 3.6 crores while another

3.62 lakh crores are employed in Other services. A minute portion i.e. around 7 thousand jobs are under 'Non-captive Electricity Generation and Transmission.



Out of the total employment in MSMEs, 6.12 crores are employed in Urban areas and the remaining 4.97 crores jobs are in Rural areas.

Estimated Employment in MSMEs (2015-16) (in Lakhs)				
Category	Rural	Urban	Total	
Manufacturing	186.56	173.86	360.41	
Trade	160.64	226.54	387.18	
Other Services	150.53	211.69	362.22	
Electricity	0.06	0.02	0.08	
All	497.8	612.1	1109.9	

More than 99% of the MSMEs are Micro Enterprises

As per the estimates of National Sample Survey, there are a total of **6.33 crore MSMEs in India as of 2015-16.** Of these, 3.24 crores are in Rural areas and 3.09 crores in urban areas. **More than 99 % i.e. around 6.31 crores of MSMEs are Micro Enterprises**. There are estimated to be around 3.31 lakh Small scale enterprises and 0.05 lakh medium scale enterprises.

Table 2.3: Distribution of Enterprises Category Wise

(Numbers in lakh)

Sector	Micro	Small	Medium	Total	Share (%)
Rural	324.09	0.78	0.01	324.88	51
Urban	306.43	2.53	0.04	309.00	49
All	630.52	3.31	0.05	633.88	100

Type of Ownership of Enterprises

Table 2.4: Percentage Distribution of Enterprises in rural and urban areas.

(Male/ Female ownership category wise)

Sector	Male-	Female	All
Rural	77.76	22.24	100
Urban	√ 81.58	18.42	100
All	79.63	20.37	100

Table 2.5: Percentage distribution of Enterprises by Male/Female Owners

Category	Male	Female	All
Micro	79.56	20.44	100
Small	94.74	5.26	100
Medium	97.33	2.67	100
All	79.63	20.37	100

State-wise Distribution of estimated MSMEs

State of Uttar Pradesh had the largest number of estimated MSMEs with a share of 14.20~% of MSMEs in the country.

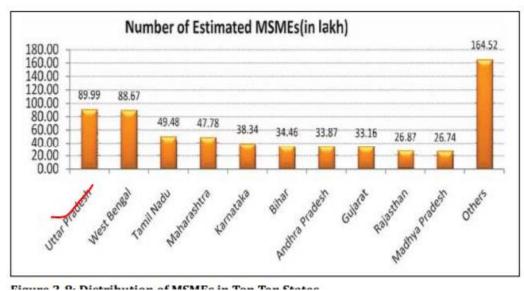


Figure 2 O. Dictribution of MCMFc in Ton Ton Ctates

Cabinet approval for change of definition for MSMEs

As the number indicates, significantly large portion of MSMEs are categorized under Micro enterprises. This categorization is done on the basis of an earlier definition of MSMEs, the one which has changed in subsequent years.

On 01 June 2020, the Cabinet Committee on Economic Affairs has approved a change in the definition on the MSMEs. This change in definition is based on the announcement made as part of the **Atma Nirbhar package.**

Cabinet approves Upward revision of MSME definition and modalities/ road map for implementing remaining two Packages for MSMEs (a)Rs 20000 crore package for Distressed MSMEs and (b) Rs 50,000 crore equity infusion through Fund of Funds

Fully paved way for Energising the MSME Sector through entire gamut of 'Atmanirbhar Bharat Package'

New definition:

As per the initial definition provided under MSME Development Act, the criteria of classification were different for enterprises involved in Manufacturing activities and those involved in Services. This has now been modified in the new definition, wherein no classification was made on the basis of activity of the enterprise.

Further, in the earlier definition, only the investment was considered as a criterion. As per the new definition, even turnover is included for classification of MSMEs. This is based on an Expert committee report of RBI, which recommended the use of turnover as criteria instead of investment.

Definition of MSMEs - Comparison						
	2006	Act	June 2020 (Cabinet approval)			
Type	Manufacturing	anufacturing Services Both (Manufactu		uring & Services)		
Criteria	Investm	ent in ₹	Investment in ₹	Turnover in ₹		
Micro	Up to 25 lakh	Up to 10 lakh	1 crore	5 crore		
Small	25 Lakh- 5 crore	10 lakh – 2 Crore	1 crore – 10 crore	5 crore- 50 crore		
Medium	5 crore – 10 crore	2 crore – 5 crore	10 crore- 50 crore	50 crore- 250 crore		

Apart from definition, the summary of the announcements made by government in relation to MSMEs are,

Relief Measure	Category	Details
	Financial	Collateral Free Loans of up to ₹ 3 lakh crores
Collateral free loans for Businesses	Financial	MSMEs can borrow up to 20% of their entire outstanding credit as on 29 February 2020, from banks and Non-Banking Financial Companies (NBFCs).
Corpus for MSMEs	Financial	A fund of funds with a corpus of ₹ 10,000 crore will be set up for MSMEs and provide equity funding. ₹ 50 thousand crore is expected to be leveraged
Subordinate debt for MSMEs	Financial	This supports stressed MSMEs having NPAs. - The promoters would be given debt from banks. - Govt. will facilitate ₹ 20 thousand crores of subordinate debt. - Accordingly, to provide ₹ 4 thousand crore to Credit Guarantee Fund Trust for MSME, to provide partial credit guarantee support to banks providing credit.
Expediting payment of dues to MSMEs	Policy	Payments due to MSMEs from the government and Centre Public Sector Enterprises (CPSEs) to be released within 45 days.
Insolvency resolution	Policy	A special resolution framework for MSMEs under the Insolvency and Bankruptcy Code, 2016 will be notified.
Disallowing global tenders	Policy	Global tenders up to ₹ 200 crore will not be allowed in government procurement to protect Indian MSMEs from competition from foreign companies.

CA25. Loya Jirga: Grand Assembly of Afghanistan

Recently, a three-day Loya Jirga-grand assembly has been called in Afghanistan to decide on freeing about 400 Taliban fighters convicted for serious crimes including murder and abductions.

The term Loya Jirga is important for exam.

Loya Jirga

- **a.** It is a mass national gathering that brings together representatives from the various ethnic, religious, and tribal communities in Afghanistan.
- **b.** It is a highly respected centuries-old consultative body that has been convened at times of national crisis or to settle national issues.

- **c.** According to the Afghan Constitution, a Loya Jirga is considered the highest expression of the Afghan people. It is not an official decision-making body and its decisions are not legally binding.
- **d.** However, the Loya Jirga's decision is seen as final, with the president and parliament expected to respect the ruling.

CA26. New grasshopper species named after Indian researcher

Link: https://www.hindustantimes.com/india-news/new-grasshopper-speciesdiscovered-after-116-years-named-after-28-year-old-indian-biologist/storygRmgEvjaVoJJddnV30xNCK.html#:~:text=A%20new%20species%20of%20pygmy,biologis t%20Dhaneesh%20Bhaskar%20of%20Kerala

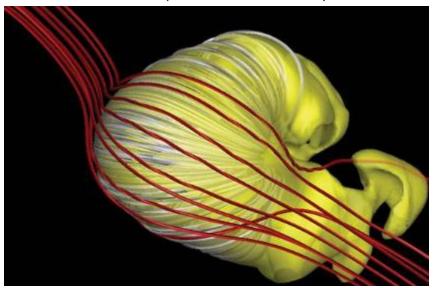
A new species of 'twighopper' or pygmy grasshopper, discovered by Croatian and German researchers in the rainforests of Sri Lanka, has been named after Kerala grasshopper expert, Dhaneesh Bhaskar, a report in the Hindustan Times said.



The discovery of the Cladonotus bhaskari is based on the photograph of a single specimen taken in 2016. The researchers studied it and found it to be distinct from other grasshopper species. They declared it to be new and christened it after Bhaskar in the journal 'Zootaxa' last month.

The researchers were quoted as saying that they had decided to name the species after Bhaskar due to his work on grasshoppers in India. Bhaskar, they said, was the first Indian researcher to study the insects, something which was earlier done by foreigners.





Link: https://indianexpress.com/article/technology/science/nasa-solar-system-shape-heliosphere-6545479/

National Aeronautics and Space Administration (NASA) scientists have developed a new prediction about the shape of the bubble that surrounds our solar system. This has been made possible after the data collected from a model that was developed using various NASA missions.

Earlier, scientists thought that the shape of our heliosphere that travels through space as it orbits around the centre of the galaxy is similar to that of a comet with a round leading edge with a long tail trailing behind. **The scientists have not been able to figure out** the shape of our solar system's heliosphere because its closest edge is more than ten billion miles from Earth. With the help of two Voyager spacecraft, **they have been able to measure this region.**

More about news:

- **a.** To study our boundary to the interstellar space, astronomers have been capturing and observing particles flying toward our planet.
- **b.** Galactic cosmic rays, the charged particles that come from different parts of the galaxy along with existing ones help scientists study the boundary of our galaxy as they travel out towards the heliosphere and are bounced back by a series of electromagnetic processes.
- **c.** Under NASA's Interstellar Boundary Explorer (IBEX), scientists use these particles as radar to know our boundary to interstellar space.
- **d.** There are two fluids mixed together. You have one component that is very cold and one component that is much hotter, the pick-up ions, said Opher, a professor of astronomy at Boston University.

e. If you have some cold fluid and hot fluid, and you put them in space, they won't mix — they will evolve mostly separately. What we did was separate these two components of the solar wind and model the resulting 3D shape of the heliosphere.

What is heliosphere?

The Heliosphere acts like a shield to our solar system that guards us against the rest of the galaxy from particles shot after a supernova (a powerful and luminous stellar explosion). However, it can't absorb all of the radiations and lets a quarter of these galactic rays into our solar system. The particles that break through our heliosphere are still dangerous, but our planet is protected by its magnetic field and atmosphere.

That's why there is a need to understand our heliosphere which will be a major breakthrough in future space exploration.

CA28. Cellular structure identified in coronavirus replication

Link: https://economictimes.indiatimes.com/news/science/scientists-identify-cellular-structure-that-may-play-critical-role-in-coronavirus-replication/articleshow/77432493.cms

Science based news. Just read it for to keep yourself update.

Scientists have identified a structure in host cells which the novel coronavirus likely uses to synthesize components that will be assembled into fully infectious viruses, an advance which may lead to the development of new drugs against COVID-19. The study, published in the journal Science Advances, uncovers a coronavirus-specific structure in cells, which may act as a target for much-needed antiviral strategies against this family of viruses. According to the scientists, corona virus replicates their large genomes in the host cell's cytosol -- the jelly-like material in which the components of the cell are suspended.

More about news:

- a. The viruses replicate by transforming host cell membranes into peculiar double-membrane vesicle (DMV) structures.
- b. In the current study, they noted that the newly made viral genetic material, its RNA molecule, needs to be exported from these DMVs to the cytoplasm to be packaged into complete, infectious forms of the virus.
- c. To date, however, they said no openings to the cytosol have been detected in the DMV replication compartments.
- d. Seeking to understand how viral RNA is exported from sealed DMVs, the scientists, Georg Wolff and his colleagues, used a powerful microscopy technique called electron tomography to visualize the middle stage of infection of a cell by mouse hepatitis coronavirus.

- e. This virus was used instead of the novel coronavirus SARS-CoV-2 due to biosafety constraints for such electron microscopy studies.
- f. The scientists identified a coronavirus-specific crown-shaped structure -- a molecular pore spanning the two DMV membranes -- that likely plays a role during RNA release from the compartment.
- g. Then using pre-fixed samples of SARS-CoV-2-infected cells, they showed that the structure is also present in SARS-CoV-2-induced DMVs.
- h. According to the researchers, this structure may be a generic complex with a pivotal role in the coronavirus replication cycle, facilitating the export of newly synthesized viral RNA from the DMVs to the cytosol.
- i. Although the exact mode of function of this molecular pore remains to be elucidated, it may offer a general coronavirus-specific drug target, the scientists noted.

CA29. Surveys Released recently by RBI

Link:

https://rbidocs.rbi.org.in/rdocs/PressRelease/PDFs/PR1525D47890F7F254899A6736C6F9B49A60F.PDF

The results of different surveys released by the RBI recently paint a very grim picture of the consumer confidence and industrial activity.

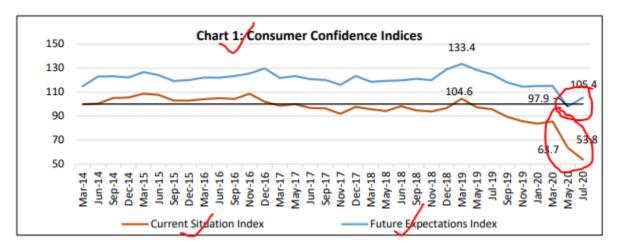
On 06 August 2020, the RBI released the results of surveys. In this topic, we take a look at few of the critical observations from these surveys and explore the trends over the period of time. Four surveys we will see here: Remember names. They are released regularly by the RBI. *In Prelims, names are important. For mains, if questions come, how COVID-19 has impacted economy, you can put names of such surveys.*

- a. Consumer Confidence Survey
- b. Business Assessment Index
- c. Order Books, Inventories and Capacity Utilization Survey (OBICUS)
- d. Inflation Expectations Survey of Households (IESH)

Consumer Confidence survey

As per the results released for July 2020 of Consumer Confidence survey, the Current Situation Index (CSI) for Economic Situation is at 53.8, which is an all-time low. The *impact of lockdown due to COVID-19 and the general uncertainty all around* is clearly visible in the low number for the index.

The survey was conducted based on the perceptions and expectations on – general economic situation, employment scenario, overall price situation, own income & spending etc. of 5,342 households across 13 major cities.



Meanwhile, the Future Expectation Index (FEI) which reflects how the consumers feel for the upcoming period has shown an improvement over May 2020, at 105.4. **This is the first time since May 2019 that FEI has increased compared to the earlier round of survey.**

Consumer perception on Income and Employment in July 2020 significantly lower than in May $2020\,$

Consumer confidence indices are based the consumers perception and expectation on 5 different variables – Economic Situation, Employment, Price Level, Income & Spending. In the July 2020 round of survey, **significant fall in Consumers current perception on Employment and income was observed.**

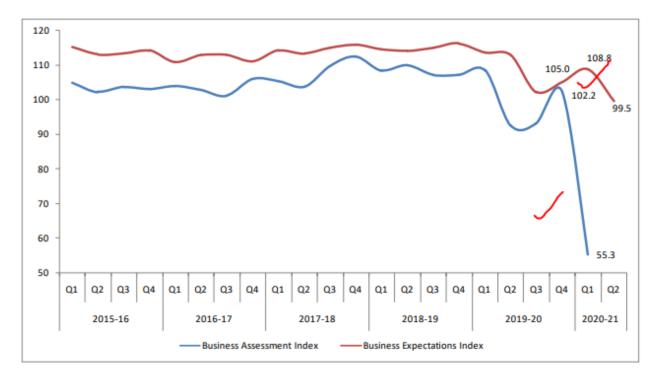
Main Variables	Current Perception compared with one-year ago		One year ahead Expectations compared with current situation			
	May-20	Jul-20	Change	May-20	Jul-20	Change
Economic Situation	-60.0	-65.9	1	-11.7	2.1	1
Employment	-48.2	-65.1	1	-5.9	10.4	1
Price Level	-75.8	-76.2	•	-66.4	-61.5	•
Income 🗸	-40.8	-54.5	1	18.1	26.3	1
Spending	43.2	30.8		55.6	49.6	1
Consumer Confidence Index	63.7	53.8	1	97.9	105.4	1
Positive Sentiments v	vith sign of im to last round		1	Negative S	entiments wi	
Positive Sentiments with sign of deterioration compared to last round			.	Negative S	entiments wi	

Sharp fall in the Business Assessment Index for Q1'FY 20-21

The 90th round of Industrial Outlook Survey of Manufacturing Sector was also conducted during April-June'2020. The survey assesses the business climate of Indian manufacturing companies. A total of 802 companies responded in this round of survey.

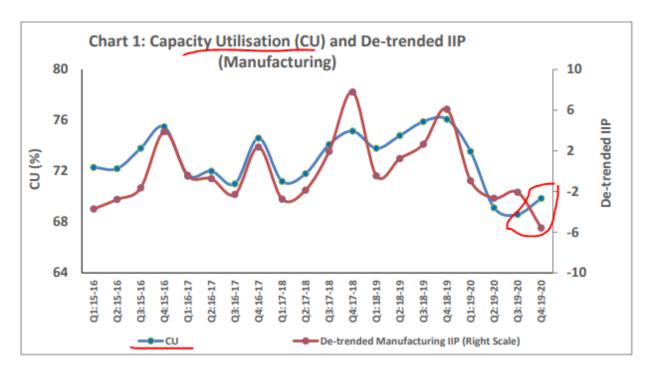
As per the survey, **Business Assessment Index (BAI)**, which is based on the current assessment of the respondents fell to 55.3 for Q1 of 2020-21, a sharp fall from 102.2 in the previous quarter i.e. Q4 of 2019-20. This is also the all-time low. This is based on various parameters.

Apart from BAI, there is another index calculated with the responses of the survey i.e. **Business Expectation Index (BEI)**, which is based on the expectation of the respondents for the next quarter for each of the parameter. The positive expectations across most of the parameters are less when compared to the previous quarter, resulting in BEI falling to 99.5 for Q2 of 2020-21, compared to the expectation they had for the current quarter, which stood at 108.8.



Order Books, Inventories and Capacity Utilization Survey (OBICUS)

The Reserve Bank released the results of the 49th round of the **Order Books, Inventories** and **Capacity Utilization Survey (OBICUS)** for the quarter January-March 2020 covering 364 manufacturing companies. The Demand conditions in manufacturing sector as per OBICUS (Order Books, Inventories and Capacity Utilization Survey) also does not show a positive trend. Although the capacity utilization for Q4 of 2019-20 had increased compared to previous quarter, it is significantly lower compared to the same quarter of 2018-19. Meanwhile, Manufacturing companies have received fewer orders in Q4 of 2019-20 compared to previous quarter. While there is an increase in Raw materials to Sales Ratio (RMI) (indicating lesser production), the Finished goods to Sales Ratio (FGI) has come down.



Inflation Expectations Survey of Households (IESH)

Reserve Bank released the results of the July 2020 round of the Inflation Expectations Survey of Households (IESH). In view of the Covid-19 pandemic, the survey was conducted through telephonic interviews during July 1-12, 2020 in 18 major cities. The results are based on responses from 5,411 urban households.

Households' median inflation perception increased by 60 basis points in July 2020 as compared with the May 2020 survey round. Inflation expectations for both three months and one-year horizons increased by 10 basis points each.



CA30. Pradeep Kumar Joshi appointed as UPSC chairman

Hew we will cover this topic in elaborate. As there is lot of confusion in its history and evolution and also Constitutional provisions. First of all, we will see History of Commission. You will enjoy reading and very important for your Prelims Exam and Mains Exam.

- a. Civil Servants for the East India Company used to be nominated by the Directors of the Company and thereafter trained at Haileybury College in London and then sent to India. Following Lord Macaulay's Report of the Select Committee of British Parliament, the concept of a merit based modern Civil Service in India was introduced in 1854.
- b. The Report recommended that **patronage-based system** of East India Company should **be replaced by** a permanent Civil Service based on a **merit-based system** with entry through competitive examinations.
- c. For this purpose, a **Civil Service Commission was setup in 1854 in London** and **competitive examinations were started in 1855**.
- d. **Initially,** the examinations for Indian Civil Service were **conducted only in London**. **Maximum age was 23 years** and **minimum age was 18 years**. The syllabus was designed such that European Classics had a predominant share of marks.
- e. All this made it difficult for Indian candidates. Nevertheless, in 1864, the first Indian, Shri Satyendra Nath Tagore brother of Shri Rabindranath Tagore succeeded. Three years later 4 other Indians succeeded.
- f. Throughout the next 50 years, Indians petitioned for simultaneous examinations to be held in India without success because the **British Government did not want many Indians to succeed and enter the ICS**.
- g. It was only after the First World War and the Montagu Chelmsford reforms that this was agreed to. From 1922 onwards the Indian Civil Service Examination began to be held in India also, first in Allahabad and later in Delhi with the setting up of the Federal Public Service Commission. The Examination in London continued to be conducted by the Civil Service Commission.
- h. Regarding Central Civil Services, the Civil Services in British India were classified as covenanted and uncovenanted services on the basis of the nature of work, payscales and appointing authority. In 1887, the Aitchinson Commission recommended the reorganization of the services on a new pattern and divided the services into three groups-Imperial, Provincial and Subordinate. The recruiting and controlling authority of Imperial services was the 'Secretary of State'.
- i. With the passing of the Indian Act 1919, the Imperial Services headed by the Secretary of State for India, were split into two-All India Services and Central Services. The central services were concerned with matters under the direct control of the Central Government.
- j. The origin of the Public Service Commission in India is found in the First Dispatch of the Government of India on the Indian Constitutional Reforms on

- **the 5th March, 1919** which referred to the need for setting up some permanent office charged with the regulation of service matters.
- **k.** Section 96(C) of the Act provided for the establishment in India of a Public Service Commission which should "discharge, in regard to recruitment and control of the Public Services in India, such functions as may be assigned thereto by rules made by the Secretary of State in Council". No decision was taken on setting up of the body after passing of 1919 Act.
- I. The subject was then referred to the Royal Commission on the Superior Civil Services in India (also known as Lee Commission) which recommended that the statutory Public Service Commission contemplated by the Government of India Act, 1919 should be established without delay.
- m. Subsequent to the provisions of Section 96(C) of the Government of India Act, 1919 and the strong recommendations made by the Lee Commission in 1924 for the early establishment of a Public Service Commission, it was on October 1, 1926 that the Public Service Commission was set up in India for the first time.
- n. Further, the Government of India Act, 1935 envisaged a Public Service Commission for the Federation and a Provincial Public Service Commission for each Province or group of Provinces. Therefore, in terms of the provisions of the Government of India Act, 1935 and with its coming into effect on 1st April 1937, the Public Service Commission became the Federal Public Service Commission.
- o. With the inauguration of the Constitution of India in January 26, 1950, the Federal Public Service Commission came to be known as the Union Public Service Commission, and the Chairman and Members of the Federal Public Service Commission became Chairman and Members of the Union Public Service Commission by virtue of Clause (1) of Article 378 of the Constitution.

Constitutional Provisions: Don't think, you are running out of time. The same thing you have to remember till end of your paper, so better you read in such a way, you never forget.

Article-315. Public Service Commissions for the Union and for the States.

Subject to the provisions of this article, there shall be a Public Service Commission for the Union and a Public Service Commission for each State.

^{2.} Two or more States may agree that there shall be one Public Service Commission for that group of States, and if a resolution to that effect is passed by the House or, where there are two Houses, by each House of the Legislature of each of those States, Parliament may by law provide for the appointment of a Joint State Public Service Commission (referred to in this Chapter as Joint Commission) to serve the needs of those States.

Afticle-316. Appointment and term of office of members.

1. The Chairman and other members of a <u>Public Service Commission shall be appointed</u>, in the case of the <u>Union Commission</u> or a <u>Joint Commission</u>, by the <u>President</u>, and in the case of a State Commission, by the <u>Governor of the State</u>:

Provided that as nearly as may be one-half of the members of every Public Service Commission shall be persons who at the dates of their respective appointments have held office for at least ten years either under the Government of India or under the Government of a State, and in computing the said period of ten years any period before the commencement of this Constitution during which a person has held office under the Crown in India or under the Government of an Indian State shall be included.

A. If the office of the Chairman of the Commission becomes vacant or if any such Chairman is by reason of absence or for any other reason unable to perform the duties of his office, those duties shall_until some person appointed under clause (1) to the vacant office has entered on the duties thereof or, as the case may be, until the Chairman has resumed his duties, be performed by such one of the other members of the Commission as the President, in the case of the Union Commission or a Joint Commission, and the Governor of the State in the case of a State Commission, may appoint for the purpose.

Article-317. Removal and suspension of a member of a Public Service Commission.

- 1. Subject to the provisions of clause (3), the Chairman or any other member of a Public Service Commission shall only be removed from his office by order of the President on the ground of misbehaviour after the Supreme Court, on reference being made to it by the President, has, on inquiry held in accordance with the procedure prescribed in that behalf under article 145, reported that the Chairman or such other member, as the case may be, ought on any such ground to be removed.
- 2. The President, in the case of the Union Commission or a Joint Commission, and the Governor in the case of a State Commission, may suspend from office the Chairman or any other member of the Commission in respect of whom a reference has been made to the Supreme Court under clause (1) until the President has passed orders on receipt of the report of the Supreme Court on such reference.
- Notwithstanding anything in clause (1), the President may by order remove from office the Chairman or any other member of a Public Service Commission if the Chairman or such other member, as the case may be,—
- a. is adjudged an insolvent; or
- 6. engages during his term of office in any paid employment outside the duties of his office; or
- pris, in the opinion of the President, unfit to continue in office by reason of infirmity of mind or body.

Article-318. Power to make regulations as to conditions of service of members and staff of the Commission.

In the case of the Union Commission or a Joint Commission, the President and in the case of a State Commission, the Governor of the State may by regulations—

determine the number of members of the Commission and their conditions of service; and make provision with respect to the number of members of the staff of the Commission and their conditions of service:

Provided that the conditions of service of a member of a Public Service Commission shall not be varied to his disadvantage after his appointment.

CA31. Agriculture Infrastructure Fund

Prime Minister Narendra Modi recently launched the financing facility of Rs 1 lakh crore under the Agriculture Infrastructure Fund via video conferencing. The fund has been launched as part of 'Atmanirbhar Bharat' (self-reliant India) to make farmers self-reliant.

So, we will cover this topic in detail. Life and UPSC both will become easy. For any such schemes, we should always cover introduction, why this was created. It becomes easy then to understand scheme.

1. Introduction

The role of infrastructure is crucial for agriculture development and for taking the production dynamics to the next level. It is only through the development of infrastructure, especially at the post harvest stage that the produce can be optimally utilized with opportunity for value addition and fair deal for the farmers. Development of such infrastructure shall also address the vagaries of nature, the regional disparities, development of human resource and realization of full potential of our limited land resource.

In view of above, the Hon'ble Finance Minister announced on 15.05.2020 Rs 1 lakh crore Agri Infrastructure Fund for farm-gate infrastructure for farmers. Financing facility of Rs. 1,00,000 crore will be provided for funding Agriculture Infrastructure Projects at farm-gate & aggregation points (Primary Agricultural Cooperative Societies, Farmers Producer Organizations, Agriculture entrepreneurs, Start-ups, etc.). Impetus for development of farmgate & aggregation point, affordable and financially viable Post Harvest Management infrastructure.

Accordingly, DAC&FW has formulated the Central Sector Scheme to mobilize a medium - long term debt financing facility for investment in viable projects relating to postharvest management Infrastructure and community farming assets through incentives and financial support.

Objectives of Scheme

To mobilize a medium - long term debt finances facility for investment in viable projects for post-harvest management Infrastructure and community farming assets through incentives and financial support in order to improve agriculture infrastructure in the country. **This financing facility will have numerous objectives** for all the stakeholders in the agriculture eco-system.

- a. Improved marketing infrastructure to allow farmers to sell directly to a larger **base** of consumers and will improve the overall income of farmers.
- b. With modern packaging and cold storage system access, farmers will be able to further decide when to sell in the market and improve realization.

- c. **Due to improvements in post-harvest infrastructure**, government will further be able to **reduce national food wastage percentage** thereby enable agriculture sector to become competitive with current global levels.
- d. **With a dedicated source of funding**, entrepreneurs will **push for innovation** in agriculture sector by leveraging new age technologies including IoT, AI, etc.
- e. It will also connect the players in ecosystem and hence, **improve avenues for collaboration between entrepreneurs and farmers.**
- f. With **Credit Guarantee**, **incentive and interest subvention** lending institutions will be able to **lend with a lower risk**. This scheme will help to enlarge their customer base and diversification of portfolio.
- g. Refinance facility will enable larger role for cooperative banks and RRBs.
- h. With reduced inefficiencies in post-harvest ecosystem, key benefit for consumers will be a larger share of **produce reaching the market and hence, better quality and prices.**

4 /mplementation Period of Scheme

The Scheme will be operational from 2020-21 to 2029-30. Disbursement in four years starting with sanction of Rs. 10,000 crore in the first year and Rs. 30,000 crore each in next three financial years. Moratorium for repayment under this financing facility may vary subject to minimum of 6 months and maximum of 2 years.

Government Budgetary Support

All loans under this financing facility will have interest subvention of 3% per annum up to a limit of Rs. 2 crores. This subvention will be available for a maximum period of 7 years. In case of loans beyond Rs.2 crore, then interest subvention will be limited up to 2 crores.

7 Size of the financing facility and eligible beneficiaries

Rs. 1 Lakh Crore to be provided by banks and financial institutions as loans to Primary Agricultural Credit Societies (PACS), Marketing Cooperative Societies, Farmer Producers Organizations(FPOs), Self Help Group (SHG), Farmers, Joint Liability Groups (JLG), Multipurpose Cooperative Societies, Agri-entrepreneurs, Startups and Central/State agency or Local Body sponsored Public Private Partnership Projects.

8 Farticipating institutions

All scheduled commercial banks, scheduled cooperative banks, Regional Rural Banks (RRBs), Small Finance Banks, Non-Banking Financial Companies (NBFCs) and National Cooperative Development Corporation (NCDC) may participate to provide this financing facility, after signing of Memorandum of Understanding (MoU) with National Bank for Agriculture & Rural Development (NABARD)/DAC&FW.

14 Monitoring framework

The National, State and District Level Monitoring Committees to ensure real-time monitoring and effective feed-back about the implementation of the proposed scheme. The Committees will be set up as per **Annexure-A**.

All assets created under this financing facility shall be geo tagged. The District Monitoring Committee and respective lending entity shall ensure that updated information on such geo tagged assets is available on the online portal.

CA32. Collapse of Canada's last remaining ice shelf raises global warming fears

Link: https://www.downtoearth.org.in/news/climate-change/milne-ice-shelf-collapse-canada-last-remaining-ice-shelf-collapse-raises-global-warming-fears-72756



The collapse of Canada's Milne ice shelf — the country's last one — in a corner of the country's **Ellesmere Island**, has increased fears of the Arctic region being under severe stress due to global warming.

The Milne ice shelf lost more than 40 per cent of its ice over two days end of July **2020**. This has increased concerns over the rapid melting of ice and the breaking of old ice shelfs — large floating pieces of ice that form when a glacier or ice sheet flows into the sea surface.

This also meant the last known epi shelf lake — a water body dammed by the ice shelf and floating on the ocean surface — in the northern hemisphere and on the Milne ice shelf, no longer exists.

CA33. 6,600-year-old gravesites in Poland suggest wealth gap existed earlier than thought

Link: https://phys.org/news/2020-08-year-old-gravesites-poland-wealth-gap.html

A team of researchers from Sweden, the U.S., Poland and the U.K. has found evidence that suggests the **wealth gap in human communities goes back at least 6,600 years. In their paper published in the journal Antiquity, the group describes their study of skeletons in an ancient Polish graveyard and what they found.**

- **a.** The wealth gap is a term for describing disparities in income for people living in a shared community. Most countries in the world today have a wealth gap. In this new effort, the researchers have found evidence that suggests the **wealth gap goes back even further than most historians have believed.**
- **b.** The work involved digging up skeletons in an ancient cemetery in Osłonki, Poland, along with associated artifacts. The researchers then studied the bones, looking for nitrogen and carbon isotopes. In all, the team studied the remains of 30 people, all adults between the ages of 18 and 45. As a final step, the researchers also studied the bones of cattle found in the same area from the same time period.
- c. They found that some of the people had been buried with pendants, headbands and copper beads, a hint that they may have been from more privileged families. But that was not enough to provide evidence of a wealth gap.
- d. The team then noted that those same people who had been buried with nice trinkets also had a distinctive ratio of carbon isotopes in their bones, which was also observed in the cattle, suggesting that those people were eating the local cattle. Those people buried without such trinkets did not have the distinctive carbon isotopes ratios, suggesting that they did not eat the local cattle.
- e. The researchers also note that the carbon isotope ratio in the cattle suggests they grazed on open field grasses because it is the type of ratio typically seen with modern cattle with access to wide-open, sunlit fields, as opposed to cows who eat plants growing in partially tree-shaded areas.

Taken together, the findings suggest that those people buried with trinkets who ate local beef likely belonged to land-owning families—families that had access to more of the good things in life than those people buried without trinkets, **providing evidence** of a wealth gap.

CA34. State Development Loans (SDLs)

We will try to connect points and make a bit story type so that you can remember points in Exam.

COVID-19 has put severe stress on the economy of the country affecting the tax revenues of both the centre & the states. But Central government is trying to improve the situation. The revenue sources of not only the Centre but also that of the states have been severely affected. Similar to the Centre, each of the states have their own budgeted expenses which they plan to meet through the various sources of revenues. Lesser revenue generation would mean that the states would not be able to finance their planed expenditure and implement various schemes.

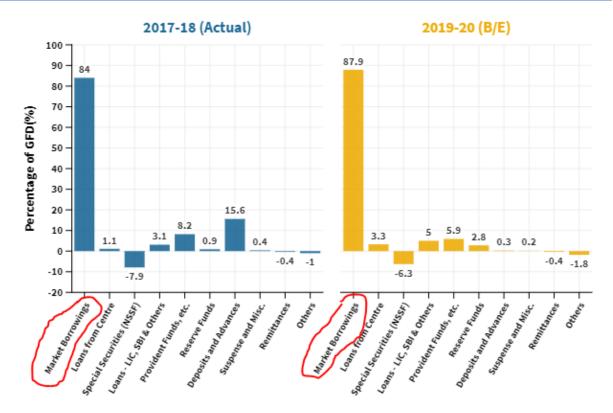
What are the problems the states are facing due to COVID 19?

- a. The states try to bridge this deficit by seeking loans and other financing options from external sources. **However, there is a statutory limit (3 percent)** on the extent to which the states can borrow to ensure fiscal stability.
- b. In addition to devolution of central tax revenue and grants-in-aid, states generate a major share of their income from state level taxes which constitute the State's own Tax Revenue (SOTR). In 2018-19, **the shortfall in SOTR was 7.5% compared to budget estimates.** This shortfall in the case of central taxes is around 9%.
- c. In 27 States/UTs, the GST collection between March & June 2020 fell by more than 25% compared to 2019.

As part of its 5th tranche of announcements of 'Atma Nirbhar Bharat Package', the Government of India has decided to allow the states to increase their borrowing limit from 3% to 5% of GSDP. This would allow states to go for external borrowings to generate additional resources at a time when the economy is going through a crisis. One of the key targets of FRBM Act (Fiscal Responsibility and Budget Management Act, 2003) was to limit the Fiscal deficit of the states to 3% of GSDP.

What is the status of deficit financing of States?

An analysis of Financing of this deficit (GFD) by the states as per the actual accounts submitted for 2017-18, indicate that around **84% of the GFD of the states is financed by Market Borrowings.**



National Small Savings Fund (NSSF) and Central Government loans were the major options for state governments to seek the funds for deficit financing. In accordance with the recommendations of the 14th Finance commission, the government of India has approved discontinuation of states seeking loans through the high-cost NSSF.

Will the Minister of FINANCE be pleased to state:-

- (a) whether the Union Government has accepted the recommendations
 of the Fourteenth Finance Commission and relieved the States of the
 high cost borrowings from the National Small Savings Fund (NSSF);
 and
- (b) if so, the details thereof and if not, the reasons therefor?
 ANSWER

(a) & (b) Yes Sir. The Union Government has accepted the recommendations of the Fourteenth Finance Commission and all States and Union Territories except Arunachal Pradesh, Delhi, Madhya Pradesh and Kerala have been excluded from further investments from National Small Savings Fund (NSSF) w.e.f. 01.04.2016. The aforesaid four States wanted to participate in the operation of NSSF as per their own volition.

This has encouraged the states to rely on State development loans (SDLs) (Market Borrowing) as major source of funds for deficit financing. Now we will learn about SDLs.

State Development Loans (SDLs) are dated securities issued by states for meeting their market borrowings requirements. In effect, the SDL are similar to the dated securities issued by the central government. Purpose of issuing State Development Loans is to meet the budgetary needs of state governments. Each state can borrow up to a set limit through State Development Loans.

d/State Development Loans (SDLs)

1.7 State Governments also raise loans from the market which are called SDLs. SDLs are dated securities issued through normal auction similar to the auctions conducted for dated securities issued by the Central Government (please see question 3). Interest is serviced at half-yearly intervals and the principal is repaid on the maturity date. Like dated securities issued by the Central Government, SDLs issued by the State Governments also qualify for SLR. They are also eligible as collaterals for borrowing through market repo as well as borrowing by eligible entities from the RBI under the Liquidity Adjustment Facility (LAF) and special repo conducted under market repo by CCIL. State Governments have also issued special securities under "Ujjwal Discom Assurance Yojna (UDAY) Scheme for Operational and Financial Turnaround of Power Distribution Companies (DISCOMs)" notified by Ministry of Power vide Office Memorandum (No 06/02/2015-NEF/FRP) dated Nevember 20, 2015.

SDL offers two main advantages which encourage investors to invest in them and help the state governments to raise the required market borrowings to meet the budgetary requirements.

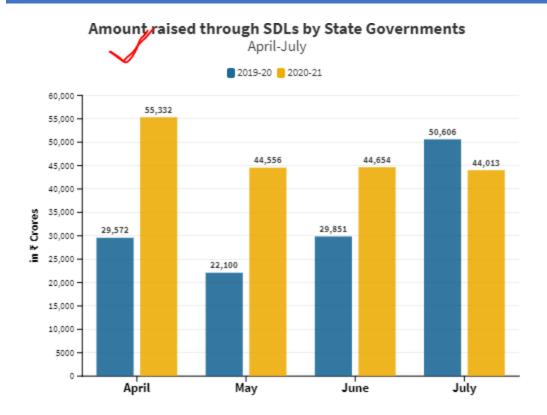
- a. Higher yield
- b. SDLs are similar to Central Government Securities, and do not have Credit risks.

Most of the investors of SDLs are Commercial banks, Insurance companies etc. who are looking for a higher yield on investment. Since 2014, the government has also allowed Foreign investments in SDLs.

SDLs qualify as approved SLR (Statutory Liquidity Ratio) security under Section 24 of Banking Regulation Act, 1949.

The investment in State Government Stocks will be reckoned as an eligible investment in Government Securities by banks for the purpose of Statutory Liquidity Ratio (SLR) under Section 24 of the Banking Regulation Act, 1949. The stocks will qualify for the ready forward facility.

As we have discussed in starting paragraph that state is facing problem financing due to COVID-19. It has increased its dependence on State Development Loans (SDLs).



CA35. Seagrasses

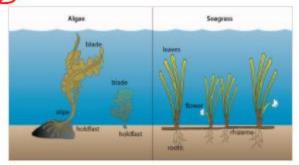


Seagrasses are found in **shallow salty and brackish waters** in many parts of the world, from the **tropics to the Arctic Circle**. Seagrasses are so-named because most species have **long green, grass-like leaves**. Seagrasses are marine flowering plants, found on all continents except Antarctica. They have roots, stems and leaves and produce flowers and fruits. The closest relatives to seagrass, on land, are the monocots – **grasses, lilies and palms**.

One thing to note is that seagrass is different from seaweed:

Even though seagrasses and seaweeds look superficially similar, they are very different organisms. Seagrasses belong to a group of plants called monocotyledons that include grasses, lilies and palms.



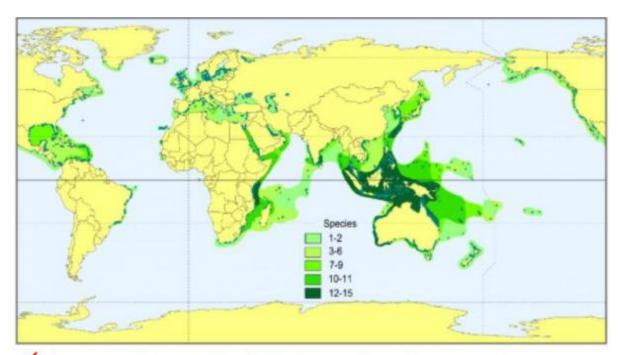


Algae or "seaweeds" (left) differ from seagrasses (right) in several ways. Algae on the seafloor have a holdfast and transport nutrients through the body by diffusion, while seagrasses are flowering vascular plants with roots and an internal transport system. (Courtesy of the Integration and Application Network (ian.umces.edu), University of Maryland Center for Environmental Science)

Where Are Seagrasses Found?

Seagrasses grow in salty and brackish (semi-salty) waters around the world, typically along gently sloping, protected coastlines. Because they depend on light for photosynthesis, they are most commonly found in shallow depths where light levels are high.

India, being in the Indo-Pacific region, has high seagrass diversity: 14 species belonging to 7 genera. **The Gulf of Mannar and Palk Strait** house all the 14 species found in India, while the **Lakshadweep and Andaman and Nicobar Islands** have 8 and 9 species respectively.



Seagrasses are found across the world, from the tropics to the Arctic. Shades of green indicate the number of species reported for a given area. The darker shades of green indicate more species are present. (Short, F. et al. 2007.)

Growth & Reproduction

Seagrasses grow both vertically and horizontally—their blades reach upwards and their roots down and sideways—to capture sunlight and nutrients from the water and sediment. They spread by two methods: **asexual clonal growth and sexual reproduction**. Enough.

Ecosystem Benefits

Seagrasses are often called foundation plant species or ecosystem engineers because they modify their environments to create unique habitats. These modifications not only make coastal habitats more suitable for the seagrasses themselves, but also have important effects on other animals and provide ecological functions and a variety of services for humans.

a. Modification of the Physical Environment:

Seagrasses are known as the "lungs of the sea" because one square meter of seagrass can generate 10 liters of oxygen every day through photosynthesis. Seagrass leaves also absorb nutrients and slow the flow of water, capturing sand, dirt and silt particles. Their roots trap and stabilize the sediment, which not only helps improve water clarity and quality, but also reduces erosion and buffers coastlines against storms.

b. Creation of Living Habitat:

Seagrasses are often called **nursery habitats** because the leafy underwater canopy they create **provides shelter for small invertebrates** (like crabs and shrimp and other types of crustaceans), small fish and juveniles of larger fish species. Many species of algae and microalgae (such as diatoms), **bacteria and invertebrates grow as "epiphytes" directly on living seagrass leaves,** much like lichens and Spanish moss grow on trees.

c. Blue Carbon:

Seagrasses are capable of capturing and **storing a large amount of carbon** from the atmosphere. It has been estimated that in this way the world's seagrass meadows can capture up to 83 million metric tons of carbon each year. Atmospheric carbon is captured by coastal mangroves, seagrasses and salt marshes at a rate **five times faster than tropical forests**.

What are the main threats to seagrasses?

Seagrass meadows are experiencing rates of loss that may be as high as 7% of their total global area per year. The natural causes of seagrass destruction are **cyclones**, **intensive grazing**, **fungal and other infestations and disease**. Seagrasses in the intertidal habitat are prone to drying out. In estuaries, **increased freshwater incursion and siltation can also destroy seagrass beds**.

However, the most significant threat is (you guessed it) from human activities. Large amounts of pollutants, including chemicals and excessive nutrients like fertilisers wash off the coast and directly into seagrass beds, causing algal blooms that can block off sunlight. Sediments can choke the leaves and dredging can completely fragment seagrass meadows. Boat anchors and large marine debris can kill sections of seagrass meadows.

CA36. Planet-Sized Sunspot Confirms New Solar Cycle

Link: https://science.thewire.in/the-sciences/solar-cycle-25-ar2770-sunspot-cluster-solar-flares/

Astrophysicists have reported that solar cycle 25 has begun, indicating **a new 11-year-long period of electromagnetic activity on the Sun**. In each cycle, the **Sun's magnetic north and south poles switch places**. Stargazers have reported increasing activity on the Sun's surface as well, which is to be expected.

But some news reports have also been accompanied by anxiety about solar flares – extremely energetic bursts of radiation from the Sun – that could disrupt electromagnetic phenomena on Earth, including radio transmissions and AC currents. **The reports are concerned with one particular cluster of sunspots, designated AR2770.**



A massive sunspot observed on the sun is turning towards Earth and is expected to increase in size over the next few days. The area, dubbed AR2770, has a 'primary dark core' the width of Mars and a number of crater-size 'spotlets' littering its surface

AR2770 is said to have emitted a number of B-class flares, the lowest class of solar flares, which have sent minor waves of ionization through Earth's atmosphere. However, the spot is growing, and increased activity is possible over the next few days that may produce more intense solar flares.

Also learn about SUNSPOTS:

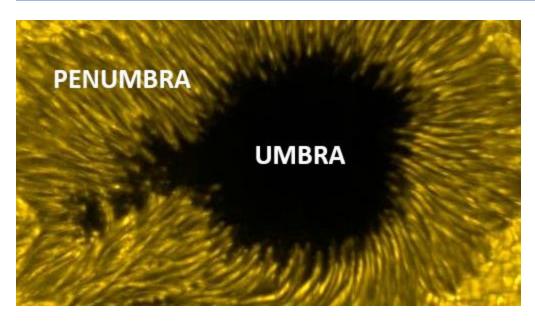
Sunspots form on the surface of the Sun due to strong magnetic field lines coming up from within the Sun trough the solar surface and **appear visibly as dark spots** compared to their surroundings.

These sunspots which can become many times bigger than the Earth are always dark because they are much cooler than the surrounding surface of the Sun itself. A big sunspot can have a temperature of 3700°C. This sounds like much but if we compare this with the temperature of the photosphere of the Sun which is about 5500°C, then you see that there is a considerable difference.

Sunspots are a common sight on our Sun during the years around solar maximum. Solar maximum or solar max is the period of greatest solar activity in the solar cycle of the Sun, where one solar cycle lasts about 11 years. Around solar minimum, only very few or even no sunspots can be found.

A sunspot consists of two parts:

- a. The dark part (umbra)
- b. Lighter part around the dark part (penumbra)



Rotation of Sunspots:

The Sun rotates around its axis just like Earth does. Solar features on the Sun like sunspot regions follow the rotation of the Sun. This means that a sunspot region travels across the solar disk from east to west as seen from Earth. This is important because sunspot regions need to be close to the central meridian (as seen from Earth) in order to be able to send coronal mass ejection towards Earth. It takes a sunspot region near the equator about 2 weeks to move from the east limb to west limb as seen from Earth. The further away a sunspot region is from the equator the longer it takes move across the face of the Sun. This is because the Sun rotates faster at its equator than at its poles.

CA37. Council of Architecture (Minimum Standards of Architectural Education) Regulations Notified

Link: https://www.livelaw.in/news-updates/council-of-architecture-minimum-standards-of-architectural-education-regulations-2020-161305

Council of Architecture (Minimum Standards of Architectural Education) Regulations, 2020 have been notified recently. These Regulations shall come into force from the 1st day of November 2020 and would supersede 1983 Regulations.

Only two things you have to remember here:

- a. Who is entitled to impose any regulatory measure in connection with the degrees and diplomas in the subject of architecture?
- b. About Council of Architecture (COA),

Now proceed for news.

Last year, the Supreme Court had held that All India Council for Technical Education (AICTE) will not be entitled to impose any regulatory measure in connection with the degrees and diplomas in the subject of architecture. Norms and Regulations set by Council of Architecture and other specified authorities under the Architects Act would have to be followed by an institution imparting education for degrees and diplomas in architecture.

Minimum criteria: Just give one reading. Not important.

As per the new Regulations,

- a. the Architecture course shall be of minimum duration of 5 academic years or 10 semesters of 15 to 18 working weeks (90 workdays) each.
- b. A candidate to the course should pass an examination at the end of the 10+2 scheme of examination with at least 50 per cent. aggregate marks in Physics, Chemistry and Mathematics and also at least 50 per cent. marks in aggregate of the 10+2 level examination or passed 10+3 Diploma Examination with Mathematics as compulsory subject with at least 50 per cent. marks in aggregate.
- c. The candidate also needs to qualify an Aptitude Test in Architecture conducted by the Council.
- d. The Regulations also deal with Intake and Migration, Courses and periods of studies, Professional examination, Standards of proficiency and conditions of admissions, qualification of examiners, Standards of staff, equipment, accommodation, training and other facilities for Architecture education.

About Council of Architecture (COA)

These Rules have been notified by the Council of Architecture (COA), a body constituted by the Government of India under the provisions of the Architects Act, 1972. The Act provides for registration of Architects, standards of education, recognized qualifications and standards of practice to be complied with by the practicing architects. The Council of Architecture is charged with the responsibility to regulate the education and practice of profession throughout India besides maintaining the register of architects. For this purpose, the Government of India has framed Rules and Council of Architecture has framed Regulations as provided for in the Architects Act, with the approval of Government of India.

CA38. Mauritius oil spill

Link: https://www.downtoearth.org.in/news/pollution/oil-spill-could-devastate-mauritius-coral-reefs-say-experts-72761



The island of Mauritius has declared a 'state of environmental emergency' after a grounded vessel began leaking tonnes of oil into the Indian Ocean.

The MV Wakashio, a Japanese-owned and Panama-registered ship that was travelling from China to Brazil ran aground a reef at Pointe d'Esny in the southeastern part of Mauritius on July 25, 2020. A crack in the ship's hull caused it to leak in the past week. **The ship was carrying 4,000 tonnes of fuel oil,** of which more than 1,000 tonnes has already leaked into the ocean. Now, the remaining 2,500 tonnes remaining on board the vessel **threatens to leak as well as the ship is breaking apart.**

How it is affecting biodiversity?

"Jorals are animals made up of calcium carbonate. Microscopic algae are located inside a coral. There is a symbiotic relationship between a coral, which is an animal and the algae, which is a plant," Patankar said.

Any kind of stress or pollution, like an oil spill, can expel the algae from a coral. When that happens, the coral gets bleached, which means it dies, he added.

"This is what is going to happen in Mauritius. That will have impacts not only on the coral reef but also on thousands of marine animals associated with the reef. These include reef fish, crabs, invertebrates like shells, molluscs crustaceans," Patankar said.

"The coral reef provides its nooks and crevices for these animals to live. Because this entire structure can collapse if it gets bleached, the consequences can be far reaching," he added.

Mauritius is an island nation in the Indian Ocean off the south-east coast of the African continent that is known to have some of the world's finest coral reefs and marine life. The oil spill will not only affect marine life of Mauritius but could also impact neighbouring islands and their marine life including that of Maldives and Lakshadweep as the ocean systems are connected through currents.



CA39. Asia Pacific Centre for Arbitration & Mediation (APCAM)

Link: https://www.livelaw.in/news-updates/justice-nariman-launches-asia-pacific-centre-for-arbitration-mediation-with-secretariat-in-india-161330

News:

Justice Nariman Launches Asia Pacific Centre for Arbitration & Mediation with Secretariat in India

Sanya Talwar 12 Aug 2020 5:05 PM

APCAM (Asia Pacific Centre for Arbitration & Mediation) is an international **ADR** (Alternative Dispute Resolution) centre formed jointly by about ten arbitration and mediation centres from the Asia-Pacific countries, which host APCAM centres in their respective countries.

Vision of APCAM:

The vision of APCAM is to assist the international business community to resolve their international and cross-border disputes under single mediation and arbitration rule and with a uniform fee structure, and to create a single panel of international mediators and arbitrators, with uniform accreditation, so as to establish the best-standards in professional and credibility, so that the business community would get the best neutrals and resolve disputes in the best manner, so as to create a better business environment in the region.

Few important points:

- a. This APCAM's structure of providing both mediation and arbitration service will allow the disputants to first settle their bone of contention without any interference and if that fails then try to resolve their disputes through arbitration.
- b. APCAM also empanels a common panel of international mediators and arbitrators, with uniform accreditation system from all the countries, which would help the parties to experience uniform high-standard practice, bringing credibility and professionalism of mediators and arbitrators.
- c. The **administration of APCAM** is done by **an independent Governing Board comprising of nominee Board members from each constituent institutions**, who are some of the best arbitrators, mediators or ADR professionals from the Asia-Pacific region.
- **d. APCAM also has an Advisory Board**, comprising of the most experienced and credible names in the field from all over the world. They **guide the Institution on procedural and ethical aspects concerning ADR.**
- e. When you opt for APCAM mediation or arbitration, you enjoy the benefit of resolving disputes in any of the constituent member countries under a single system with administering centres in all countries.

India is a member of it or not?

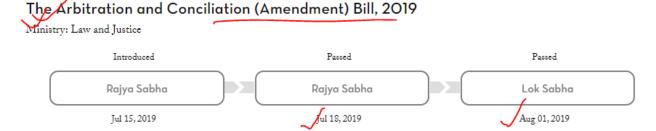
Yes, India (Indian Institute of Arbitration & Mediation (IIAM)) is a member.

IIAM is one of the founding members of APCAM (Asia Pacific Centre for Arbitration & Mediation), which is an international ADR centre formed jointly by about ten arbitration and mediation centres from the Asia-Pacific countries, which host APCAM centres in their respective countries.

Secretariat:

The institutional member that nominated the APCAM Chairman shall serve as the APCAM Secretariat. The term of office for the Secretariat shall follow the term of the APCAM Chairman.

We will also see Arbitration and Conciliation (Amendment) Act 2019



It seeks to amend the Arbitration and Conciliation Act, 1996. The Act contains provisions to deal with domestic and international arbitration and defines the law for conducting conciliation proceedings. Key features of the Bill are:

a. Arbitration Council of India:

- The Bill seeks to establish an independent body called the Arbitration Council
 of India (ACI) for the promotion of arbitration, mediation, conciliation and
 other alternative dispute redressal mechanisms.
- Its functions include: (i) framing policies for grading arbitral institutions and accrediting arbitrators, (ii) making policies for the establishment, operation and maintenance of uniform professional standards for all alternate dispute redressal matters, and (iii) maintaining a depository of arbitral awards (judgments) made in India and abroad.
- b. Composition of the ACI: The ACI will consist of a Chairperson who is either: (i) a Judge of the Supreme Court; or (ii) a Judge of a High Court; or (iii) Chief Justice of a High Court; or (iv) an eminent person with expert knowledge in conduct of arbitration. Other members will include an eminent arbitration practitioner, an academician with experience in arbitration, and government appointees.
- c. **Appointment of arbitrators:** Under the 1996 Act, parties were free to appoint arbitrators. In case of disagreement on an appointment, the parties could request the Supreme Court, or the concerned High Court, or any person or institution designated by such Court, to appoint an arbitrator.
- d. Under the **Bill, the Supreme Court and High Courts may now designate arbitral institutions, which parties can approach for the appointment of arbitrators**. For international commercial arbitration, appointments will be made by the institution designated by the Supreme Court.
- e. For domestic arbitration, appointments will be made by the institution designated by the concerned High Court.
- f. In case there are no arbitral institutions available, the Chief Justice of the concerned High Court may maintain a panel of arbitrators to perform the

functions of the arbitral institutions. An application for appointment of an arbitrator is required to be disposed of within 30 days.

g. Relaxation of time limits:

Under the Act, arbitral tribunals are required to make their award within a period of 12 months for all arbitration proceedings. The Bill seeks to remove this time restriction for international commercial arbitrations. It adds that tribunals must endeavour to dispose of international arbitration matters within 12 months.

CA40. Health of the Schedule Commercial Banks in the Latest Financial Stability Report (FSR)

Link:

https://rbidocs.rbi.org.in/rdocs/PublicationReport/Pdfs/0FSRJULY2020C084CED43 CD1447D80B4789F7E49E499.PDF

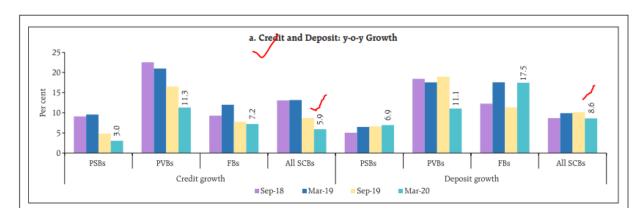
This is just one topic we took from report. It is just to give you fair idea what terms and parameters are used to determine the stability of Banks. No need to learn anything. Just see terminologies. I have not explained each terminology. Any term you don't know, search it and find.

The Financial Stability Report (FSR) is a biannual report published by the Reserve Bank of India (RBI). The objective of the report is to review the nature and magnitude of risks, and their implications which can affect the macroeconomic environment, financial institutions, markets, and infrastructure.

This story focusses on the performance of Scheduled Commercial Banks (SCBs) as presented in FSR.

COVID-19 halted the improvement in credit demand of banks

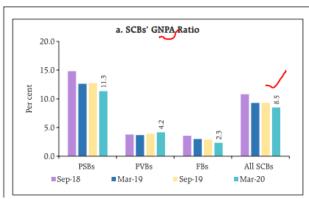
- a. Credit demand in SCBs was slightly improving in early 2019-20. However, towards the end of the financial year, the improvement was halted as a result of the pandemic.
- b. Looking at the performance of SCBs, the already weakened credit growth in the first half of 2019-20, went further down to 5.9% in March 2020 and continued to reduce till early June 2020.
- c. The deposit growth also dropped in the latter half of 2019-20. In the initial months of 2020-21, there was an increase in deposit growth because of the precautionary savings behaviour due to the pandemic.

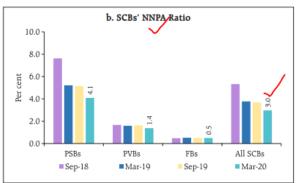


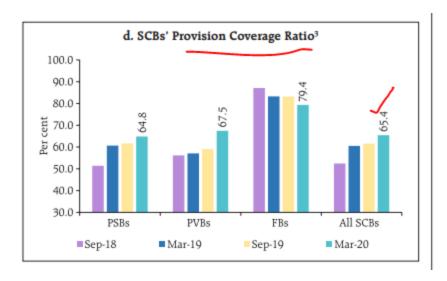
GNPA ratio of all SCBs had declined in March 2020 as compared to September 2019

- a. Meanwhile, the **Gross Non-Performing Asset (GNPA) ratio** of all SCBs which was 9.3% in September 2019 has **declined** to 8.5% in March 2020.
- b. During the same period, the **Net NPA dropped from 3.7% to 3%.** This indicates that the performance of banks had improved.
- c. The **Provision Coverage Ratio improved** to 65.4% from 61.6% over this period.
- d. The **capital to risk-weighted assets ratio (CRAR)** of SCBs also **dropped** down to 14.8% in March 2020 from 15% in September 2019.

Hope you are familiar with all the above terms. If not search in google or any source.







Stability of banking sector

Five indices based on the five dimensions of Soundness, Asset Quality, Profitability, Liquidity, and Efficiency, are analyzed to assess the impact of underlying conditions and risk factors on the stability of banking sector.

III. Constructing Banking Stability Map and Indicator: Methodology

The Banking Stability Map and Indicator represent an overall assessment and Indicator are based on five indices which represent the five dimension:



SCBs had recorded a decline in the dimensions of soundness, liquidity, and efficiency in March 2020 compared to September 2019, contributing to a decline in stability of the sector, while a marginal improvement in asset quality, and profitability was recorded.

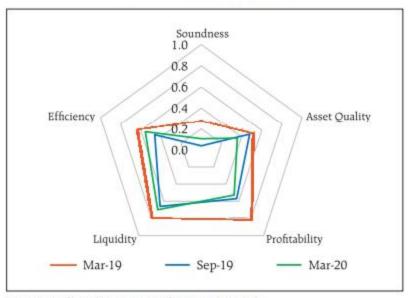


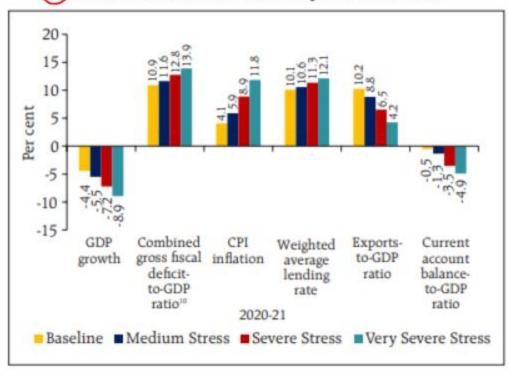
Chart 2.5: Banking Stability Map

Note: Away from the centre signifies increase in risk. Source: RBI Supervisory Returns and Staff Calculations.

RBI takes into consideration four different scenarios and evaluates a bank's financial position at these hypothetical conditions which help in decision making within the bank. **One is the baseline scenario** which is derived from the projected values of macroeconomic variables. The other three adverse scenarios- **medium, severe, and very severe,** are calculated for worsening macroeconomic indicators as indicated in the chart below.

Chart 2.6: Macroeconomic Scenario Assumptions

(Assessment under stringent hypothetical adverse economic onditions and should not be interpreted as forecasts)



GNPA ratio is expected to increase to up to 14.7% in the worst-case scenario

- a. The stress test covering **53 banks revealed** that the **GNPA ratio of all SCBs may increase from 8.5% in March 2020 to 12.5% by March 2021** under the baseline scenario or the forecasted macroeconomic environment.
- b. Further, based on the type of bank, GNPA ratio of public sector banks may go up from 11.3% to 15.2% during the same period under the baseline scenario. That is, more loans are in the danger of not being repaid.

Around 20 banks may end up dominating the list of largest capital erosion

- a. The report mentions that capital erosion is anticipated.
- b. From 14.6% in March 2020, the CRAR is projected to drop to 13.3% in March 2021 under baseline scenario.
- c. It is further expected to drop to 11.8% in the worst-case scenario with five banks failing to meet the minimum capital level.

Governor of RBI stated that India's financial system is sound

a. In the foreword of the report, RBI Governor Shaktikanta Das stated that India's financial system was sound, and that priority has been given to the need for financial intermediaries to proactively augment capital and improve their resilience.

- b. Financial sector must be stable to boost the confidence of businesses, investors, and consumers.
- c. The report added that a combination of fiscal, monetary and regulatory interventions on an unprecedented scale has ensured normal functioning of financial markets and the actions undertaken by financial sector regulators and the government to mitigate the impact of the pandemic helped reduce operational constraints and maintain market integrity and resilience in the face of severe risk aversion.

It remains to be seen if the predictions made in the report come true.

CA41. PM Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi)

Link: https://economictimes.indiatimes.com/news/economy/policy/pm-svanidhi-government-receives-over-5-lakh-loan-applications-from-street-vendors/articleshow/77503498.cms

News was:

The Union Housing and Urban Affairs Ministry recently said over 5 lakh applications had been received under the PM Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi) scheme for street vendors since it started on July 2 and 1 lakh loans had been sanctioned already.

What is the Scheme?

This is a **Central Sector Scheme** to facilitate street vendors to access affordable working capital loan for resuming their livelihoods activities, after easing of lockdown.

What are the objectives of the Scheme?

- To facilitate working capital loan up to `10,000 at subsidized rate of interest
- To incentivize regular repayment of loan; and
- To reward digital transactions.

What are the salient features of the Scheme?

- Initial working capital of up to `10,000/-
- Interest subsidy on timely/early repayment @ 7%
- Monthly cash-back incentive on digital transactions
- Higher loan eligibility on timely repayment of the first loan

Who is the target beneficiary for the Scheme?

Street vendors/ hawkers vending in urban areas, as on or before March 24, 2020, including the vendors of surrounding peri-urban and rural areas.

Implementing agency:

Recently, the **Ministry of Housing and Urban Affairs signed MoU with Small Industries Development Bank of India (SIDBI)** in order to engage SIDBI as the Implementation Agency for the scheme.

Jun 19, 2020, 6:01PM

Sing and Urban Affairs Ministry signs MoU to engage SIDBI as implementation agency for PM SVANidhi

Housing and Urban Affairs Ministry and Small Industries Development Bank of India, SIDBI today signed an MoU to engage SIDBI as the implementation agency for PM Street Vendor's AtmaNirbhar Nidhi (PM SVANidhi). The Ministry had launched the PM SVANidhi on 1st of this month for providing affordable Working Capital loan to street vendors to resume their livelihoods that have been adversely affected due to Covid-19 lockdown.



Which lending institutions will provide credit?

Scheduled Commercial Banks, Regional Rural Banks, Small Finance Banks, Cooperative Banks, Non-Banking Financial Companies, Micro-Finance Institutions and SHG Banks. 8.

What is the tenure of the Scheme?

The Scheme shall be implemented up to March 2022.

CA42. New study sheds light on genetic affinities of Gujjars and Ladakhis

Link: https://www.downtoearth.org.in/news/science-technology/new-study-sheds-light-on-genetic-affinities-of-gujjars-and-ladakhis-72814

The Union Territories of Jammu and Kashmir (J&K) and Ladakh in North India, with their wide variety of landscape, are a congruence of several languages and cultural practices. The region is believed to have served as a corridor for ancient human migrations between the Indian subcontinent and North-East Asia, Eurasia and Africa.

The populations in the region offer a unique opportunity to investigate the past anthropological and demographic events which might have shaped the extant human population diversity. In a new study, scientists at the Department of Biotechnology's Centre for DNA Fingerprinting and Diagnostics (DBT-CDFD) have sought to decipher the genetic diversity encompassed by Gujjars from the Jammu region of J&K and the Ladakhi populations.

Previous study:

A previous study had found that the two communities — Gujjars and Ladakhis — exhibited lower genetic affinity towards other populations in their geographical proximity. To better understand the genetic diversity in these populations, a battery of DNA markers located on autosomes, Y-chromosome and the mitochondrial genome were employed.

The principal coordinate and cluster analysis based on autosomal DNA markers indicated Gujjars and Ladakhis were genetically distant to each other as well as to other reference populations of India, which was in concordance with Y-chromosomal analysis.

The present study is the first comprehensive attempt to determine the genetic relatedness of the Gujjars and Ladakhis to populations within India and elsewhere in the world and would help in gaining deeper insights into genetic diversity and demographic settlement in this part of the world.

CA43. Hornbill Habitat Loss

Link: https://www.thehindu.com/news/national/forest-cover-loss-threatens-hornbills-in-arunachal/article32339946.ece

A study based on satellite data has indicated a high rate of deforestation in major hornbill habitats in Arunachal Pradesh and a part of Assam.

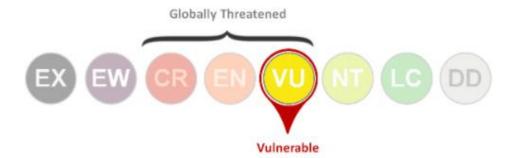
Learn about Hornbill with respect to India:

India has nine hornbill species, of which four are found in the Western Ghats: Indian Grey Hornbill (endemic to India), the Malabar Grey Hornbill (endemic to the Western Ghats), Malabar Pied Hornbill (endemic to India and Sri Lanka) and the widely distributed but endangered **Great Hornbill**. India also has one species that has one of the smallest ranges of any hornbill: the Narcondam Hornbill, found only on the island of Narcondam.

Conservation Status (Great Hornbill):

- a. Currently, 26 out of the 62 species (40%) of hornbills are Globally Threatened or Near Threatened with extinction, with all other species listed as Least Concern, according to the International Union for Conservation of Nature (IUCN) Red List of Threatened Species.
- b. The great hornbill is evaluated as vulnerable.
- c. It is protected at the highest level under Schedule I of the Wildlife Protection Act, 1972.

Red List Category



CA44. Is It Constitutional to Declare Wild Animals to Be 'Vermin'?

Link: https://science.thewire.in/the-sciences/animals-vermin-section-62-wildlife-protection-constitutionality/

Farmers in particular lose their livelihoods, standing crops – when stray animals trample them. So, state governments have sent several requests over the years to the Centre to declare certain species as 'vermin', so that they may be hunted and killed without consequence.

We will see here certain legal and constitutional provisions regarding protection of wildlife. So many Prelims based question you can get from this Article. So, read carefully.

The Wildlife (Protection) Act 1972 does not define the term 'vermin'. However, its Schedule V contains a list of animals designated 'vermin', including rats, crows and foxes.

Section 62 of the Act empowers the Centre to declare wild animals of **any species as 'vermin'** in any area and for a specified period of time. These animals are deemed to be included in Schedule V, opening them up to be hunted.

Declaration of certain wild animals to be vermin.—⁵[The Central Government] may, by notification, declare any wild animal other than those specified in Schedule I and Part II of Schedule II to be vermin for any area and for such period as may be specified therein and so long as such notification is in force, such wild animal shall be deemed to have been included in Schedule V.

However, many experts have argued against such mass-culling because it is ineffective and does not resolve the human-animal conflicts. Against this background, it's worth noting that the constitutionality of Section 62 of the Act is also suspect for three reasons:

- 1. It violates Article 14 of the Constitution
- 2. It violates Article 21 of the Constitution
- 3. A combined reading of the Directive Principles of State Policy (DPSPs) and the fundamental duties require the state to be cautious when enacting laws that affect wildlife

Article 14

Article 14 of the Indian Constitution secures equality and equal protection before the law. One of the tests to determine compliance with Article 14 is called *manifest* arbitrariness. A law suffers from arbitrariness when it is 'excessive' and 'capricious' or suffers from the lack of an 'adequate determining principle'. The wording of Section 62, which allows the Centre to declare any wild animal to be 'vermin', apart from those listed in the Act's Schedule I and part II of Schedule II, itself doesn't disclose a determining principle, leave alone an adequate one.

- a. Notifications issued by the Union environment ministry suggest there are no specific principles the Centre uses to determine whether a particular species can be declared 'vermin'.
- b. The notifications only mention that the animals have become a threat to property, life and crops. The decision rests heavily on the state governments' requests.
- c. In the past, **states** have requested the Centre to declare certain animals as 'vermin' **without providing any detailed accounts or estimates of the destruction** caused by those animals.
- d. The Centre issues these notifications on the basis of the state governments' requestspoorly researched or not.
- e. So, this provision **suffers from 'manifest arbitrariness'** both in how it is worded and how it is implemented.

Article 21

In its controversial decision in Animal Welfare Board of India v. A. Nagaraja (2014), the Supreme Court extended the right to life under Article 21 of the Constitution to animals. This opinion understandably drew flak from lawyers and constitutional experts, but high courts around the country have cited it and expanded on it. For example, the Uttarakhand high court in 2018 and the Punjab and Haryana high court in 2019 declared all the members of the animal kingdom to be legal entities, with distinct legal personalities and with rights akin to those of a living person.

a. **This expansion of Article 21 also means** the same **safeguards** that apply to humans – including the right to not be deprived of life or personal liberty except according to just, fair and reasonable procedures – **also applies to animals**.

b. There are no procedural guidelines on how and in what situations Section 62 can be exercised. As a result, the government has an unfettered discretion in deciding which animals deserve to be designated 'vermin'.

What the DPSPs and fundamental duties say:

The first mention of wildlife in the Indian Constitution is in Article 48A, a part of the DPSPs. It states that the state shall endeavour to protect and improve the environment and to safeguard forests and wildlife.

Article 51A(g) under the fundamental duties also makes it the duty of every citizen "to protect and improve the natural environment including forests, lakes, rivers and wildlife, and to have compassion for living creatures."

- a. **In Sachidanand Pandey v. State of West Bengal (1987),** the Supreme Court held that whenever an ecological issue is brought before the court, the justices have to bear in mind Articles 48A and 51A(g).
- b. The bench in that case also said that when the court is called upon to give effect to the DPSPs and fundamental duties, the least it can do is make sure it bears appropriate considerations in mind and excludes irrelevant information. However, the government often ignores 'appropriate considerations' and factors extraneous factors like public pressure into its decisions about declaring this or that species to be 'vermin'.

Where do we go from here?

- a. Specifically, lawmakers should delete Section 62 of the Wildlife (Protection) Act 1972 such that they don't use their discretion to declare any animal as vermin and allow culling.
- b. Perhaps they as well as the courts can draw inspiration from Section 11(1)(b) of the Act, which allows the chief wildlife warden or an authorized officer to permit the hunting of an animal that has become dangerous to human life or property (including crops). It thus raises the threshold for determining whether an animal can be hunted as well as restricts the hunting to only those specific animals or groups of animals.
- (b) the Chief Wild Life Warden or the authorised officer may, if he is satisfied that any wild animal specified in Schedule II, Schedule III, or Schedule IV, has become dangerous to human life or to property (including standing crops on any land) or is so disabled or diseased as to be beyond recovery, by order in writing and stating the reasons therefor, permit any person to hunt ²[such animal or group of animals in a specified area or cause such animal or group of animals in that specified area to be hunted].

We can conclude that in its current form, **Section 62 fails to distinguish between individuals that are directly responsible for the destruction of crops and others of the same species**. It also suffers from several legal infirmities, primarily vis-à-vis Articles

14 and 21. Our constitutional framework envisions a harmonious relationship between humans and the rest of the ecosystem. The section threatens this fragile relationship and challenges our fundamental human values of compassion, empathy and respect for other life forms.

CA45. Universal Ratification to Child Labour Convention

Link: https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS 749858/lang-en/index.htm

Child Labour

ILO Child Labour Convention achieves universal ratification

All 187 member States of the International Labour Organization (ILO) have ratified the ILO Convention on the Worst Forms of Child Labour, 1999 (No. 182).

Recently, International Labour Organization (ILO)'s convention on Worst Forms of Child Labour also known as Convention No. 182 received universal ratification after the Kingdom of Tonga ratified the same. It means ratification by all the members of an organisation. Convention No. 182 has received ratification from all the 187 members of ILO.

Universal ratification of Convention 182 is an historic first. It reflects a global commitment that the worst forms of child labour, such as slavery, sexual exploitation, the use of children in armed conflict or other illicit or hazardous work that compromises children's health, morals or psychological wellbeing, have no place in our society."

Guy Ryder, ILO Director-General

The ILO estimates that there are 152 million children in child labour, 73 million of whom are in hazardous work. Seventy per cent of all child labour takes place in agriculture and is mostly related to poverty and parents' difficulties finding decent work.

Convention No. 182 calls for the prohibition and elimination of the worst forms of child labour, including slavery, forced labour and trafficking. It prohibits the use of children in armed conflict, prostitution, pornography and illicit activities such as drug trafficking, and in hazardous work.

It is **one of the ILO's eight Fundamental Conventions**. These cover the abolition of child labour, the elimination of forced labour, the abolition of work-related discrimination and the rights to freedom of association and collective bargaining.

The right fundamental Conventions are:

1. Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87) >

2. Right to Organise and Collective Bargaining Convention, 1949 (No. 98) >

3. Forced Labour Convention, 1930 (No. 29) > (and its 2014 Protocol >)

4. Abolition of Forced Labour Convention, 1957 (No. 105) >

5. Minimum Age Convention, 1973 (No. 138) >

6. Worst Forms of Child Labour Convention, 1999 (No. 182) >

7. Equal Remuneration Convention, 1951 (No. 100) >

8. Discrimination (Employment and Occupation) Convention, 1958 (No. 111) >

See below, which of the above 8 India has ratified (check Convention Number to see).

Ratifications of fundamental Conventions by country



CA46. Understand Everything about the National Flag, Anthem & Fmblem

India, being home to a largely diverse demography, language & culture, is united with the national symbols which are intrinsic and unique to India.

The National Flag

The present National Flag of India was adopted by Constituent Assembly on 22 July 1947. Display of the flag must be in compliance with the **Flag Code of India, 2002.**

The flag should be made of hand-spun and hand-woven Wool/Cotton/Silk Khadi bunting in the prescribed dimensions.

- 1.1 The National Flag shall be a tri-colour panel made up of three rectangular panels or sub-panels of equal widths. The colour of the top panel shall be India saffron (Kesari) and that of the bottom panel shall be India green. The middle panel shall be white, bearing at its centre the design of Ashoka Chakra in navy blue colour with 24 equally spaced spokes. The Ashoka Chakra shall preferably be screen printed or otherwise printed or stenciled or suitably embroidered and shall be completely visible on both sides of the Flag in the centre of the white panel.
- 1.2 The National Flag of India shall be made of hand spun and hand woven wool/cotton/silk khadi bunting.
- 1.3 The National Flag shall be rectangular in shape. The ratio of the length to the height (width) of the Flag shall be 3:2.

Fundamental Duties

Text of Article 51-A

PART IVA FUNDAMENTAL DUTIES

51A. Fundamental duties.—It shall be the duty of every citizen of India—

1. to abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem;

Some basics about National Flag: They will not ask in exam. Just read once.

- a. The flag should not be used for commercial purposes and also must not be used as a portion in any kind of garment or cloth or decoration.
- b. Also, nothing is allowed to be inscribed on the flag.
- c. It should not be used to hold any item or as a cloth to wrap things except for flowers prior to unfurling.
- d. When the flag is hoisted/lowered or being carried in a parade, everyone has to stand in attention facing the flag.
- e. The flag should always be kept in the upright position with saffron at the top.
- f. The flag should be distinctly placed and flown from sunrise to sunset.

- g. No other flag should be placed above or higher than or side by side to the National Flag.
- h. The flag will be half-masted only in the event of death of dignitaries as mentioned in the Flag Code of India.

The National Anthem

Composed by Rabindranath Tagore, rendition of the full version of the National Anthem takes about 52 seconds.

The MHA in its orders mentioned that it is not possible to give an exhaustive list of occasions on which the singing of the Anthem is permitted. However, it made clear that there is no objection to the singing of the Anthem accompanied by mass singing so long as it is done with due respect as a salutation to the motherland and proper decorum is maintained.

- (4) It is not possible to give an exhaustive list of occasions on which the singing (as distinct from playing) of the Anthem can be permitted. But there is no objection to the singing of the Anthem accompanied by mass singing so long as it is done with due respect as a salutation to the motherland and proper decorum is maintained.
- (5) In all schools, the day's work may begin with community singing of the Anthem. School authorities should make adequate provision in their programmes for popularising the singing of the Anthem and promoting respect for the National Flag among students.

The Supreme Court in its order in 2018 stated that it is not mandatory to play the anthem prior to screening feature films in cinema halls modifying its 2016 order.

As in the case of the flying of the National Flag, it has been left to the good sense of the people not to indulge in indiscriminate singing or playing of the Anthem.

Any act of disrespect to the National Flag or Anthem is a punishable offence by law

As per the **Prevention of Insults to National Honour Act**, any person who intentionally prevents the singing of anthem or causes disturbance to any assembly singing the anthem is liable to be punished with imprisonment of up to three years or a penalty or both. **The same punishment is applicable to those who disrespect the National Flag** or Constitution of India.

2. INSULT TO INDIAN NATIONAL FLAG AND CONSTITUTION OF INDIA

Whoever in any public place or in any other place within public view burns, mutilates, defaces, defiles, disfigures, destroys, tramples upon or *otherwise shows disrespect to or brings into contempt (whether by words, either spoken or written, or by acts) the Indian National Plag or the Constitution of India or any part thereof, shall be punished with imprisonment for a term which may extend to three years or with fine, or with both

The State Emblem of India



The State Emblem of India is adapted from the Sarnath Lion Capital of Amarnath. In the State Emblem, three lions on an abacus with the Dharma Chakra in the Centre, a bull on the right and a galloping horse to the left is clearly visible. The outlines of two Dharma Chakras on either end of the abacus are also seen. The motto 'Satyameva Jayate' in Devanagari script at the bottom is also a part of the emblem and translates to 'Truth alone Triumphs'.

The State Emblem of India (Prohibition of Improper Use) Act, 2005 regulates the usage of the National Symbol. According to the Act, no one is allowed to use the symbol to mislead people into thinking that it relates to the government. Apart from not permitting the usage of the emblem for commercial purposes, the act also prohibits the

usage of the symbol by people for trademark or patent. Violating this law would result in imprisonment up to two years or fine up to Rs. 5000 or both.

CA47. African Swine Flu

Link: https://www.newindianexpress.com/nation/2020/aug/13/meghalaya-detects-african-swine-fever-outbreak-after-assam-arunachal-2182954.html

News:

African swine fever (ASF) has spread to Meghalaya; more than 17,000 pigs have died due to the highly contagious disease in adjoining Assam.

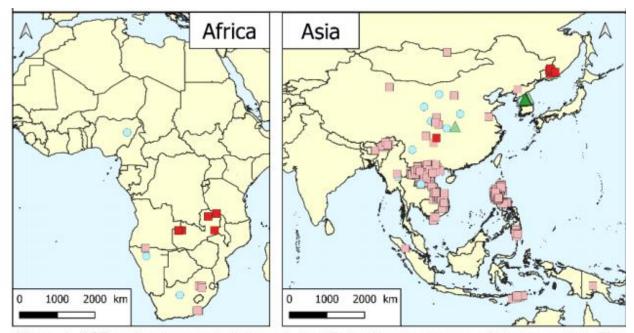
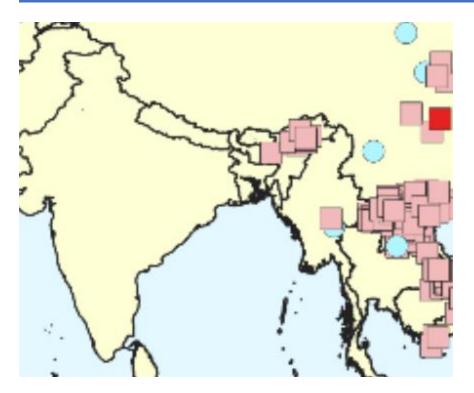


Figure 1. ASF outbreaks reported through the Early Warning system within the period. The outbreaks notified between July 24 and August 06 pointed with a higher color intensity compared to the ongoing outbreaks (lighter colors).



Background:

Since February this year, **ASF has killed at least 17,000 domesticated pigs in Assam and an unspecified number in Arunachal Pradesh.** The disease is believed to have been transmitted from China where it has resulted in the death of several animals in 2019.

What's the concern?

Piggery is a major source livelihood in the northeast because of the high demand for pork. Assam alone has seven lakh pig farmers engaged in the business, worth at least ₹8,000 crore annually.

About African Swine Fever (ASF):

ASF is not a risk to human health.

KEY FACTS

- African swine fever (ASF) is a severe viral disease affecting domestic and wild pigs;
- It is responsible for serious production and economic losses;
- This transboundary animal disease (TAD) can be spread by live or dead pigs, domestic or wild, and pork products; furthermore, transmission can also occur via contaminated feed and fomites (non-living objects) such as shoes, clothes, vehicles, knives, equipment etc., due to the high environmental resistance of ASF virus.
- There is no approved vaccine against ASF (unlike classical swine fever ('Hog Cholera') which is caused by a different virus)
- Historically, outbreaks have been reported in Africa and parts of Europe, South America, and the Caribbean. More recently (since 2007) the disease has been reported in multiple countries across Africa, Asia and Europe, in both domestic and wild pigs.

CA48. Naval Innovation and Indigenization Organisation (NIIO) launched

Link: https://www.thehindu.com/news/national/after-ship-design-navy-should-focus-on-indigenous-armaments-rajnath-singh/article32347036.ece

Remember Ministry, why it was set up and structure. Very small information is available now about this Organization.

The NIIO puts in place dedicated structures for the end users to interact with academia and industry towards fostering innovation and indigenization for self-reliance in defence in keeping with the vision of Atmanirbhar Bharat.

The NIIO is a three-tiered organisation.

- a. Naval Technology Acceleration Council (N-TAC) will bring together the twin aspects of innovation and indigenization and provide apex level directives.
- b. A working group under the N-TAC will implement the projects.
- c. A Technology Development Acceleration Cell (TDAC) has also been created for induction of emerging disruptive technology in an accelerated time frame.

The Draft Defence Acquisition Policy 2020 (DAP 20) envisages Service Headquarters establishing an Innovation & Indigenisation Organisation within existing resources. CA1. Payment and Settlement System

Very important topic for exam.

The Reserve Bank of India (RBI) released the 21st issue of its bi-annual report- the **Financial Stability Report (FSR)**, in <u>July 2020</u>. The purpose of this report is to ascertain the financial stability of the economy by reviewing the potential risks and their impact on the various components of the economy.

In an earlier Current Affairs posted, we looked into what this report has to say about the health of Banks in the country. **Today, we look into the initiatives being taken and proposed by RBI regarding Payments & Settlements.**

The FSR provides information about three measures taken by RBI since December 2019 in regard to Payment & Settlement Systems.

- a. Launch of NEFT 24x7x365
- b. Setting up the Payments Infrastructure Development Fund
- c. Business Continuity of Payment Systems

National Electronic Funds Transfer (NEFT) is a nation-wide centralized payment system owned and operated by the Reserve Bank of India (RBI). This enables bank customers in India to transfer funds between any two NEFT enabled bank accounts

If we see RBI's Annual Report for 2018-19, transactions worth ₹ 228 lakh crores were done through NEFT during 2018-19. This is nearly double the value, two years ago i.e. ₹ 120 lakh crores in 2016-17. The total number of NEFT transactions in 2018-19 were around 232 crores. See below.

Table IX.1: Payment System Indicators – Annual Turnover						
/ / v	Volume (million)			Value (₹ billion)		
29/16-17	2017-18	2018-19	2016-17	2017-18	2018-19	
2	3	4	5	6	7	
ket						
107.8	124.4	136.6	981,904	1,167,125	1,356,882	
1,622.1	1,946.4	2,318.9	120,040	172,229	227,936	
506.7	1,009.8	1,752.9	4,116	8,925	15,903	
	2016-17 2 ket 107.8	Volume (million 2016-17 2017-18 2 3 ket 107.8 124.4 1,622.1 1,946.4	Volume (million) 2016-17 2017-18 2018-19 2 3 4 ket 107.8 124.4 136.6 1,622.1 1,946.4 2,318.9	Volume (million) V 2016-17 2017-18 2018-19 2016-17 2 3 4 5 ket 107.8 124.4 136.6 981,904 1,622.1 1,946.4 2,318.9 120,040	Volume (million) Value (₹ billion) 2016-17 2017-18 2018-19 2016-17 2017-18 2 3 4 5 6 ket 107.8 124.4 136.6 981,904 1,167,125 1,622.1 1,946.4 2,318.9 120,040 172,229	

Comparatively, the total value of amount transferred through IMPS was nearly ₹ 16 lakh crores from 175 crore transactions. This indicates that NEFT is the preferred option for higher volume transactions, due to the monetary limits on IMPS transactions.

Earlier, the major problem with the NEFT was timing problem. Earlier, an NEFT transaction could only be done between 8:00 AM to 7:00 PM. Now, it has been changed. Effective from 16 December 2019, RBI has announced that the NEFT transactions can be done round the clock and across all the days in a year. This provides the feasibility of transferring funds, making utility payments, making purchases etc. round the clock.



With this, India joins an elite group of five other countries – United Kingdom, Hong Kong, South Korea, Singapore and China to provide round-the-clock fund transfer facility. This initiative was driven as part of 'Payment and Settlement Systems in India: Vision - 2019-2021' released in May 2019.

Vision 2021 concentrates on a two-pronged approach of, (a) exceptional customer experience; and (b) enabling an eco-system which will result in this customer experience. With this in view, the Vision aims towards,

- nhancing the experience of Customers;
- empowering payment System Operators and Service Providers;
- enabling the Eco-system and Infrastructure;
- ∕putting in place a Forward-looking Regulation;
- supported by a Risk-focussed Supervision.

Setting up of Payments Infrastructure Development Fund

As per RBI's annual report for 2018-19, the total number of transactions at Point of Sale (PoS) Terminals during 2018-19, using Credit cards was around 176 crores, while that of transactions through Debit Cards and PPIs (Pre-paid Payment Instruments) were 440 crores and 460 crores respectively.

IX.6 During 2018-19, the number of card payment transactions carried out through credit cards and debit cards was 1.8 billion and 4.4 billion respectively. Prepaid Payment Instruments (PPIs) recorded a volume of about 4.6 billion transactions valued at ₹2,129 billion.

IX.7 The acceptance infrastructure also witnessed substantial growth, the number of point of sale (POS) terminals increased by 21 per cent to 3.72 million at end-March 2019 from 3.08 million at end-March 2018. However, during the same period, the number of ATMs witnessed a decline from 222,247 to 221,703.

Authorisation of Payment Systems

Meanwhile, there was also an increase in the 'Acceptance Infrastructure' i.e. the equipment which is used to accept the cards for payment. The number of PoS terminals increased from 30.8 lakhs as on 31 March 2018 to 37.2 lakhs by 31 March 2019, an increase of 21%.

For your information, creating an 'Acceptance Development Fund' was part of Payments Systems Vision 2019-21.

5.3.5 ACCEPTANCE INFRASTRUCTURE - ADDRESS SUPPLY SIDE ISSUES

Acceptance infrastructure, particularly Point of Sale (PoS) terminals / mobile PoS / asset-light terminals, as a percentage of the total number of debit / credit cards is low. There is a need to increase the penetration of acceptance infrastructure in the country. The infrastructure will be upscaled to atleast six times of the present levels in the next three years' time.

i. Acquirers: Explore the option of permitting acquiring PoS infrastructure by all regulated entities, subject to regulatory clearance / no objection certificates. Increase in acquirers, like Regional Rural Banks and Non-Banking Financial Companies, to cover a large section of establishments.

(Action - RBI

ii. Innovation-based new devices: Innovation towards low-cost acceptance devices will be encouraged with a view towards cost reduction, enhanced safety and ubiquitousness.

(Action - RBI)

ii. Acceptance Development/Fund (ADF): Creation of an ADF to subsidise acquirers for deploying PoS acceptance infrastructure in tier-3 to tier-6 centers. This would help in facilitating innovation and reducing cost of such transactions.

(Action - RBI

iv. Bharat QR (BQR): Enhanced usage of signed and encrypted BQR as proactive preventive measure for secure payments

(Action - PSOs)

So, as payments increased, RBI created a **Payments Infrastructure Development Fund** (PIDF) on 05 June 2020, to subsidize the deployment of PoS acceptance infrastructure. The main emphasis of this fund is to increase the infrastructure in Tier-III to Tier-VI centres along with north-eastern parts of India.

June 05, 2020

RBI announces creation of Payments Infrastructure Development Fund

The Reserve Bank announces creation of a Payments Infrastructure Development Fund (PIDF) to encourage acquirers to deploy Points of Sale (PoS) infrastructure (both physical and digital modes) in tier-3 to tier-6 centres and north eastern states.

Over the years, payments ecosystem in the country has evolved with a wide range of options such as bank accounts, mobile phones, cards, etc. To provide further fillip to digitisation of payment systems, it is necessary to give impetus to acceptance infrastructure across the country, more so in underserved areas.

RBI made an initial contribution of ₹ 250 crores towards the corpus of the fund. This covers half of the fund, with the remaining contribution coming from card issuing banks and Card networks operating in the country. **The fund would be governed by an Advisory Council, which is managed and administered by RBI.**

Ensuring Business Continuity during COVID-19 Lockdown

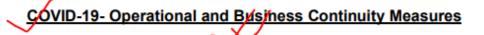
RBI has a Business Contingency Plan (BCP) in place, to be implemented in case of any emergencies and contingencies. COVID-19 was one such emergency which prompted the implementation of BCP. Accordingly, RBI alerted the different stakeholders of the Banking System India and initiated the Business continuity measures on 16 March 2020.

RBI/2019-20/172 DoS.CO.PPG.BC.01/11.01.005/2019-20

March 16, 2020

The Chairman / Managing Director / Chief Executive Officer All Scheduled Commercial Banks (Excluding RRBs) All Local Area Banks
All Small Finance Banks and All Payment Banks/All UCBs/NBFCs

Madam / Dear Sir,



As you are aware, the World Health Organization (WHO) has declared the recent outbreak of the novel coronavirus disease (COVID-19) a pandemic indicating significant and ongoing person-to-person spread in multiple countries, with the uncertainty about the extent of spread and the likely impact on the global economy. Several confirmed cases have also been detected in India, which highlight the need of a co-ordinated strategy for handling the emerging situations for protecting the resilience of the Indian financial system.

As per the update provided in Financial Stability Report, the following initiatives were taken by RBI for smooth running of payment systems.

- a. Day-to-day operations of RTGS (Real Time Gross Settlement) & NEFT systems were shifted to Primary Data Centre, under protected environment.
- b. Work-from-home procedures were implemented by Clearing Corporation of India Limited (CCIL) for its officials. CCIL takes care of financial market infrastructure for Money market, government securities & foreign exchange settlements.
- c. Skeletal staff was maintained in the office of CCIL along with minimum staff in remote disaster recovery sites, for them to take over in case of any disruptions in the primary sites.

CA49. BharatNet program

Prime Minister Narendra Modi used the Independence Day speech to launch the **National Digital Health Mission** and promise **optical fibre connectivity to all six lakh villages** in **1,000 days**. Today we will discuss **Optical Fibre Network Project.**

We will see what exactly is BharatNet? When was it conceived and what is the current status of implementation?

BharatNet programme was earlier known as National Optical Fiber Network during the UPA

- **a.** With a vision to connect over 2,50,000 Gram Panchayats across the country, the Manmohan Singh led UPA government initiated the National Optical Fiber Network (NOFN) programme in 2011.
- **b.** Like in the case of a few other schemes, the Modi government renamed the programme as BharatNet programme.
- **c.** The programme aims at taking broadband connectivity to every nook and corner of the country by using optical fiber.
- **d.** It is considered the biggest rural telecom project in the world.
- **e.** The project is now an integral part of the current government's Digital India initiative- the flagship programme to empower citizens digitally and to bridge the digital gap between rural and urban India.

Magnitude and dimensions of the operation

- World's largest rural broadband connectivity project through optical fibre
- All 2.5 lakh Gram Panchayats in India to be connected through optical fibre
- Minimum 100 Mbps bandwidth at each Gram Panchayat
- High Capacity Network Management System and Network Operation Centre
- BharatNet to be non-discriminatory access infrastructure for all Service Providers

BBNL manages and takes care of the operation of BharatNet

Bharat Broadband Network Limited (BBNL) is a special purpose vehicle, set up by the government of India under the Department of Telecommunications for management, establishment, and operation of BharatNet. It was incorporated in 2012 as a PSU under the Companies Act.

What government envisages to do through Bharat Net?

Through BharatNet, the government envisages providing a minimum of 100 Mbps bandwidth at each Gram Panchayat so that online services can be accessed by everyone, especially those in rural India. This includes e-governance, e-learning, e-banking, e-commerce and e-health services. The Infrastructure is a national asset and non-discriminatory access will be provided to all telecom service providers. In short, the central government is laying broadband internet infrastructure that can be used by governments and service providers.

Deadlines have been modified time and again

The program was originally planned to be implemented in a phased manner. Deadlines were set by the UPA government for each of the three phases. They had ambitious deadlines to complete the entire project in two years– by 2013. This was further extended to:

- Phase I 50,000 Gram Panchayats by 31 March 2015
- Phase II- 1 lakh Gram Panchayats by March 2016
- Phase III- remaining 1 Lakh Gram Panchayats by December 2016

But, after the NDA came to power in 2014, these deadlines were extended up to March 2017. Nonetheless, the first phase of connecting more than one lakh panchayats was completed in only December 2017. **Currently, phase – II to connect the remaining 1.5 lakh panchayats is under implementation.** *The government is expecting to complete the project by August 2021.*

Funds are earmarked as a whole, not state-wise

Funds for BharatNet are allocated as a whole and not state-wise. A lump sum amount is allocated and disbursed from **Universal Service Obligation Fund (USOF)** to BBNL for implementation of BharatNet. USOF's task is to make sure that people in rural areas have access to telecom connectivity at an affordable and reasonable rate. It was established in 2002.

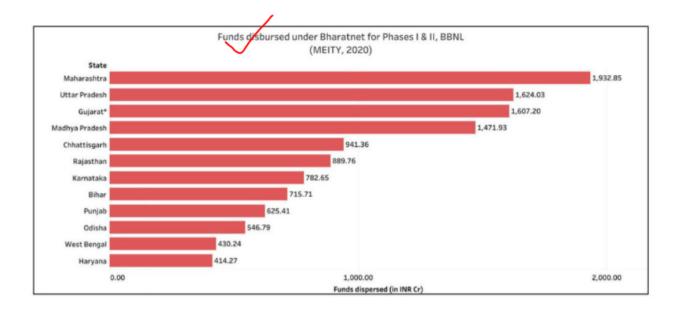
Subject: Guidelines for schemes to support pilots towards utilization of BharatNet.

Universal Service Obligation Funds (USOF) is an attached office of Department of Telecom (DoT), Ministry of Communications for executing important telecom projects like BharatNet, LWE, Mobile Connectivity in NER & Uncovered Villages of India and Submarine OFC connectivity to Andaman & Nicobar and Lakshadweep Islands, etc. USOF established with a mandate of ensuring reliable, universal and affordable telecom services to the citizens of the country in rural and remote areas.

2. Indian Telegraph Rules, 1951 provide for USOF funding for pilot project under stream VI viz. Rule 525(2)(vi): Stream VI- Induction of new technology developments in the telecom sector in rural and remote areas: "pilot project to establish new technological developments in the telecom sector, which can be deployed in the rural and remote areas, may be supported with the approval of the Central Government".

Not important: Just to end this topic with this point as it was recently declared in Parliament.

Combining the funds disbursed for both phase I & II, Maharashtra has accounted for almost ₹1,933 crores while UP and Gujarat have received more than ₹ 1,600 crores each as per Lok Sabha answer provided on 05 February 2020.



CA50. Recent examples of rising Temperatures of Earth

Very short news. Just two places for today's news. We will see news and Map (for this we mainly choose such news).

- 1. Greenland
- 2. Death Valley

ENVIRONMENT, THE SCIENCES

Green and Ice Has Shrunk Beyond Return, Study Finds

15/08/2020

Greenland 's ice sheet may have **shrunk past the point of return**, with the ice likely to melt away no matter how quickly the world reduces climate-warming emissions, new research suggests.

Scientists studied data on 234 glaciers across the Arctic territory spanning 34 years through 2018 and **found that annual snowfall was no longer enough to replenish glaciers** of the snow and ice being lost to summertime melting.

That melting is already causing global seas to rise about a millimeter on average per year. If all of Greenland 's ice goes, the water released would push sea levels up by an average of 6

meters – enough to swamp many coastal cities around the world. *This process, however, would take decades.*



Did Death Valley just hit the highest temperature recorded ever

The all-time highest temeparature ever was recorded more than a century ago, but that reading has been challenged



California's Death Valley registered a temperature of 54.4 degrees Celsius or 129.9 degrees Fahrenheit on August 16, 2020, which, once verified, could be the hottest temperature ever recorded on Earth.



CA51. NALSA Launches Campaign for Empowering Women Through Legal Awareness

 $Link: \underline{https://www.livelaw.in/pdf\ upload/pdf\ upload-380035.pdf}$

News:

PRESS NOTE National Legal Services Authority

"Empowering women through Legal Awareness"- A Campaign launched by Justice N.V. Ramana

15th August, 2020 New Delhi

A Campaign for empowering women has been launched by Hon'ble Mr. Justice N.V. Ramana, Judge, Supreme Court of India and Executive Chairman, NALSA today on the occasion of 74th Independence Day. It is a Joint initiative of National Legal Services Authority and National Commission for Women.

- a. The campaign, rolled out on the occasion of 74th Independence Day of India, is a Joint initiative of the NALSA and the National Commission for Women to make women aware of the relevant rights and protections available to them under the various laws.
- b. Under the Project, 570 legal literacy programmes shall be carried out for women in 285 districts in the States of Andhra Pradesh, Assam, Madhya Pradesh, Maharashtra, Rajasthan, Telangana, Uttar Pradesh and West Bengal.
- c. This will help the women to enhance their capacities so that they are able to advance their rights and navigate the judicial and administrative set up for actualization of their rights.



Introduction

The National Legal Services Authority (NALSA) has been constituted under the Legal Services Authorities Art, 1987 to provide free Legal Services to the weaker sections of the society and to organize Lok Adalats for amicable settlement of disputes.

Mon'ble Mr. Justice Sharad Arvind Bobde, The Chief Justice of India is the Patron-in-Chief and Hon'ble Mr. Justice N. V. Ramana, Judge, Supreme Court of India is the Executive Chairman of the Authority. NALSA is housed at 12/11, Jam Nagar House, New Delhi-110011.

NALSA is a decentralized body: Remember this also.

In every State, State Legal Services Authority has been constituted to give effect to the policies and directions of the NALSA and to give free legal services to the people and conduct Lok Adalats in the State. The State Legal Services Authority is headed by Hon'ble the Chief Justice of the respective High Court who is the Patron-in-Chief of the State Legal Services Authority.

In every District, District Legal Services Authority has been constituted to implement Legal Services Programmes in the District. The District Legal Services Authority is situated in the District Courts Complex in every District and chaired by the District Judge of the respective district.

Section 12 of the Legal Services Authorities Act, 1987 prescribes the criteria for giving legal services to the eligible persons. Section 12 of the Act reads as under: -

Every person who has to file or defend a case shall be entitled to legal services under this Act if that person is a

- a. member of a Scheduled Caste or Scheduled Tribe
- b. a victim of trafficking in human beings or begar as referred to in Article 23 of the Constitution
- c. a woman or a child
- d. a mentally ill or otherwise disabled person
- a person under circumstances of undeserved want such as being a victim of a mass disaster, ethnic violence, caste atrocity, flood, drought, earthquake or industrial disaster
- f. an industrial workman

Also see the constitutional provisions regarding Legal Aid:

- a. **Article 39A of the Constitution** of India provides that State shall secure that the operation of the legal system promotes justice on a basis of equal opportunity, and shall in particular, provide free legal aid, by suitable legislation or schemes or in any other way, to ensure that opportunities for securing justice are not denied to any citizen by reason of economic or other disability.
- b. **Articles 14 and 22(1)** also make it obligatory for the State to ensure equality before law and a legal system which promotes justice on a basis of equal opportunity to all. Legal aid strives to ensure that constitutional pledge is fulfilled in its letter and spirit and equal justice is made available to the poor, downtrodden and weaker sections of the society.

CA52. Israel-UAE Peace Deal

Link: https://www.thehindubusinessline.com/news/world/in-historic-breakthrough-uae-and-israel-establish-diplomatic-ties/article32347686.ece

Recently, the President of the USA has announced that Israel and the United Arab Emirates (UAE) have agreed to establish full diplomatic ties as part of a deal to halt the annexation of occupied land sought by the Palestinians for their future state.



Overview of the agreement: *Very brief you need to know now. As gradually development takes place, we will keep learning. See both the maps carefully.*

- a. The UAE has become the first Gulf Arab state to do so and only the third Arab nation to have active diplomatic ties with Israel.
- **b.** Egypt made a peace deal with Israel in 1979, followed by Jordan in 1994.
- **c.** Under the deal, Israel would suspend its plans to annex large parts of the occupied West Bank. The West Bank is sandwiched between Israel and Jordan. One of its major cities is Ramallah, the de facto administrative capital of Palestine. Israel took control of it in the Six-day Arab-Israeli war, 1967 and has over the years established settlements there.
- **d.** A joint statement from the USA, the UAE and Israel has been issued which says that delegations would meet in the coming weeks to sign deals on direct flights, security, telecommunications, energy, tourism and health care.
- **e.** Both nations will also partner on fighting the Covid-19 pandemic together.

Impact on the UAE:

The deal smoothens the UAE's international campaign to be seen as a beacon of tolerance in the Middle East despite being governed by autocratic rulers. It puts the UAE out first in a regional recognition race among neighbouring Gulf Arab states.

Impact on Israel:

The announcement justifies the year-long claims of Israeli Prime Minister Benjamin Netanyahu that his government enjoys closer ties to Arab nations than publicly acknowledged. The deal gives Netanyahu a domestic boost at a time when Israel's coalition government is facing infighting and the possibility of early elections.

