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AHMEDABAD

204, Ratna Business Square, Opp HK College, Ashram Road, Ahmedabad - 09

M: 73037 33599

NEW DELHI

9/13, Nr Bikaner Sweets, Bada Bazar Road, Old Rajinder Nagar, New Delhi – 60

M: 93197 33599

Mail : info@civilsias.com

Telegram Channel link : https://t.me/abhinav_civilsias

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- FACT 3. TAX REVENUE

TOPIC 1. ABRAHAM ACCORD

1. In a move that significantly impacts geopolitics in the Middle East, **Israel and United Arab Emirates** Thursday announced that they will normalise diplomatic relations. In a joint statement released by **US, Israel and UAE**, leaders of the three countries agreed to **“the full normalization of relations between Israel and the United Arab Emirates”**, calling the agreement a “historic diplomatic breakthrough” that would “advance peace in the Middle East region”. The agreement that will be called the **‘Abraham Accord’** was brokered by US President Donald Trump.
2. **Why is this important?**
 - a. This move is significant because with the exception of Jordan and Egypt, Israel does not have diplomatic relations with Gulf Arab states owing to its long-standing conflict with Palestinians. Israel had signed peace agreements with Egypt in 1979 and with Jordan in 1994. However, despite the absence of official diplomatic relations, Israel has been engaging with its neighbours with regard to issues like trade.
 - b. The agreement comes after Israel’s Prime Minister Benjamin Netanyahu agreed to suspend plans to annex parts of the West Bank, one that had been bitterly criticised by these Gulf Arab states, Europe and a few other countries around the world.
3. **What are the politics behind this agreement?**
 - a. The situation in the Middle East is complex and some observers believe that domestic politics in Israel and the US may also have a little to do with this agreement. Several nations in the Middle East also have contentious relations with Iran and this improvement in relations between Israel and the UAE may be an attempt by the US and Israel to use the leverage to urge other Gulf Arab states to alienate Iran.
 - b. Netanyahu, who has been facing mass protests for weeks against his mishandling of the coronavirus outbreak, a drop in popularity in his country, and is on trial for corruption, may be banking on this agreement to revive his image. He does, however, risk alienating a significant portion of his voter-base who had supported his plans to annex the West Bank.
 - c. The situation isn’t very different for Trump. With the US presidential elections around the corner, Trump may consider this agreement to be a foreign policy success.
 - d. The UAE’s large reserves of oil have made it the second largest economy in the Middle East, and that has allowed it to grow its military and economy might enough to play an influential role in the region. Over the past two decades, the UAE has also focused on curbing Iran and Islamic militancy.
4. **What do the Palestinians think about this?**
 - a. Senior Palestinian official Hanan Ashrawi criticised the agreement, and particularly the UAE, saying that the country had “come out in the open on its secret dealings with Israel”. Directing criticism at UAE’s Prince Mohammed, Ashrawi said: “May you never be sold out by your ‘friends’.”
 - b. Hamas spokesman Hazem Qassem said: “This agreement does absolutely not serve the Palestinian cause, it rather serves the Zionist narrative. This agreement encourages the occupation (Israel) to continue its denial of the rights of our Palestinian people, and even to continue its crimes against our people,”
 - c. Palestinian groups, particularly members of the Palestinian Liberation Organization (PLO), took to social media platforms to criticise the agreement, and particularly express their anger at the UAE, that they believe has harmed the Palestinian cause.
 - d. What are the clauses of this agreement?
 - e. In the next few weeks, Israel and the UAE will sit to finalise bilateral ties and cover areas of investment, tourism, the establishment of direct flights, security, telecommunications, technology, energy, healthcare, cultural exchange, environmental issues, and the establishment

of embassies, in addition to other areas of cooperation. The joint statement mentioned that Israel and the UAE would also be “forging closer people-to-people relations”.

- f. The statement also said that Israel will “focus its efforts now on expanding ties with other countries in the Arab and Muslim world”, and that the US and UAE would be assisting it in achieving that goal.

5. How has the world reacted?

- a. Hossein Amir-Abdollahian, Special Aide on International Affairs of the Islamic Parliament tweeted shortly after the release of the agreement: “UAE’s new approach for normalizing ties w/fake, criminal #Israel doesn’t maintain peace & security, but serves ongoing Zionists’ crimes. Abu Dhabi behavior has no justification, turning back on the Palestine cause. W/ that strategic mistake, #UAE will be engulfed in Zionism fire.” Iran’s foreign ministry called the agreement “shameful”.
- b. In a televised address, Trump said, “The deal that was reached today will enable Muslims to have far greater ability to visit many historic sites in Israel and to peacefully pray at the Al-Aqsa Mosque.” Brian Hook, the US Special Representative for Iran and Senior Policy Advisor to Mike Pompeo, called the agreement a “nightmare” for Iran.
- c. Both Egypt and Jordan appear to have supported this agreement, with Egypt’s President Abdul Fattah al-Sisi welcoming it, while Jordan’s Foreign Minister Ayman Safadi said it could help restart peace negotiations.
- d. The UK’s Prime Minister Boris Johnson said: “It was my profound hope that annexation did not go ahead in the West Bank and today’s agreement to suspend those plans is a welcome step on the road to a more peaceful Middle East.”



TOPIC 2. NEW TAX REGIME

1. Hotel bills over Rs 20,000, life insurance premium payment over Rs 50,000 and health insurance premium payment over Rs 20,000 along with donations and payment of school/ college fees over Rs 1 lakh a year may come under the scanner of the Income-tax Department as it plans to expand the scope of reportable financial transactions under the Statement of Financial Transactions (SFT).
2. The new list of proposed transactions were released Thursday, a day when Prime Minister Narendra Modi announced measures aimed at easing compliance and rewarding honest taxpayers by launching the 'Transparent Taxation — Honouring the Honest' platform.

3. Which transactions are proposed to be added

- a. As part of the proposed expansion of reportable transactions under SFTs, the following transactions would be under scanner
 - i. Payment of educational fee/ donations above Rs 1 lakh per annum
 - ii. Payment to hotels above Rs 20,000
 - iii. Purchase of jewellery, white goods, marbles, paintings, etc above Rs 1 lakh
 - iv. Life insurance premium over Rs 50,000
 - v. Payment of property tax above Rs 20,000 per annum
 - vi. Electricity consumption above Rs 1 lakh per annum
 - vii. Health insurance premium above Rs 20,000
 - viii. Deposits/credits in current account above Rs 50 lakh
 - ix. Deposits/ credits in non-current account above Rs 25 lakh
 - x. Domestic business class air travel/ foreign travel
 - xi. Share transactions/ demat accounts/ bank lockers
- b. The government also proposes compulsory filing of returns by a person having bank transactions over Rs 30 lakh, payment of rent over Rs 40,000 and all professionals and businesses having turnover over Rs 50 lakh.

4. Existing reportable transactions

- a. Banks and financial institutions used to share information about high-value transactions recorded in SFTs with tax authorities.
- b. In July, the government had launched a revised Form 26AS which included high-value transactions from SFTs from this assessment year, which would be now directly visible to the taxpayer at the time of filing of Income-tax returns.
- c. In their SFTs, banks and other reporting financial institutions record details of transactions involving cash deposits aggregating Rs 10 lakh or more in a year, in one or more accounts (other than a current account and time deposit), cash payments made by any person totalling over Rs 1 lakh, and payments of bills for one or more credit card of Rs 10 lakh or more by a person in a financial year.
- d. Further, investment in bond/debentures, shares, mutual funds, buyback of shares exceeding Rs 10 lakh in a financial year, along with purchase or sale of immovable property of Rs 30 lakh and above, by a person are recorded in the SFTs.

5. What does it imply

- a. The government states these measures are aimed at widening the tax base. For taxpayers, this implies enhanced flow of information to tax authorities.
 - b. When implemented, it would also reflect in Form 26AS, the consolidated annual statement showing tax deductions/ collections and advance tax against an individual's PAN. This would create greater onus on the taxpayers to comply in a voluntary manner.
6. Prime Minister Modi had Thursday said that people paying taxes in this country are "too less". While filing income tax returns has increased by about 2.5 crore in the last 6-7 years, only 1.5 crore people pay taxes in a country of 130 crore, Modi had said, asking more people to come forward to pay taxes.

Prime Minister Narendra Modi has urged people to voluntarily pay taxes. A significant number of those who file returns claim they have no taxable income.

Assessment year 2018-19

6.75%
Assessees who paid more than ₹1.5 lakh in taxes

52.8%
Assessees who paid ₹0-1.5 lakh in taxes

58.71 mn

Total number of tax returns filed

40.43%
Assessees who paid zero tax

Source: Central Board of Direct Taxes

84.5 mn

Taxpayers who did not file returns. This includes those who paid tax deducted at source, or TDS

5.98%

India's direct tax-to-GDP ratio

TOPIC 3. MAURITIUS OIL SPILL

1. A week after Mauritius declared a national emergency over an oil spill near its coast, Prime Minister Pravind Jugnauth Thursday announced it had been cleaned up. The accident had been traced to a Japanese ship, anchored off southern part of island nation in Indian Ocean. It had raised concerns over ecological damage caused to region.
2. **What caused the Mauritius oil spill?**
 - a. A Japanese ship named M V Wakashio, which is owned by Nagashiki Shipping and operated by Mitsui OSK Lines Ltd, struck a coral reef resulting in an oil spill of over 1,000 tonnes into Indian Ocean. The ship was carrying an estimated 4,000 tonnes of oil.
3. **How does the oil spill compare to others around the world?**
 - a. BBC reported that rather than size of oil spill, it was area where it happened which was a cause for concern. The accident had taken place near two environmentally protected marine ecosystems and Blue Bay Marine Park Reserve, which is a wetland of international importance.
 - b. Some of the world's largest oil spills include the Persian Gulf War oil spill of 1991, when more than 380 million gallons of oil was poured into the northern Persian Gulf by Iraq's forces.
 - c. The 2010 Deepwater Horizon oil spill in the Gulf of Mexico is also considered to be among the largest known accidental oil spills in history. Starting April 20, 2010, over 4 million barrels of oil flowed over a period of 87 days into the Gulf of Mexico.
 - d. In 2016, a United States Geological Survey (USGS)-NASA study found that the 2010 oil spill led to "widespread" shoreline loss along the heavily oiled areas along Louisiana's coast. "Erosion rates were highest along shorelines documented with heavy to moderate oiling, and were lower along shorelines that experienced low oiling," a USGS release noted.
4. **How dangerous are oil spills?**
 - a. Oil spills affect marine life by exposing them to harsh elements and destroying their sources of food and habitat. Further, both birds and mammals can die from hypothermia as a result oil spills, according to US National Oceanic and Atmospheric Administration (NOAA). For instance, oil destroys insulating ability of fur-bearing mammals, such as sea otters. It also decreases the water repellency of birds' feathers, without which they lose their ability to repel cold water.
5. **How are oil spills cleaned?**
 - a. There are a few ways to clean up oil spills. including skimming, in situ burning and by releasing chemical dispersants. Skimming involves removing oil from the sea surface before it is able to reach the sensitive areas along the coastline. In situ burning means burning a particular patch of oil after it has concentrated in one area.
 - b. Releasing chemical dispersants helps break down oil into smaller droplets, making it easier for microbes to consume, and further break it down into less harmful compounds.
 - c. Natural actions in aquatic environments such as weathering, evaporation, emulsification, biodegradation and oxidation can also help reduce the severity of an oil spill and accelerate the recovery of an affected area. But these occur differently in freshwater and marine environments, the Environmental Protection Agency (EPA) notes in a report on oil spills.

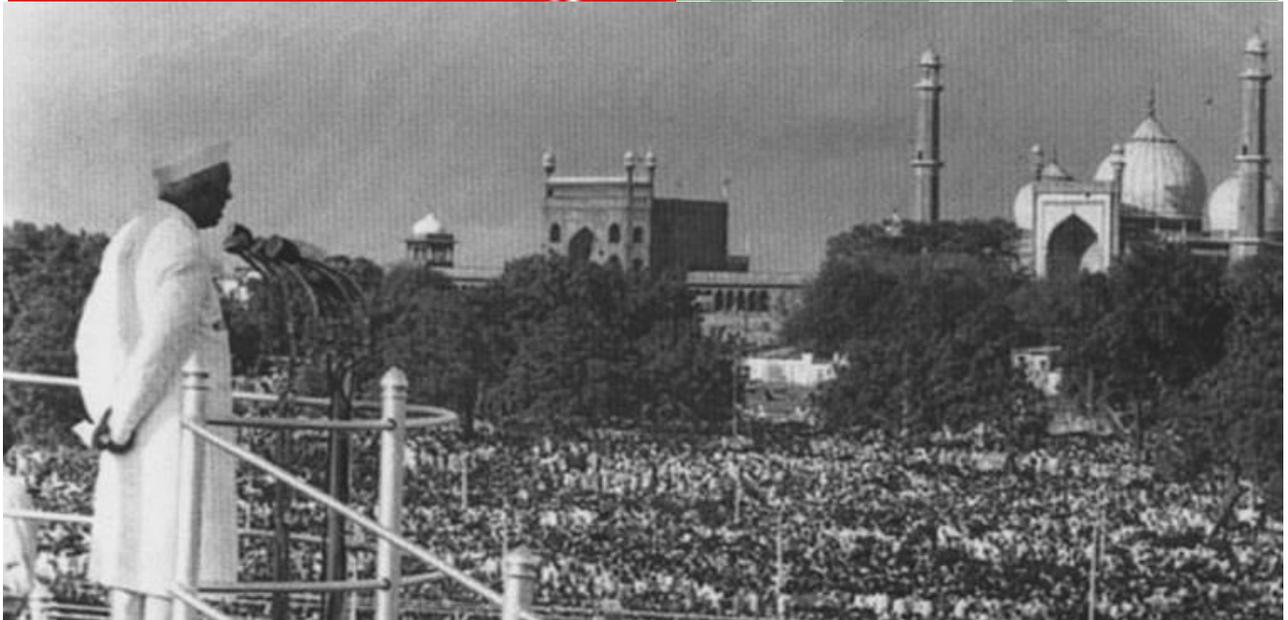


TOPIC 4. NATIONAL FLAG OF INDIA

1. On July 22, 1947, when members of the Constituent Assembly of India met in the Constitution Hall in Delhi, the first item on the agenda was reportedly a motion by Pandit Jawaharlal Nehru, about adopting a national flag for free India.
 2. It was proposed that “National Flag of India shall be horizontal tricolour of deep saffron (kesari), white and dark green in equal proportion.” The white band was to have a wheel in navy blue (the charkha being replaced by the chakra), which appears on the abacus of the Sarnath Lion Capital of Ashoka.
 3. While finer nuances were subsequently discussed in meeting, final design of Indian National Flag, hoisted by Prime Minister Nehru on August 16, 1947 at Red Fort, had a history of several decades preceding independence.
- 4. The first national flag of India**
- a. While an Indian flag was reportedly designed by Sister Nivedita, an Irish disciple of Swami Vivekananda, between 1904-1906, arguably the first national flag of India is said to have been hoisted on August 7, 1906, in Kolkata at the Parsee Bagan Square (Green Park).
 - b. It comprised three horizontal strips of red, yellow and green, with Vande Mataram written in middle. Believed to have been designed by freedom activists Sachindra Prasad Bose and Hemchandra Kanungo, red strip on flag had symbols of sun and a crescent moon, and green strip had eight half-open lotuses.
 - c. Next year, in 1907, Madame Cama and her group of exiled revolutionaries hoisted an Indian flag in Germany in 1907 — this was the first Indian flag to be hoisted in a foreign land.
 - d. In 1917, Dr Annie Besant and Lokmanya Tilak adopted a new flag as part of the Home Rule Movement. It had five alternate red and four green horizontal stripes, and seven stars in the saptarishi configuration. A white crescent and star occupied one top corner, and the other had Union Jack.
- 5. The origins of the present-day flag**
- a. The design of the Indian tricolour is largely attributed to Pingali Venkayya, an Indian freedom fighter who reportedly first met Mahatma Gandhi in South Africa during the second Anglo-Boer War (1899-1902), when he was posted there as part of the British Indian Army.
 - b. Years of research went into designing the national flag. In 1916, he even published a book with possible designs of Indian flags. At the All India Congress Committee in Bezwada in 1921, Venkayya again met Gandhi and proposed a basic design of the flag, consisting of two red and green bands to symbolise the two major communities, Hindus and Muslims. Gandhi arguably suggested adding a white band to represent peace and the rest of the communities living in India, and a spinning wheel to symbolise the progress of the country.
 - c. Several changes continued to be made till a decade later, when in 1931 the Congress Committee met in Karachi and adopted the tricolour as our national flag. Red was replaced with saffron and the order of the colours was changed. The flag was to have no religious interpretation.
- 6. A Flag for Independent India**
- a. The Tricolour was altered to become the flag of Independent India. Saffron on top symbolises “strength and courage”, white in the middle represents “peace and truth” and green at the bottom stands for “fertility, growth and auspiciousness of the land”. The Ashok Chakra with 24 spokes replaced the spinning wheel as the emblem on the flag. It is intended “to show that there is life in movement and death in stagnation”.
- 7. Controversies regarding its creator**
- a. In 2013, a controversy arose when historian Panduranga Reddy stated that the national flag was designed by Hyderabad-born Surayya Tyabji. With the resolution in the Constituent Assembly mentioning no names, the attributions are open to argument. While there is no consensus on who recommended the change from charkha to the Ashok Chakra in 1947, in 2018, in an article titled “How the Tricolour and Lion Emblem Really Came to Be”, Laila Tyabji, founding member

of crafts NGO Dastkar, wrote that her parents, Badruddin and Surayya Tyabji, had suggested the change.

- b. The website of the Flag Foundation of India, a non-profit organisation formed by industrialist and Congress politician Naveen Jindal, states, "The design of the National-flag for Independent India submitted by Mrs. Suriaya Badr-ud-Din Tyabi was finally approved and accepted by the Flag Committee on 17th July 1947. She was an artist of repute and her husband B.H.F.Tyabji (ICS) was then a Deputy Secretary in the Secretariat of the Constituent Assembly."
- c. Venkayya, who passed away in 1963, was posthumously honoured with a postage stamp in 2009 for his contribution towards Indian freedom struggle. In 2014, his name was also proposed for Bharat Ratna.



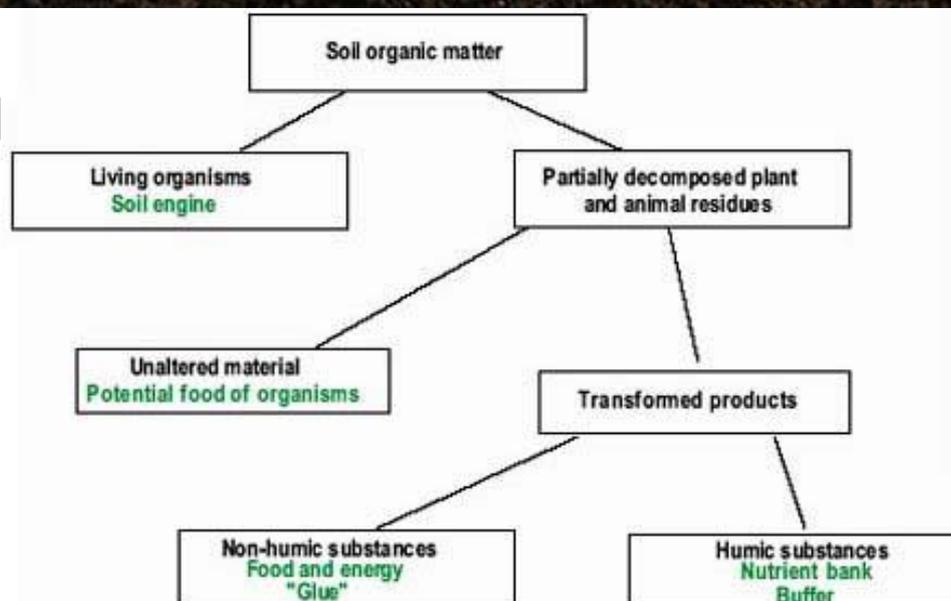
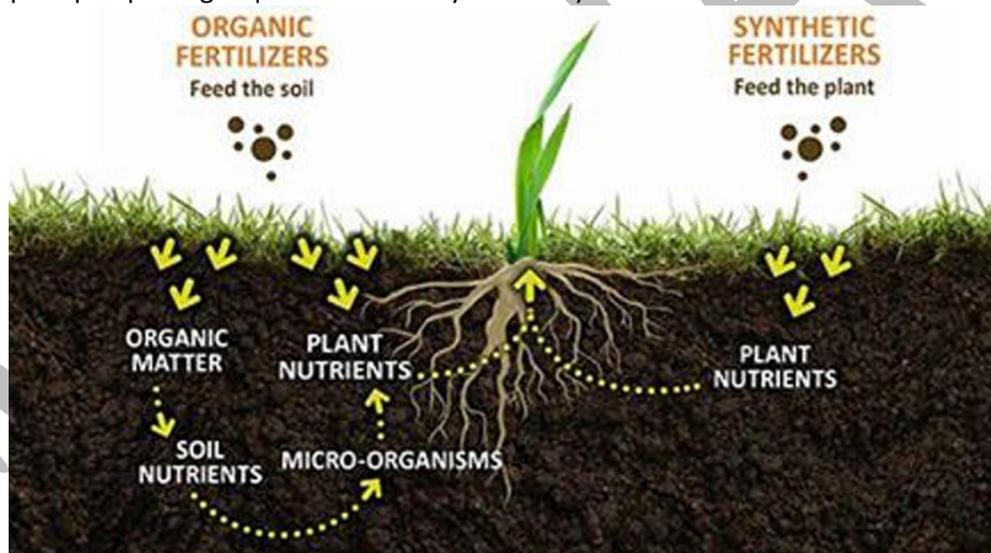
TOPIC 5. ORGANIC MATTER IN SOIL

1. In the past five decades, the state had achieved several firsts in the field of agriculture and even became the first state in the country to install soil fertility map in each village to improve soil health. But the soil of Punjab has always been an issue of debate because the state is not only the highest consumer of chemical fertilisers per hectare in the country, but also the third highest pesticide consumer while accounting for just 1.53 per cent of the total area of the country.
2. Indian-American soil scientist Dr Rattan Lal, an alumnus of Punjab Agriculture University (PAU), Ludhiana, who recently received the prestigious World Food Prize, said that in Punjab, Haryana and Uttar Pradesh soils are degraded and depleted because 'organic matter' is quite below (.5-.2 per cent). The Indian Express explains how organic matter in soil is an important issue for Punjab:
3. **What is organic matter and why it is required in the soil?**
 - a. Organic matter is the very foundation of good soil health. It consists of plants, animal material which gets converted into humus after decomposing.
 - b. According to the agriculture department, it improves soil quality and fertility. Organic matter can even improve the fertility of sandy soils. It supplies nutrients, increases water-holding capacity, prevents soil erosion. Supplication of organic matter into the soil decreases with frequent tilling of the land.
 - c. In Punjab, farmers usually plant three crops a year which means the land gets disturbed every time they till, leading to a decrease in organic matter in the soil. "Soil having good amount of organic matter has great water holding capacity which in turn needs lesser irrigation and even helps arrest floods by alloing increased infiltration into the soil," said Joint Director (Fertilisers), Agriculture department, Jagtar Singh Brar.
4. **What is the ideal organic matter content in soil?**
 - a. 'Organic matter' content in the soil of the state is way below what it needs to be so as to call the soil healthy. While PAU said that .75 per cent organic matter in the soil is sufficient, Punjab agriculture department said it should be at least 1 per cent. International standards suggest having around 2-3 per cent in the soil.
 - b. Dr Lal, who received an award for his work helping millions of farmers improve their soil health, had opined in his published interviews that organic matter should be around 2-3 per cent.
5. **How much organic matter is present in the soil of Punjab and has it increased over the years?**
 - a. According to experts, organic matter presence in the soil was .33 per cent during the Green Revolution in 1966-67, which has increased to .51 per cent at present. In the past over 50 years that have elapsed between the Green Revolution , the state registered a .18 per cent increase of organic matter (OM) in its soil.
 - b. "Punjab's soil falls in the 'medium' category as for as availability of OM is concerned," said Dr O P Choudhary, principal soil chemist and head of the department of soil science at PAU. He added, "In Punjab, 54.7 per cent land has medium organic carbon in the soil between .40 and .75 per cent, while 31.4 per cent of the land witnesses low OM below .40 per cent and only 13.9 per cent land witnesses high .75 per cent and above organic matter, which means on an average our soil had witnessed .51 per cent organic matter in this decade from 2011 to 2020."
6. **How much time does it take to increase organic matter in the soil?**
 - a. With the collective efforts of Punjab government, experts and farmers, it can be increased up to .50-1 per cent in a decade's time, even though the increase was between .3 and .11 per cent in the past five decades. "We at PAU had done experiments in our fields where we had incorporate wheat and paddy residue in the fields and had also done green manuring, as a result of which the organic matter has increased from .42 per cent a decade back to .67 per cent now in our fields," said Dr Choudhary, adding that they had increased it by .25 per cent in a decade and the same can be replicated across Punjab.
7. **What steps can be taken to increase organic matter in soil in Punjab, when most farmers sow three crops a year?**
 - a. By tilling the land again and again, organic matter gets disturbed and decreases. Experts advised farmers to opt for two crops a year and grow green manure as a third crop, which is ploughed into the field only to improve soil fertility. The best time to grow it is after wheat harvesting in April, and then ploughing it in the fields before paddy sowing in June. Putting cow dung in the fields, incorporating paddy and wheat stubble in soil, growing pulses like summer moong are methods to enhance it.

- b. "When majority farmers are sowing three crops a year and fields are not free to grow green manure, incorporation of wheat and paddy stubble is the best way to enhance organic matter," said Director, Punjab Agriculture Department, Dr Sutantra Airi, adding that with incorporating crop residue in fields, usage of fertilizers would also decrease and land would become healthy.
- c. Dr Choudhary said, "By incorporating paddy straw in the soil, farmers will get 33 kg Nitrogen, 13 kg phosphorus, 150 kg potassium, 7 kg sulphur, 2,400 kg carbon a 1-3 kg micronutrients (zinc, manganese, iron, and copper)."

8. Why is increasing organic matter important for Punjab?

- a. When Punjab has already witnessed high productivity in several crops, enhancing this further with existing land holdings is possible when soil is enriched. For instance, paddy productivity in Punjab varies between 4.9 tonnes to 7.4 tonnes per hectare and wheat production is between 3.8 tonnes to 5.7 tonnes per hectare. If organic matter in the soil is enhanced to the desired level, the fertility of the soil of low production areas can be enhanced manifold to bring it at par with soil giving the highest production in the state. Fertility of soil with high productivity can also be enhanced further by increasing organic matter to around 1 per cent, said experts.
 - b. "Good OM also leads to proper utilisation of fertilisers put in the fields," said joint director Brar.
 - c. "For example, if we have hybrid seeds of any crop with the capacity of giving 50 quintals of yield per acre, we also need quality soil with required OM to get that yield, otherwise farmers may end up getting a much lower yield than the claimed 50 quintals," said Madan Lal Khurana, soil expert and retired deputy director of Agriculture Soil Testing Karnal (Haryana).
9. He added that good OM means getting better fertility, good quality crops, as poor OM results in stagnating the yield of the crop despite putting required fertilisers year after year.



TOPIC 6. ASSAMESE

1. The question, “Who is an Assamese?”, has been debated for decades in Assam, whose history has been shaped by people of multiple cultures over centuries. Now, a report by a government-appointed committee has proposed a definition for “Assamese people”. While this is limited to purpose of implementing a provision of 1985 Assam Accord - Clause 6 - it spotlights complexities at play in Assam.
2. **Why is it a matter of debate?**
 - a. The Assam Accord was signed at the end of a six-year agitation (1979-85) against illegal migration from Bangladesh. In the context of the Accord, the question of who is Assamese stems from the language of Clause 6: “Constitutional, legislative and administrative safeguards, as may be appropriate, shall be provided to protect, preserve and promote the cultural, social, linguistic identity and heritage of the Assamese people.”
 - b. This gives rise to two questions: what will these safeguards be; and, who are the “Assamese people” eligible for these?
3. **Isn't any resident of Assam, Assamese?**
 - a. It is not all-encompassing in a state defined by the politics of migration. And yet, the definition of “Assamese” cannot be so narrow as to mean only those who speak Assamese as their first language. Assam has many indigenous tribal and ethnic communities with their own ancestral languages. For Clause 6, it was necessary to expand the definition of “Assamese” beyond the Assamese-speaking population.
 - b. Those not eligible for the safeguards under Clause 6 would clearly be from among the migrant populations. But would the entire migrant populations be excluded, or would some of them be eligible for Clause 6 benefits? Hence the debate.
4. **But who is a migrant?**
 - a. In popular conversation, the idea of “indigenous” is taken to mean communities who trace their histories in Assam before 1826, the year when the erstwhile kingdom of Assam was annexed to British India. Large-scale migration from East Bengal took place during British rule, followed by further waves after Independence.
 - b. The 1979-85 Assam Movement was triggered by fears that these Bengali Muslim and Bengali Hindu migrants would one day overrun the indigenous population, and dominate the resources and politics of the state. During the agitation, the demand was for the detection and deportation of those who had migrated after 1951.
5. **Was this demand accepted?**
 - a. Not 1951. The Assam Accord was settled at a cut-off of March 24, 1971; anyone who arrived in Assam before that cut-off would be considered a citizen of India. This date was also the basis of the National Register of Citizens (NRC), published last year.
 - b. Because Accord legalised additional migrants (1951-71) against the original demand of 1951, Clause 6 was incorporated as a safeguard for the indigenous people. This was the reasoning as explained to The Indian Express last year by Prafulla Kumar Mahanta, who signed the Accord as All Assam Students' Union president in 1985 and went on to become the Chief Minister.
6. **How has Clause 6 been taken up since?**
 - a. Because of complexities involved, previous efforts to work out a framework made little headway. The matter got urgency last year amid protests by Assamese against the Citizenship Amendment Bill (now an Act) which makes it easier for certain categories of migrants to get Indian citizenship — key here being Hindus from Bangladesh. The Home Ministry set up a new committee, which submitted its report in February, but the government sat on it for months. This led to four of the committee's 14 members making its contents public on Tuesday.
7. **So, what are the recommendations?**
 - a. For the purpose of implementation of Clause 6, the proposed definition includes indigenous tribals, other indigenous communities, all other citizens of India residing in Assam on or before

January 1, 1951 and indigenous Assamese — and their descendants. In short, it covers anyone who can prove their presence (or that of their ancestors) in Assam before 1951.

- b. As for safeguards, the committee has recommended reservations in legislature and jobs for “Assamese people”, and that “land rights be confined” to them.

8. What are implications of the definition?

- a. Migrants who entered Assam after 1951 but before March 24, 1971 are not Assamese but are Indian citizens. They would not be eligible, for example, to contest an election in 80-100% of Assam’s seats (if that recommendation is accepted). But they can vote.
- b. Not just indigenous groups, but East Bengal migrants who entered Assam before 1951, too, would be considered Assamese. “(Migrants of) 1951-71 have been accepted (as citizens)... for their staying here, some people have suffered certain losses that have to be made up,” said committee member Nilay Dutta, Advocate General of Arunachal Pradesh.

9. What issues does this raise?

- a. Some find it too inclusive. The committee had received some public suggestions that had proposed a base year of 1826 for anyone being considered Assamese, Nilay Dutta said.
- b. Hafizul Ahmed, president of Sadou Asom Gorias-Moria-Deshi Jatiya Parishad that speaks for indigenous Assamese Muslims, told Indian Express that there should not be a base year for identifying indigenous people of Assam. The organisation had sought that only communities living in Assam during Ahom rule (pre-1826) be included in definition, based on their cultural identities.
- c. Others find it exclusionary. The All Assam Minority Students’ Union, which is identified with Bengali Muslims, had been demanding that the 1971 cutoff be used for deciding Clause 6 eligibility too. Its adviser Azizur Rahman said: “How will you prove that a person has been in Assam prior to 1951?” (The 1951 NRC is not available in several parts of the state.)
- d. Sadhan Purkayastha, general secretary of the Citizens’ Right Protection Committee, said lakhs of people in Assam’s Barak Valley stand to lose their rights if the report is implemented. A large number of Bengali Hindus and some Bengali Muslims had migrated from Sylhet to Barak Valley in the 1950s and 1960s.

10. What is the way forward?

- a. “Several issues come up: for both the state and central government, the key issue is whether it will stand the test of judicial scrutiny because it is bound to be challenged in the courts; and will it stand the test of constitutional validity?” said Sanjoy Hazarika, International Director of the Commonwealth Human Rights Initiative, and a journalist who has written extensively on migration.

11. Among the issues Hazarika raised were:

- a. Does the definition of an Assamese — a social, historic, ethnic, linguistic, political and cultural and not just religious entity — or a Bengali or a Punjabi or a Tamil also define her/his Indian-ness or Indian citizenship? “This is a key legal and constitutional issue that needs to be considered. It is connected to the NRC process as the Assam Accord cannot be reviewed in isolation of one clause or the other,” he said.
- b. How will pre-1971 migrants be accommodated? “There isn’t a magic wand to solve the problem which has challenged the core of Assam for over 70 years... I have been an advocate of constitutional reservations and work permits. But we also need to acknowledge the demographic reality in the state and its diversities,” he said.

TOPIC 7. PERSEIDS

1. The Perseids meteor shower is going to be active from August 17-26. The annual celestial event is considered the best meteor shower, thanks to the many bright meteors and fireballs shooting through the sky making it easy for people to watch it from Earth.
2. **What are meteor showers?**
 - a. Meteors are bits of rock and ice that are ejected from comets as they manoeuvre around their orbits around the sun. For instance, the Orionids meteors emerge from the comet 1P/Halley and make their yearly presence in October. Meteor showers, on the other hand, are witnessed when Earth passes through the trail of debris left behind by a comet or an asteroid.
 - b. When a meteor reaches the Earth, it is called a meteorite and a series of meteorites, when encountered at once, is termed as a meteor shower. According to NASA, over 30 meteor showers occur annually and are observable from the Earth.
 - c. As meteors fall towards the Earth, the resistance makes the space rocks extremely hot and, as meteorites pass through the atmosphere, they leave behind streaks of glowing gas that are visible to the observers and not the rock itself.
3. **What is the Perseids meteor shower?**
 - a. The Perseids meteor shower peaks every year in mid-August. It was first observed over 2,000 years ago. The Perseids occur as the Earth runs into pieces of cosmic debris left behind by the comet Swift-Tuttle. The cloud of debris is about 27 km wide, and at the peak of the display, between 160 and 200 meteors streak through the Earth's atmosphere every hour as the pieces of debris, travelling at some 2.14 lakh km per hour, burn up a little less than 100 km above the Earth's surface.
4. **Where do the Perseids meteor showers come from?**
 - a. The comet Swift-Tuttle, which was discovered in 1862 by Lewis Swift and Horace Tuttle, takes 133 years to complete one rotation around the sun. The last time it reached its closest approach to the sun was in 1992 and will do so again in 2125. Every time comets come close to the sun, they leave behind dust that is essentially the debris trail, which the Earth passes through every year as it orbits around the Sun.
5. **How can one view the Perseids meteor shower?**
 - a. According to NASA, these meteor showers are best viewed from areas in the Northern Hemisphere in pre-dawn hours. However, at times, it may be possible to view the meteor showers as early as 10 pm. Further, meteors are best visible on a cloudless night, when the sky is visible and when the Moon is not extremely bright.
 - b. But this year, the showers are coinciding with the last quarter of the moon phase, which it reached on August 11 (the last quarter moon is half-lit by sunshine and its own shadow, it rises during midnight and sets at noon) due to which, the view of the showers may be restricted as a result of the Moon's brightness, reducing the visible meteors from about 60 per hour to 15-20 per hour, NASA has said.
 - c. Chances of a successful viewing are higher from locations far away from the lights of cities. Pollution and monsoon clouds make the Perseids difficult to view from India. But in areas where there is no light or air pollution, viewers do not need to use any special equipment to view the showers and one should make sure to give enough time to let the eyes adjust to the darkness, which can take about 30 minutes. Additionally, viewers should try to stay away from their phones as looking at bright screens affects night vision.

TOPIC 8. HINDU WOMEN'S INHERITANCE RIGHTS

1. On Tuesday, the Supreme Court expanded on a Hindu woman's right to be a joint legal heir and inherit ancestral property on terms equal to male heirs.
2. **What is the ruling?**
 - a. A three-judge Bench headed by Justice Arun Mishra ruled that a Hindu woman's right to be a joint heir to the ancestral property is by birth and does not depend on whether her father was alive or not when the law was enacted in 2005. The Hindu Succession (Amendment) Act, 2005 gave Hindu women the right to be coparceners or joint legal heirs in the same way a male heir does. "Since the coparcenary is by birth, it is not necessary that the father coparcener should be living as on 9.9.2005," the ruling said.
3. **What is the 2005 law?**
 - a. The Mitakshara school of Hindu law codified as Hindu Succession Act, 1956 governed succession and inheritance of property but only recognised males as legal heirs. The law applied to everyone who is not a Muslim, Christian, Parsi or Jew by religion. Buddhists, Sikhs, Jains and followers of Arya Samaj, Brahma Samaj are also considered Hindus for purposes of this law.
 - b. In a Hindu Undivided Family, several legal heirs through generations can exist jointly. Traditionally, only male descendants of a common ancestor along with their mothers, wives and unmarried daughters are considered a joint Hindu family. The legal heirs hold family property jointly.
 - c. Women were recognised as coparceners or joint legal heirs for partition arising from 2005. Section 6 of Act was amended that year to make a daughter of a coparcener also a coparcener by birth "in her own right in same manner as son". The law also gave daughter same rights and liabilities "in the coparcenary property as she would have had if she had been a son".
 - d. The law applies to ancestral property and to intestate succession in personal property — where succession happens as per law and not through a will.
 - e. 174th Law Commission Report had also recommended this reform in Hindu succession law. Even before 2005 amendment, Andhra Pradesh, Karnataka, Maharashtra and Tamil Nadu had made this change in the law, and Kerala had abolished the Hindu Joint Family System in 1975.
4. **How did the case come about?**
 - a. While the 2005 law granted equal rights to women, questions were raised in multiple cases on whether the law applied retrospectively, and if the rights of women depended on the living status of the father through whom they would inherit. Different benches of the Supreme Court had taken conflicting views on the issue. Different High Courts had also followed different views of the top court as binding precedents.
 - b. In *Prakash v Phulwati* (2015), a two-judge Bench headed by Justice A K Goel held that the benefit of the 2005 amendment could be granted only to "living daughters of living coparceners" as on September 9, 2005 (the date when the amendment came into force).
 - c. In February 2018, contrary to the 2015 ruling, a two-judge Bench headed by Justice A K Sikri held that the share of a father who died in 2001 will also pass to his daughters as coparceners during the partition of the property as per the 2005 law.
 - d. Then in April that year, yet another two-judge bench, headed by Justice R K Agrawal, reiterated the position taken in 2015.
 - e. These conflicting views by Benches of equal strength led to a reference to a three-judge Bench in the current case. The ruling now overrules the verdicts from 2015 and April 2018. It settles the law and expands on the intention of the 2005 legislation "to remove the discrimination as contained in section 6 of the Hindu Succession Act, 1956 by giving equal rights to daughters in the Hindu Mitakshara coparcenary property as the sons have".
5. **How did the court decide the case?**

- a. The court looked into the rights under the Mitakshara coparcenary. Since Section 6 creates an “unobstructed heritage” or a right created by birth for the daughter of the coparcener, the right cannot be limited by whether the coparcener is alive or dead when the right is operationalised.
- b. The court said the 2005 amendment gave recognition of a right that was in fact accrued by the daughter at birth. “The conferral of a right is by birth, and the rights are given in the same manner with incidents of coparcenary as that of a son and she is treated as a coparcener in the same manner with the same rights as if she had been a son at the time of birth. Though the rights can be claimed, w.e.f. 9.9.2005, the provisions are of retroactive application, they confer benefits based on the antecedent event, and the Mitakshara coparcenary shall be deemed to include a reference to a daughter as a coparcener,” the ruling said.
- c. The court also directed High Courts to dispose of cases involving this issue within six months since they would have been pending for years.

6. What was the government’s stand?

- a. Solicitor General Tushar Mehta argued in favour of an expansive reading of the law to allow equal rights for women. He referred to the objects and reasons of the 2005 amendment. “The Mitakshara coparcenary law not only contributed to discrimination on the ground of gender but was oppressive and negated the fundamental right of equality guaranteed by the Constitution of India,” he submitted.



- The Hindu Succession **Act of 1956** governs the property rights of **Hindus, Sikhs, Buddhists, and Jains**.
- The Indian Succession **Act of 1925** governs the property rights of **Christians and Zoroastrians (Parsis)**
- The Shariat **Act of 1937** governs the property rights of both **Sunnis and Shias** – the two major **Muslims communities** in the country. However, it has not been codified yet.

TOPIC 9. MOUNT SINABUNG

1. Indonesia's Mount Sinabung volcano erupted on Monday, sending a column of ash and smoke more than 16,000 feet into the air. The volcano became active in 2010, erupting after nearly 400 years of inactivity.
2. According to the National Museum of Natural History (NMNH), USA, generally, there are about 20 volcanoes actively erupting every day. As per the weekly volcanic activity report prepared by The Smithsonian and US Geological Survey's (USGS) Volcano Hazards program, for the week ending August 4, 2020, there were 17 volcanoes across the world with continuing eruptions. As per USGS, there are about 1,500 potentially active volcanoes worldwide.
3. Indonesia is home to many active volcanoes, due to its position on the "Ring of Fire", or the Circum-Pacific Belt, which is an area along the Pacific Ocean characterised by active volcanoes and frequent earthquakes. The Ring of Fire is home to about 75 per cent of the world's volcanoes and about 90 per cent of its earthquakes.
4. **The current eruption**
 - a. According to a report in the Jakarta Post, Monday's eruption was the third since Saturday, with the volcano spewing 5000-metre high column of ash and smoke into the air, followed by another eruption that produced a 2000-metre high column.
 - b. The ash from Monday's explosion covered three districts and "turned the sky dark", the Jakarta Post reported. More eruptions are likely in the coming days.
5. **What are the recent eruptions?**
 - a. The volcano, which is situated in North Sumatra, has been active since 2010.
 - b. Another eruptive phase for the volcano began in September 2013, which continued uninterrupted until June 2018, according to information maintained by the National Museum of Natural History's Global Volcanism Program. During the 2018 eruption, the volcano released ash 5-7 km into the air, coating villages.
6. **Why do volcanoes erupt?**
 - a. A volcano can be active, dormant or extinct. An eruption takes place when magma (a thick flowing substance), formed when the earth's mantle melts, rises to the surface. Because magma is lighter than solid rock, it is able to rise through vents and fissures on the surface of the earth. After it has erupted, it is called lava.
 - b. Not all volcanic eruptions are explosive, since explosivity depends on composition of magma. When the magma is runny and thin, gases can easily escape it, in which case, the magma will flow out towards the surface. On the other hand, if the magma is thick and dense, gases cannot escape it, which builds up pressure inside until the gases escape in a violent explosion.
7. **When do volcanic eruptions become dangerous?**
 - a. According to US Centers for Disease Control and Prevention (CDC), most common cause of death from a volcano is suffocation, making people with respiratory conditions such as asthma and other chronic lung diseases especially susceptible. People living in areas close to the volcano, or in low-lying areas downwind, are also at higher risk in case of an explosion, since the ash may be gritty and abrasive and small ash particles can scratch the surface of the eyes.
 - b. Further, volcanic eruptions can result in additional threats to health such as floods, mudslides, power outages, drinking water contamination and wildfires.
 - c. Lava flows, however, rarely kill people, since they move slowly, giving enough time to escape. In a 2018 interview to Stanford News, Stanford geologist Gail Mahood noted that one reason why volcanic eruptions can be dangerous in places such as Indonesia, Guatemala and the Philippines is that in these countries, large populations are packed on and around volcanoes.

TOPIC 10. ASSAM ACCORD

1. Assam Accord came at the culmination of a movement against immigration from Bangladesh
2. In February, a government-appointed committee had submitted its recommendations for implementation of Clause 6 of the Assam Accord, a key provision that has been contentious for decades. Since then, the government has not made the report public.
3. On Tuesday, with 6 months having passed, a few members of panel - Arunachal Pradesh Advocate General Nilay Dutta and 3 members of All Assam Students' Union (AASU)- released report independently.
4. **But what is Clause 6?**
 - a. Part of the Assam Accord that came at the culmination of a movement against immigration from Bangladesh, Clause 6 reads: "Constitutional, legislative and administrative safeguards, as may be appropriate, shall be provided to protect, preserve and promote the cultural, social, linguistic identity and heritage of the Assamese people." .
 - b. For recognition as citizens, the Accord sets March 24, 1971 as the cutoff. Former Chief Minister Prafulla Mahanta, one of the signatories to the 1985 Accord as then AASU president, explained to The Indian Express last year that immigrants up to the cutoff date would get all rights as Indian citizens. Therefore, he said, Clause 6 was inserted to safeguard the socio-political rights and culture of the "indigenous people of Assam".
5. **What has happened since?**
 - a. Several committees have been set up over the years to make recommendations on implementation of Clause 6. None of them made headway on the provision's contentious issues, however, until the latest one that was set up by the Home Ministry in 2019. Following widespread protests against the Citizenship Amendment Bill, now an Act, in December and January, the government gave an urgent push to Clause 6 to pacify the Assamese community.
 - b. Headed by retired High Court judge Biplab Kumar Sarma and including members of the legal fraternity, retired civil servants, scholars, journalists and AASU office-bearers, the committee was asked to fast-track its report. It submitted its report in February but the government did not make its contents public. Nilay Dutta and three AASU members independently made the contents public on Tuesday.
6. **What has it recommended?**
 - a. Its brief was to define "Assamese people" and suggest measures for safeguard of their rights.
 - b. Definition of "Assamese people" has been a subject of discussion for decades. The committee has proposed that following be considered Assamese people for purpose of Clause 6:
 - c. All citizens of India who are part of:
 - i. Assamese community, residing in Territory of Assam on or before January 1, 1951; or
 - ii. Any indigenous tribal community of Assam residing in the territory of Assam on or before January 1, 1951; or
 - iii. Any other indigenous community of Assam residing in the territory of Assam on or before January 1, 1951; or
 - iv. All other citizens of India residing in territory of Assam on or before January 1, 1951; and
 - v. Descendants of the above categories
7. **Why 1951?**
 - a. During the Assam agitation, the demand was for detection and deportation of migrants who had illegally entered Assam after 1951. The Assam Accord, however, set the cutoff at March 24, 1971. The National Register of Citizens (NRC) was updated based on this cutoff.
 - b. Clause 6 is meant to give the Assamese people certain safeguards, which would not be available to migrants between 1951 and 1971. If the recommendation is accepted, those who migrated between 1951 and 1971 would be Indian citizens under the Assam Accord and NRC, but they would not be eligible for safeguards meant for "Assamese people".
8. **What are these safeguards?**

- a. Among various recommendations, key is reservation of seats in Parliament, Assembly and local bodies; reservation in jobs; and land rights. The panel recommends Assamese people be given:
 - i. 80 to 100% reservation in the parliamentary seats of Assam, Assembly seats and local body seats be reserved for the “Assamese people”.
 - ii. 80 to 100% of Group C and D level posts (in Assam) in central government/semi-central government/central PSUs/private sector
 - iii. 80 to 100% of jobs under Government of Assam and state government undertakings; and 70 to 100% of vacancies arising in private partnerships
 - iv. Land rights, with restrictions imposed on transferring land by any means to persons other than “Assamese people”.
9. Several other recommendations deal with language and cultural and social rights. On language, it recommends:
 - a. Assamese language shall continue to be official language throughout state with provisions for use of local languages in Barak Valley, Hill Districts, and Bodoland Territorial Area Districts.
 - b. Mandatory provision of an Assamese language paper for recruitment in state government services with alternatives for Barak Valley districts, BTAD and Hills Districts.
 - c. To set up Academies for all-round development of each of indigenous tribal languages including, Bodo, Mishing, Karbi, Dimasa, Koch-Rajbongshi, Rabha, Deuri, Tiwa, Tai and other indigenous languages.



TOPIC 11. GST SLABS 2020

1. Goods and Services Tax (GST), rolled out in July 2017, marked a major shift from the traditional production-linked tax to a consumption-based tax. The new regime subsumed state levies such as VAT, sales tax, octroi/entry tax together with central levies such as central excise and service tax. States gave up some of their taxation rights in lieu of the Centre passing on their revenue share under GST and also compensating them for potential revenue losses in the first five years.
2. The tussle between the Centre and the states, which has escalated in recent weeks, involves the passing on of this share, and the payments under the compensation cess head.

3. What does GST include?

- a. GST includes a tax levied by the Centre on the intra-state supply of goods and/or services called Central GST (CGST), and a corresponding tax levied by states/UTs called the State GST (SGST/UTGST) on these goods and services. CGST and SGST are levied simultaneously on every purchase of goods and services, except exempted ones. The consumer pays an overall rate under one of the major tax slabs — 5%, 12%, 18% and 28% — out of which half accrues to the Centre and half to the state where consumption happens.
- b. Integrated GST (IGST) is the GST levied on inter-state transactions and exports/imports of goods and services. IGST is a combination of SGST and CGST and is first levied and administered by the Centre, which then distributes it between the consuming state and itself.
- c. In addition, a compensation cess - ranging from 1-200% - is levied on sin and luxury goods like cigarettes, pan masala and certain categories of automobiles, over and above topmost slab of 28%.

4. How does all this work?

- a. Take spoons and forks, for which the GST is 12%. A consumer will pay 12% on the price of the spoons and forks if she buys from a manufacturer in the same state (intra-state transaction). Then, 6% will be the Centre's share as CGST and 6% the state's share as SGST.
- b. For a wholesale (B2B) transaction, the GST allows the seller to claim input tax credit (ITC) by setting off the tax liability against the tax already paid. For example, a manufacturer in Andhra Pradesh sells spoons and forks to a shop in Andhra Pradesh (intra-state transaction). The shop-owner pays 12% to the manufacturer. When a customer buys these from his shop, she pays 12% GST on the final price. The shop-owner then takes ITC for the 12% he has already paid and deposits 12% GST with the authorities, removing the cascading effect of taxation. In the whole transaction, GST of 12% is in effect applied only once after availing ITC.
- c. However, if spoons and forks are manufactured in Andhra Pradesh and sold to a shop-owner in Maharashtra, the inter-state transaction attracts 12% IGST (6% CGST, 6% SGST). The IGST is levied and collected by the Centre, and the division with the consuming state happens later.
- d. Now, if a consumer buys from the shop in Maharashtra, she pays 12% GST (6% CGST, 6% Maharashtra GST). The shop-owner has already paid IGST on the input. Since GST is a destination-based tax, the state share in IGST from the transaction should accrue to the consumption state, Maharashtra, and not the exporting state, Andhra Pradesh. Therefore, the shop-owner can make use of the IGST as a credit to pay for the CGST and Maharashtra GST.
- e. The final apportionment of IGST thus happens between consuming state (Maharashtra) and Centre, after setting off the credit from the IGST payment made earlier in the exporting state.

5. How are states compensated?

- a. As per GST (Compensation to States) Act, 2017, states are guaranteed compensation for revenue loss on account of implementation of GST for a transition period of five years (2017-2022). The compensation is calculated based on difference between current states' GST revenue and protected revenue after estimating an annualised 14% growth rate from base year of 2015-16.
- b. The high rate of 14%, which has got compounded since 2015-16, has been seen as delinked from economic realities. While chairing the first few meetings of the GST Council, then

Finance Minister Arun Jaitley had proposed a revenue growth rate of 10.6% (the average all-India growth rate in the three years preceding 2015-16). Council meeting records show the suggestion of 14% revenue growth was accepted “in the spirit of compromise”.

6. How did compensation become an issue?

- a. Compensation payments to states started getting delayed since October last year as GST revenues started to slow down. The Covid-19 pandemic has widened the gap, with GST revenues declining 41% in the April-June quarter.
- b. While the 14% growth rate in tax revenue has been compounded over the base year 2015-16, collections have remained around the same level for two years. As a result, the states’ monthly protected revenue, which was Rs 49,020 crore for 2018-19 and Rs 55,882 crore for 2019-20, has risen to Rs 63,706 crore in 2020-21. In the ongoing financial year, the SGST revenue for July has been Rs 40,256 crore, while monthly protected revenue is Rs 63,706 crore, leaving a gap of Rs 23,450 crore (taking into account settlement of IGST). For April-July, only Rs 21,940 crore has been collected as compensation cess, including Rs 7,265 crore in July.
- c. The Centre on July 27 released Rs 13,806 crore to the states for March 2020, wrapping up the full payout for FY20 at Rs 1.65 lakh crore. Compensation remains pending for the four months of this financial year (April to July).

7. How is the dispute now placed?

- a. Fresh tensions have resulted after senior Finance Ministry officials are learnt to have reported Centre’s inability to compensate states in the near future, which was followed by the Attorney General of India’s legal opinion that the Centre does not have an obligation to pay for a revenue shortfall. The AG is learnt to have suggested that the GST Council can recommend to the Centre that it allow the states “to borrow on the strength of the future receipts from the compensation fund” and that the Centre will have to take the “final decision in the matter”.
- b. States such as Punjab, Kerala, Bihar are not in favour of being asked to borrow to bridge the revenue gap, that will be then repaid from the compensation cess fund. They are of the view that receipts in the compensation fund are likely to be too low to meet the revenue shortfall, let alone be used for repaying states for borrowing. They have suggested raising tax rates or cess rates, or bringing in more items under the 28% slab and the compensation cess. The rest of the revenue gap, Punjab has suggested, can be bridged through market borrowing by the Centre that can then compensate the states.
- c. On August 1, Finance Minister Nirmala Sitharaman said the Attorney General’s view on GST compensation was sought after consultation with the states and a meeting of the GST Council would be held now to discuss the legal opinion. A GST Council meeting on compensation was slated to be held in July but was not. It is expected to be held shortly.

TOPIC 12. SUNSPOTS

1. A massive Sunspot group, AR2770, was observed last week, spaceweather.com claimed using images of the Sun's surface from NASA's Solar Dynamics Observatory (SDO). According to the report, a few minor space flares have been emitted by this particular Sunspot group already, which has not caused anything major other than "minor waves of ionization to ripple through Earth's upper atmosphere".
2. Solar flares, when powerful enough, can disrupt satellite and radio transmission, and more severe ones can cause 'geomagnetic storms' that can damage transformers in power grids.

3. Sunspots

- a. A Sunspot is an area on Sun that appears dark on surface and is relatively cooler than surrounding parts. These spots, some as large as 50,000 km in diameter, are visible markers of Sun's magnetic field, which forms a blanket that protects solar system from harmful cosmic radiation.
- b. On the photosphere– the outer surface of the Sun which radiates heat and light– Sunspots are the areas where the star's magnetic field is the strongest; around 2,500 times more than the Earth's magnetic field.
- c. Most Sunspots appear in groups that have their own magnetic field, whose polarity reverses during every solar cycle, which takes around 11 years. In every such cycle, the number of Sunspots increases and decreases.
- d. The current solar cycle, which began in 2008, is in its 'solar minimum' phase, when the number of Sunspots and solar flares is at a routine low.

4. Why Sunspots appear dark

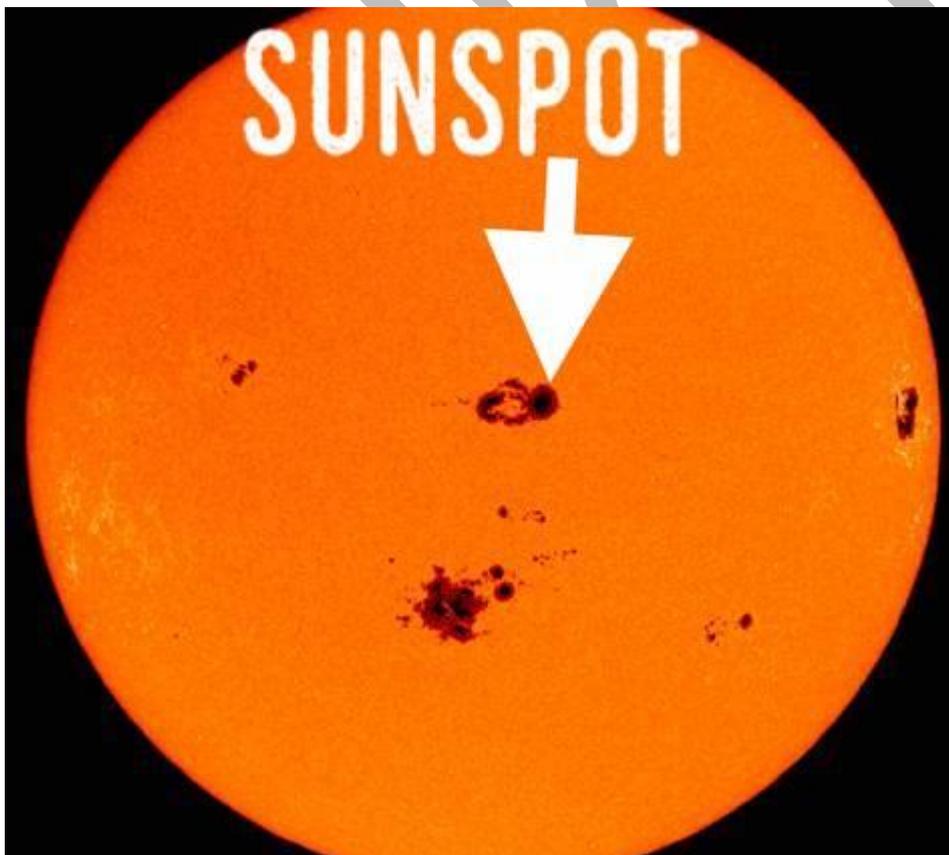
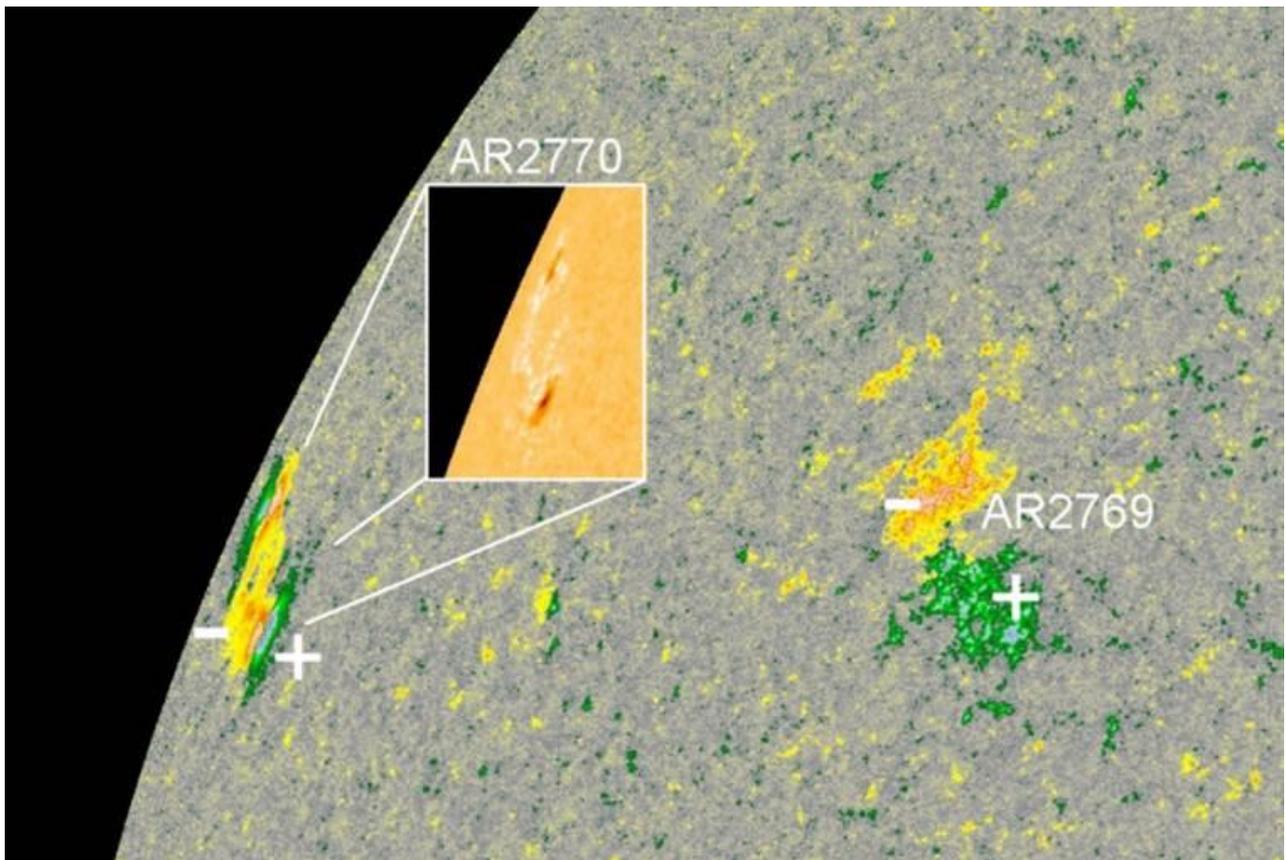
- a. Because Sunspots have high magnetic pressures, the atmospheric pressure in the surrounding photosphere reduces, inhibiting the flow of hot gases from inside the Sun to the surface.
- b. Due to this, the temperatures of Sunspots are thousands of degrees lower than the surrounding photosphere, which has a temperature of 5,800 degrees Kelvin. Sunspots temperatures are around 3,800 degrees Kelvin.
- c. Because they stop convective flow of heat and light, Sunspots appear dark. They typically consist of a dark region called 'umbra', which is surrounded by a lighter region called 'penumbra'.

5. Solar flares and Coronal Mass Ejections

- a. When a Sunspot reaches up to 50,000 km in diameter, it may release a huge amount of energy that can lead to solar flares. The flares are caused by explosions that are triggered due to the twisting, crossing or reorganising of magnetic field lines near Sunspots.
- b. At times, solar flares are accompanied by Coronal Mass Ejections (CME)– large bubbles of radiation and particles emitted by the Sun that explode into space at high speed. CMEs can trigger intense light in the sky on Earth, called auroras.
- c. The solar flare explosion's energy can be equivalent to a trillion 'Little boy' atomic bombs dropped on Hiroshima and Nagasaki in 1945.

6. Damage caused by solar flares

- a. Solar flares can have a major effect on radio communications, Global Positioning Systems (GPS) connectivity, power grids, and satellites.
- b. In 1967, a major solar flare almost led to a nuclear war during Cold War, as per a space.com report. In May that year, US Air Force's Ballistic Missile Early Warning System radar sites in Alaska, Greenland and UK got jammed due to flare, causing US officials to mistakenly hold Soviet Union responsible for radar failures. It was only after scientists at North American Aerospace Defense Command (NORAD) informed US leaders of solar flare that matter deescalated.
- c. Recently, scientists have developed a new model that can successfully predict seven of Sun's biggest flares from last solar cycle, out of a set of nine with help of NASA's Solar Dynamics Observatory.



TOPIC 13. LANGUAGE

1. For decades, researchers have examined why women are underrepresented in science and associated fields, whether in college and university or at the workplace. Studies have found that the reason is often cultural: Girls grow up believing that boys are better at these fields, even when they are capable of excelling themselves.
2. A new study has now examined whether these cultural stereotypes are rooted in the languages that people speak. It has found that gender associations in a language do predict people's implicit gender associations. In other words, the findings suggest that linguistic associations may be related to people's implicit judgement of what women can accomplish.
3. The study is published in the journal Nature Human Behavior.

4. Words & connections

- a. The researchers examined 25 languages for gender stereotypes that undermine efforts to support equality across career paths in STEM (science, technology, engineering and mathematics). English and Hindi were among the 25 languages.
- b. Specifically, researchers Molly Lewis of Carnegie Mellon University (Pennsylvania) and Gary Lupyan of University of Wisconsin-Madison examined how words co-occur with women compared to men. "The implicit biases don't come from any particular phrases. The bias that we find comes from looking at which words co-occur next to each other in a lot of text, and what words tend to have the same neighbors," Lewis told The Indian Express by email.
- c. The degree of gender bias in languages. (Credit: Lewis & Lupyan, 2020; Nature Human Behavior)
- d. By training machine learning models on large corpora of texts in each language, the researchers examined, for example, how often 'woman' is associated with 'home', 'children' and 'family', whereas 'man' is associated with 'work,' 'career' and 'business'.
- e. "We find, for example, that the words 'man' and 'career' tend to co-occur with each other more often than 'woman' and 'career' in nearly all 25 languages that we looked at," Lewis said.

5. Psychological bias

- a. To quantify implicit gender bias in people, the researchers measured their performance in a psychological task called the Implicit Association Test.
- b. The results suggested that if one speaks a language with high gender bias, then one is more likely to have a gender stereotype that associates men with career and women with family.
- c. "Our study shows that language statistics predict people's implicit biases — languages with greater gender biases tend to have speakers with greater gender biases," Lupyan said in a statement.
- d. Curiously, countries with a larger older population were found to have a stronger bias in career-gender associations. Given that India has a young population, did speakers of Hindi — the only Indian language among the 25 studied — show lower implicit bias than others? Lewis replied: "Participants in India had a relatively low bias to associate men with career and women with family on the Implicit Association Task."

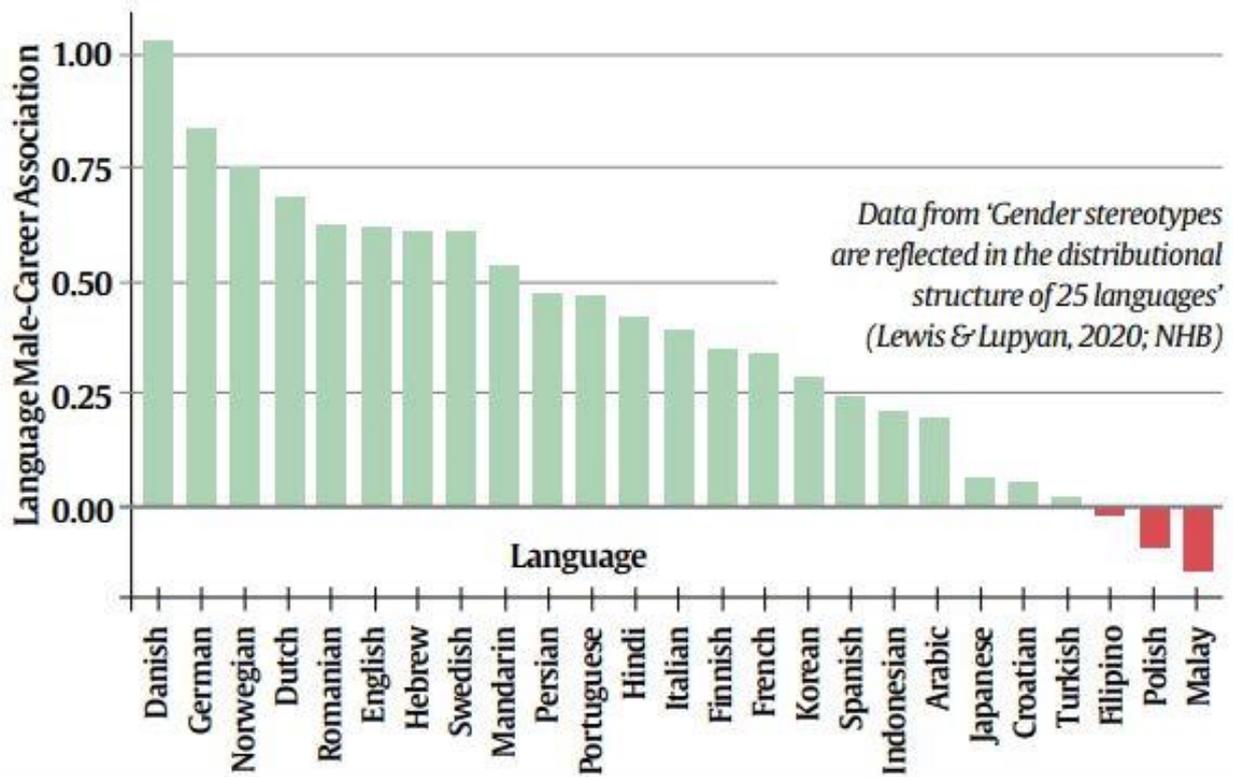
6. The STEM connection

- a. The study used a gender equality metric reported by UNESCO — the percentage of women among STEM graduates in tertiary education. It found that countries with weaker associations between men and career tended to have more women in STEM fields. However, there was no relationship between the percentage of women in STEM fields and the language's explicit gender association measure, as quantified in the study.

7. Limitations

- a. The results are correlational, although the researchers said the findings do suggest a causal influence. They also noted that the Implicit Association Test used in the study has been criticised for low reliability. They have called for additional work to explore language statistics and implicit associations with gender stereotypes.

LANGUAGES BY DEGREE OF GENDER BIAS



TOPIC 14. QUIT INDIA MOVEMENT

1. On August 8, 78 years ago, Mahatma Gandhi gave the call for British colonisers to “Quit India” and for the Indians to “do or die” to make this happen. Soon after, Gandhi and almost the entire top Congress leadership was arrested, and thus began a truly people-led movement in our freedom struggle, eventually quelled violently by the British, but leaving behind a clear message – the British would have to leave India, and no other solution would be acceptable to its masses.

2. What led to the events of August 1942

- a. While factors leading to such a movement had been building up, matters came to a head with the failure of the Cripps Mission.
- b. The World War II was raging, and a beleaguered British needed the cooperation of their colonial subjects in India. To this end, in March 1942, a mission led by Sir Stafford Cripps arrived in India to meet leaders of the Congress and the Muslim League. The idea was to secure India’s whole-hearted support in the war, in return for self-governance.
- c. However, despite the promise of “the earliest possible realisation of self-government in India”, the offer Cripps made was of dominion status, and not freedom. Also, there was a provision of the partition of India, which was not acceptable to the Congress.
- d. The failure of Cripps Mission made Mahatma Gandhi realise that freedom would be had only by fighting tooth and nail for it. Though initially reluctant to launch a movement that could hamper Britain’s efforts to defeat Fascist forces in the World War, the Congress eventually decided to launch a mass civil disobedience. At the Working Committee meeting in Wardha in July 1942, it was decided the time had come for the movement to move into an active phase.

3. The Gowalia Tank address by Gandhi

- a. On August 8, Bapu addressed the people from Mumbai’s Gowalia Tank maidan. “Here is a mantra, a short one, that I give you. Imprint it on your hearts, so that in every breath you give expression to it. The mantra is: ‘Do or Die’. We shall either free India or die trying; we shall not live to see the perpetuation of our slavery,” Gandhi said. Aruna Asaf Ali hoisted the Tricolour on the ground, and the Quit India movement had been officially announced.
- b. By August 9, Gandhi and all other senior Congress leaders had been jailed. Bapu was kept at the Aga Khan Palace in Pune, and later in the Yerawada jail. It was during this time that Kasturba Gandhi died at the Aga Khan Palace.

4. People’s movement

- a. The arrest of the leaders, however, failed to deter the masses. With no one to give directions, people took the movement into their own hands.
- b. In Bombay, Poona and Ahmedabad, lakhs of people clashed with the police on August 9. On August 10, protests erupted in Delhi, UP and Bihar. There were strikes, demonstrations and people’s marches in defiance of prohibitory orders in Kanpur, Patna, Varanasi, and Allahabad.
- c. The protests spread rapidly into smaller towns and villages. Till mid-September, police stations, courts, post offices and other symbols of government authority were attacked. Railway tracks were blocked, students went on strike in schools and colleges across India and distributed illegal nationalist literature. Mill and factory workers in Bombay, Ahmedabad, Poona, Ahmednagar, and Jamshedpur stayed away for weeks.
- d. In some places, the protests were violent, with bridges blown up, telegraph wires cut, and railway lines taken apart.
- e. Ram Manohar Lohia, describing the movement on its 25th anniversary, wrote: “9th August was and will remain a people’s event. 15th August was a state event... 9th August 1942 expressed the will of the people — we want to be free, and we shall be free. For the first time after a long period in our history, crores of people expressed their desire to be free...”

5. The slogan ‘Quit India’

- a. While Gandhi gave the clarion call of Quit India, the slogan was coined by Yusuf Meherally, a socialist and trade unionist who also served as Mayor of Mumbai. A few years ago, in 1928, it was Meherally who had coined the slogan “Simon Go Back”.

6. Outcome

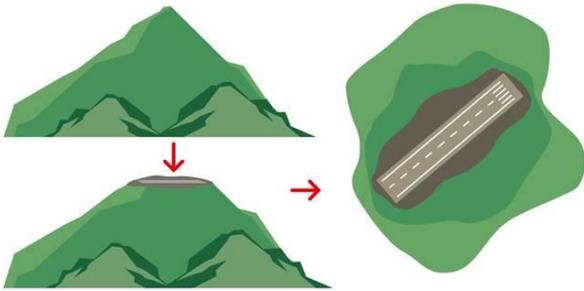
- a. The Quit India movement was violently suppressed by the British – people were shot, lathi-charged, villages burnt and enormous fines imposed. In the five months up to December 1942, an estimated 60,000 people had been thrown in jail.
- b. However, though the movement was quelled, it changed the character of the Indian freedom struggle, with the masses rising up to articulate as they had never before – the British masters would have to Quit India.



TOPIC 15. TABLETOP RUNWAYS



WHAT ARE TABLETOP RUNWAYS

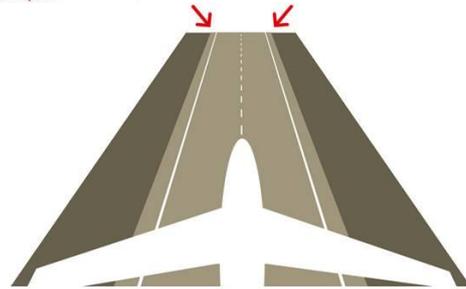


They are generally constructed by chopping off hilltops, which creates a plateau or a tabletop. They may have steep precipices on either sides that drop into deep gorges.

#QUIXPAINED



DECEPTIVELY DANGEROUS



The runway appears to be on contiguously levelled land despite the drop ahead, leading to an optical illusion. Without much of a margin, it's easy to overshoot the runway.

#QUIXPAINED



TABLETOP RUNWAYS IN INDIA AND ELSEWHERE



#QUIXPAINED



WHAT WENT WRONG IN KOZHIKODE

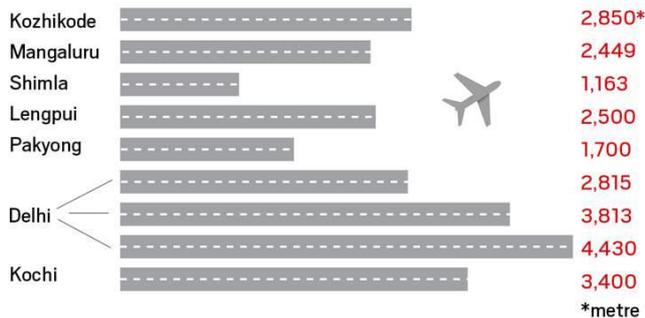


In Kozhikode, as in Mangaluru in 2010, the aircraft overshot the runway upon touching down and fell into a 35-ft deep valley, resulting in the plane's hull breaking up. Heavy rains posed its own challenges.

#QUIXPAINED



KOZHIKODE VS OTHER RUNWAYS



Text: Pranav Mukul; Illustration: Mithun Chakraborty

#QUIXPAINED

TABLETOP RUNWAY ATOP CHOPPED-OFF HILL



Path of the Air India Express aircraft minutes before it touched the ground at Kozhikode airport. Bad weather conditions complicated the approach for the pilots. Flight path: Flightradar24; Map: Google Earth

1. **The story so far:**

- a. On August 7, a Boeing 737 of Air India Express (the low cost subsidiary of national carrier Air India) on a special 'Vande Bharat' repatriation flight from Dubai to Kozhikode overshot the runway. There were '174 passengers, 10 infants, 2 pilots and 4 cabin crew on board'. In what was its second attempt, flight IX-1344 touched down on runway 10 of Calicut International Airport at 7.40 p.m., went past the runway end and safety area, and fell into a valley. The fuselage split in the impact. Both pilots lost their lives; there were casualties and injuries of varying degrees among passengers. There was no fire on board. The Digital Flight Data Recorder and Cockpit Voice Recorder have been recovered. The accident has once again turned the spotlight on operations to what are called 'tabletop airports' in India.

2. **What is a 'tabletop airport' and how many are there in India?**

- a. As the name suggests, it is an airport located and built on top of a plateau or hilly surface, with one or both ends of the runway overlooking a drop. The airports in the country which would count as "tabletops", are namely Lengpui (Mizoram), Shimla and Kullu (Himachal Pradesh), Pakyong (Sikkim), Mangaluru (Karnataka), Kozhikode and Kannur (both Kerala).
- b. A retired aviation official says there is no such term as a 'tabletop airport' in any International Civil Aviation Organisation (ICAO) technical document. But India's statutory aviation body, the Directorate General of Civil Aviation (DGCA), refers to these airports in this manner by way of highlighting safety measures during operations to these runways. The official adds that there are not many differences between a 'normal' airport and a 'tabletop' airport.

3. **Why are these airports drawing attention now?**

- a. While there have been some aviation incidents at these airports, it was the accident in Mangaluru on May 22, 2010, that highlighted operational risks. Here, an Air India Express flight again, from Dubai to Mangaluru, overran the runway while landing on runway 24. Flight IX-812 hit an antenna and then went down a steep embankment after which there was a fire. Of the 160 passengers and 6 crew, 158 lost their lives. The case focused attention on the nature of operations to such airports, especially their shorter runways.
- b. Kozhikode has two runways of 2,700 metres in length. It was 2,860 metres but 'shortened' to accommodate a safety feature called RESA, or Runway End Safety Area (of 240 metres), which is a means "to limit the consequences when there is an aircraft overrun during landing, a rejected take-off, or even undershoots the landing area". In "tabletop" airport operations, the ICAO says a RESA of 90 metres is mandatory, while 240 metres is recommendatory. The runways are Instrument Landing System (ILS) CAT 1 enabled and the airport has a range of visual aids which include simple approach lighting. In addition, all obstacles are lit. Both runways have Required Navigation Performance approach.
- c. The retired official says there have been Code E aircraft (based on wingspan) operations to Kozhikode airport. Kannur and Mangaluru too have had widebody aircraft operations. The largest aircraft at Kozhikode (and at any tabletop airport so far) has been Air India's 423-seater Boeing 'jumbo' 747, operating on the Kozhikode-Jeddah sector.

4. **What were the recommendations made after the Mangaluru crash?**

- a. In its report on the crash, the court of Air Marshal B.N. Gokhale, former Vice-Chief of Air Staff, Indian Air Force (and its team of aviation expert assessors) made a series of recommendations in a 191-page document of October 2010. These were addressed to the airline operator (Air India and Air India Express). To the Airports Authority of India, it pointed out issues like "avoidance of the downward slope in the overshoot area particularly on 'tabletop' runways; the need for a ground arresting system for aircraft — such a facility is maintained at almost all airfields of the Indian Air Force'; a visual reference system to alert the pilot (while landing) of the remaining distance to be covered; location of the ATC tower, approach and area radars; the role of the Rescue and Fire Fighting service, aerodrome risk assessment and, finally, recommendations for the DGCA.

5. **Is there any ICAO document on operations?**

- a. The retired official says there is an ICAO document 9981 for airports, which also serves as a guideline for compatibility study of the operation of larger aircraft in a comparatively smaller aerodrome. The issue of growth versus aviation services is a worldwide issue requiring the development of small aerodromes for the use of bigger aircraft in a safe manner, especially as demand for air services grows from existing airports. In this document, the elements to be assessed include aerodrome infrastructure and its ground handling capabilities, and aeroplane characteristics. Each element is assessed technically to see whether these are compatible for new types of aircraft proposed to be operated in such aerodromes. Thereafter, a proper safety assessment is done to assess the risk associated with the operation of higher category of aircraft. Risk mitigation measures are suggested in order to bring those risks within “tolerable limits”. Such a compatibility study and safety assessment report will be scrutinised by the regulatory aviation authorities and if found satisfactory, the no objection certificate for operation of such higher category aircraft is issued.
- b. When a need was felt to upgrade services at Kozhikode, the airport undertook a runway recarpeting and strengthening exercise between 2015 and 2017.

6. **Could safety measures be better in terms of the ground infrastructure?**

- a. While RESA is in vogue, the term EMAS has been tossed up, which is mandatory at all international airports in the United States. Called Engineered Materials Arrestor/Arresting System, it is made of engineered lightweight and crushable cellular cement/concrete.
- b. Used at the runway ends, it acts as a safety barrier and successfully stops an aircraft overrun. Its retarding effect increases as one moves away from the runway edge. In demonstrations in the West, it ensured good aircraft safety. It must be noted that these are laid in easily replaceable blocks in the overrun area. The material is engineered specifically for the airport it is to be used, says the retired official. It is said to be ideal for use in ‘tabletop’ airports. About 75m of EMAS can serve the purpose of 240m of RESA without causing any damage to the aircraft.

7. **How are operations from a pilot’s point of view?**

- a. A senior airline commander, who is also an instructor and check pilot, says that in reality, there is no specific training that can be given for ‘table top’ runways. However, airlines conduct route checks for short runways. He says that one needs to understand that the landing technique and precautions taken are the same for all runways except that there is no scope for error on short and/or ‘tabletop’ runways. As aircraft accident data show, “runaway overshoots” (excursion) occur as often on non-‘tabletop’ runways. But in such cases, the aircraft, for obvious reasons, has a much better probability of surviving. However, an overrun by even a few metres can turn catastrophic for ‘tabletop’ runway landings.
- b. During pilot training, the emphasis is on aiming for 1,000 ft from the beginning of the runway and landing within the touchdown zone. Pilots are also trained to execute a go around if they do not make contact within the touchdown zone. Now, the senior commander says, there is a lot of emphasis on this aspect and pilots are asked to have this uppermost in mind while operating on a short or ‘tabletop’ runway . Further, Crew Resource Management is a mandatory training for all pilots following the recommendations made after the Mangaluru crash, which include classroom and simulator training. Here, the senior commander says, emphasis is placed on training the copilot to ask the commander to initiate a go around in case of an unstable approach or if the aircraft has not touched down within touchdown zone. He or she is even trained to take over as a last ditch measure in case the commander does not heed the copilot’s safety advice to initiate a go around. Other than this, classroom training and simulator training are provided to explain various types of optical illusions including those caused by ‘tabletop’ runways. There is a lot of training done on the simulator for landing in low visibility, heavy rain and winds. This happens during initial induction training and every six

months thereafter. As the monsoon is a major factor in Indian aviation, monsoon training is given during initial command training before release. The senior commander adds that certain restrictions are placed before releasing the pilot in command for monsoon operations. Such comprehensive training helps in any landing on any runway and can especially be life saver in 'tabletop' operations. The DGCA has mandated a Monsoon Minimum Equipment List as far as aircraft operations are concerned. Here it is mandatory that aircraft devices used in braking or slowing such as brakes and reversers are completely operational.

8. **What is the role of the air traffic control?**

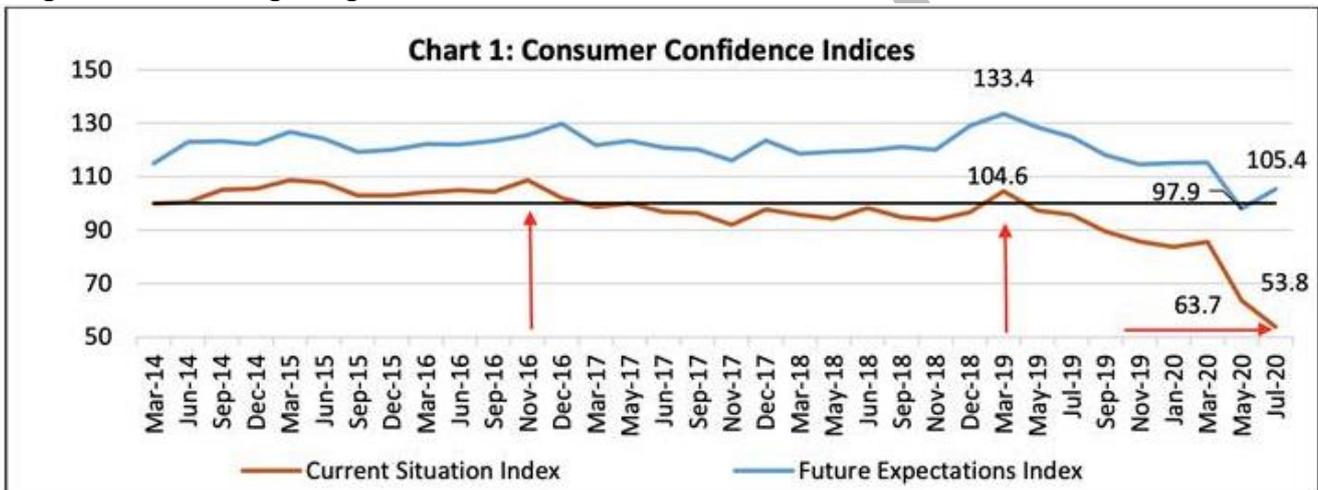
- a. The ATC only has jurisdiction to provide the pilots with weather conditions including visibility, rain and winds. The minimum visibility is already prescribed, says the senior commander. The ATC will not give clearance to commence approach if visibility is below this minima, but if the visibility meets the requirements then the ATC cannot stop the pilot. The pilot commences approach when visibility is within minima and descends towards the runway to land. At a point called Decision Height, or DH (normally around 200 ft) in case of ILS, and at a point called Minimum Descent Altitude, or MDA, in case of a non precision approach, the pilot must be aware of the runway environment in order to make a safe landing. If he has not, then he has to initiate a go around, circle and return for another attempt at landing. Many a time, the runway cannot be seen even when reported visibility conditions meet the requirements as the conditions measurable on ground by the meteorological department are not the same as the instantaneous condition on the approach path. Only a pilot can observe this.
- b. So essentially, after a point, the ATC has a limited role, says the senior commander.
- c. If the declared visibility meets the prescribed minima, there is nothing wrong in the pilot attempting an approach. But trying to come in below DH and MDA, if the runway is still not visible is illegal, says the senior commander. No pilot does that, he adds.
- d. One needs to understand, he says, that in heavy rain, even if the runway is visible in time, sometimes due to sudden burst of heavy rain during the final touchdown, it is very difficult for the flight crew to fine tune their judgement of flare height. This may even cause a pilot to land beyond the touchdown zone. Finally, he says, all airline companies ask their pilots to divert in case of a thunderstorm and in their opinion if the weather is unsafe even if it meets the minima. But if there is only rain and no thunderstorm seen on aircraft radar then a pilot will attempt an approach and take decision at DH/MDA.

9. **What must Indian aviation do?**

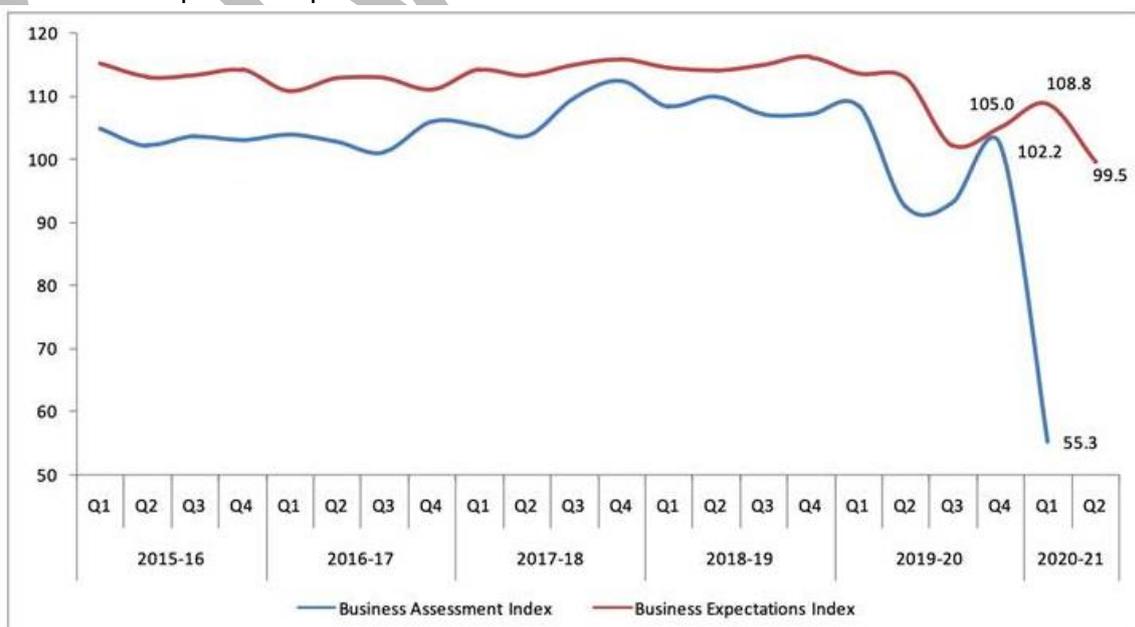
- a. Aviation safety expert Captain Mohan Ranganathan says India needs to move away from the culture where, after every fatal incident, officials say runways will conform to ICAO standards, the investigation will identify the accident cause, and steps will be taken to rectify the deficiencies. He says if the government is serious it needs to declare Kozhikode as a Code 3C airport, for only narrow body aircraft; ban landings on runway 10 during the monsoons; ensure that all runway condition standards are enforced; ensure approach and landing accident training for pilots is enforced strictly and, finally, be transparent and safety-oriented and not look at commercial interests.

TOPIC 16. INDIAN ECONOMY

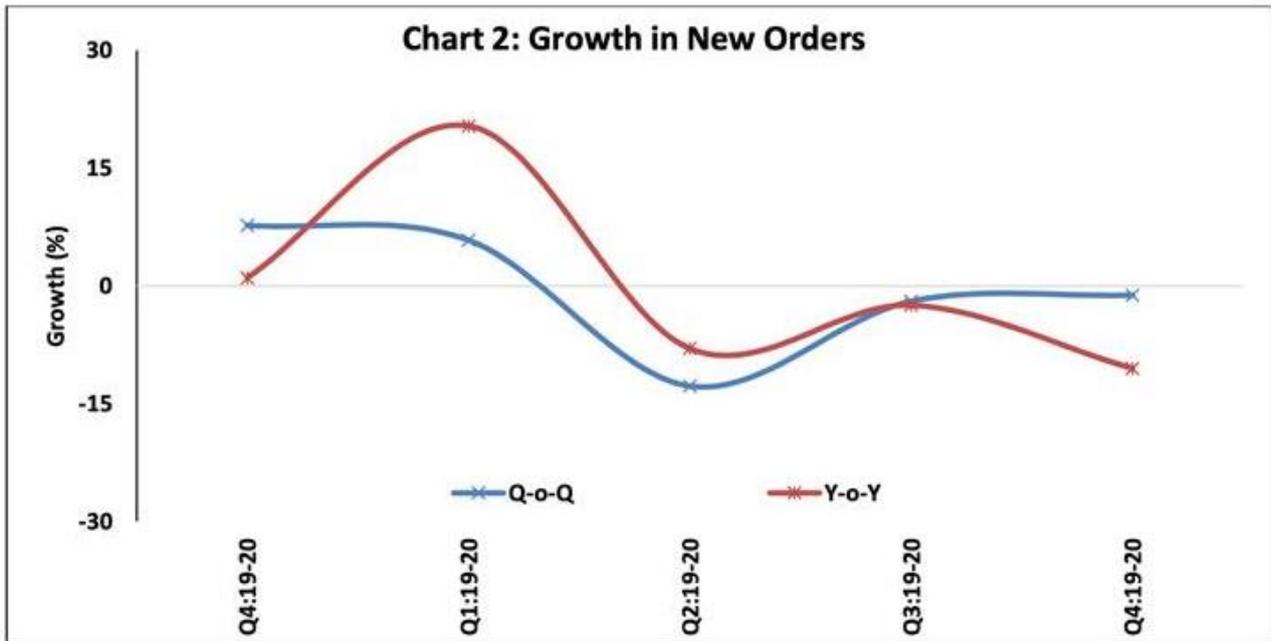
1. John Kenneth Galbraith, the Canada-born US economist, who also served as the ambassador to India in the early sixties, held that “There are two kinds of forecasters: those who don’t know, and those who don’t know they don’t know”.
2. So with apologies to Galbraith, let’s try to look at five charts, courtesy the Reserve Bank of India and the five surveys it conducts regularly, to map the state of the economy.
3. **Chart 1** alongside maps the state of consumer confidence in the economy. The red line maps the current consumer confidence and the blue line tracks the consumer expectation a year from now. Over 5,300 households across 13 major cities in India are asked questions about the economic situation, income, spending, employment and the price level.
4. As red line shows, consumer confidence index continues to plummet and has hit an all-time low of 54 in July. It is interesting to note that past two peaks were in March 2019 - time when current government was getting re-elected - and in November 2016 - when demonetization was announced.



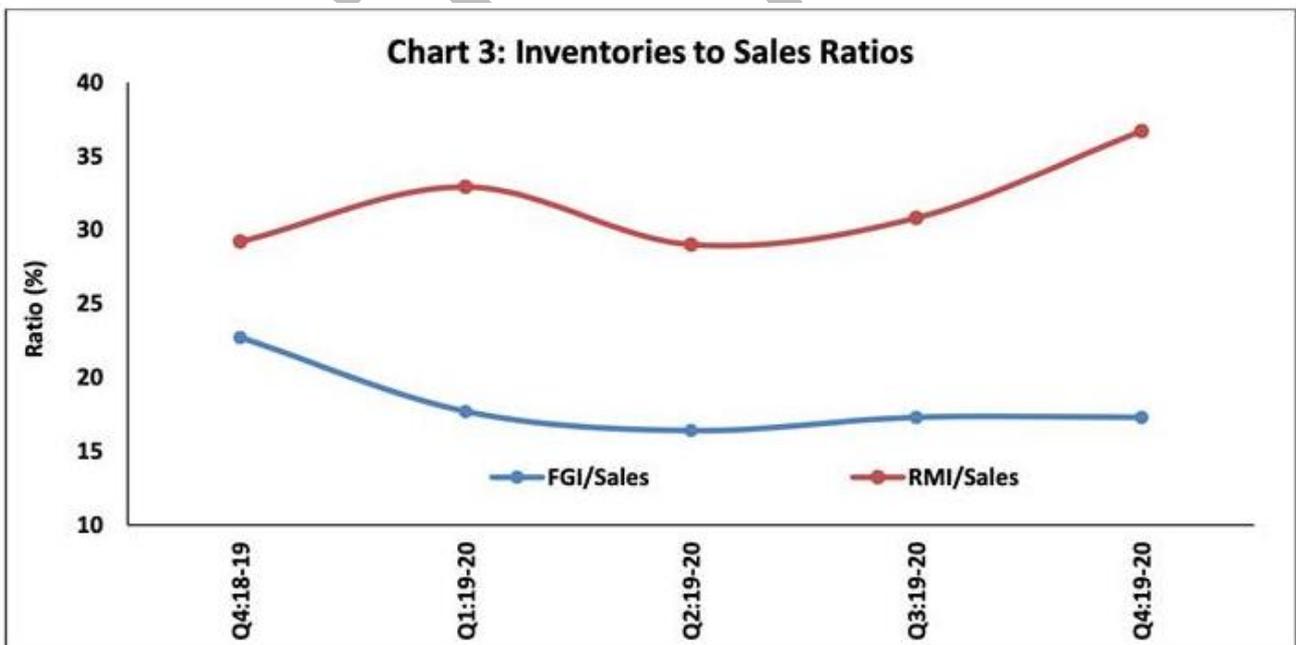
5. **Chart 2** captures business confidence of Indian manufacturing companies for Q1:2020-21 (April, May, June) — shown by blue line — and their expectations for Q2:2020-21 (July, August, September) — shown by red line. Both these business indices provide a snapshot of business outlook in every quarter and take values between 0 and 200, with 100 being threshold separating expansion from contraction.
6. As is evident, current business confidence index fell sharply to an all-time low at 55.3 in Q1:2020-21 from 102.2 in the previous quarter.



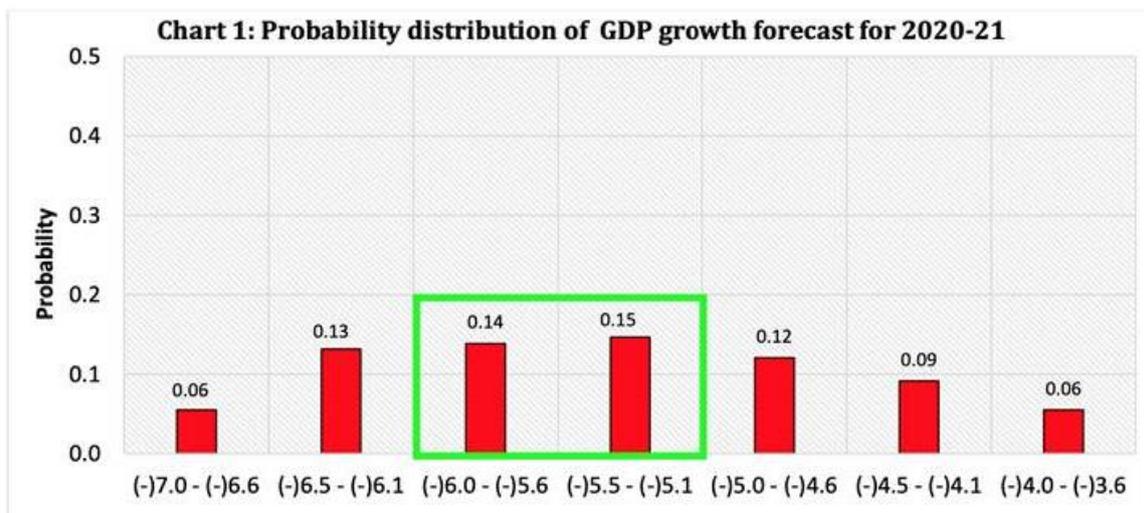
7. The next two charts are taken from the RBI's OBICUS (Order Books, Inventories and Capacity Utilization Survey) for the quarter January-March 2020 and it covered 364 manufacturing companies.
8. **Chart 3** shows that even before Covid hit India, new orders were witnessing negative growth (year-on-year), represented by the red line. Even quarter-on-quarter growth (blue line) was stagnant.



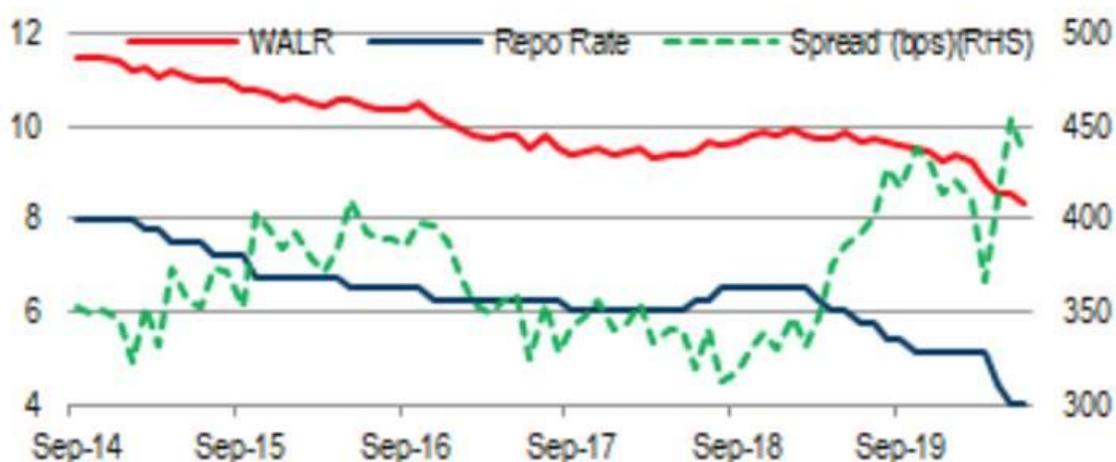
9. The red line in **Chart 4**, which shows the “ratio of raw material inventory to sales”, has been going up since the second quarter (July, August, September) of the last financial year. In essence, it shows the poor state of demand in the economy even before Covid.
10. The capacity utilisation (not shown in any chart) in manufacturing firms in the economy has come down from 76% in March 2019 to 69.9% in March 2020.



11. Finally, **Chart 5** shows that most professional forecasters — highlighted in green — expect the Indian economy to contract between 5% and 6% in the current financial year.
12. Given these five survey results, one could reasonably ask why the RBI did not cut interest rates this week in order to boost economic activity.



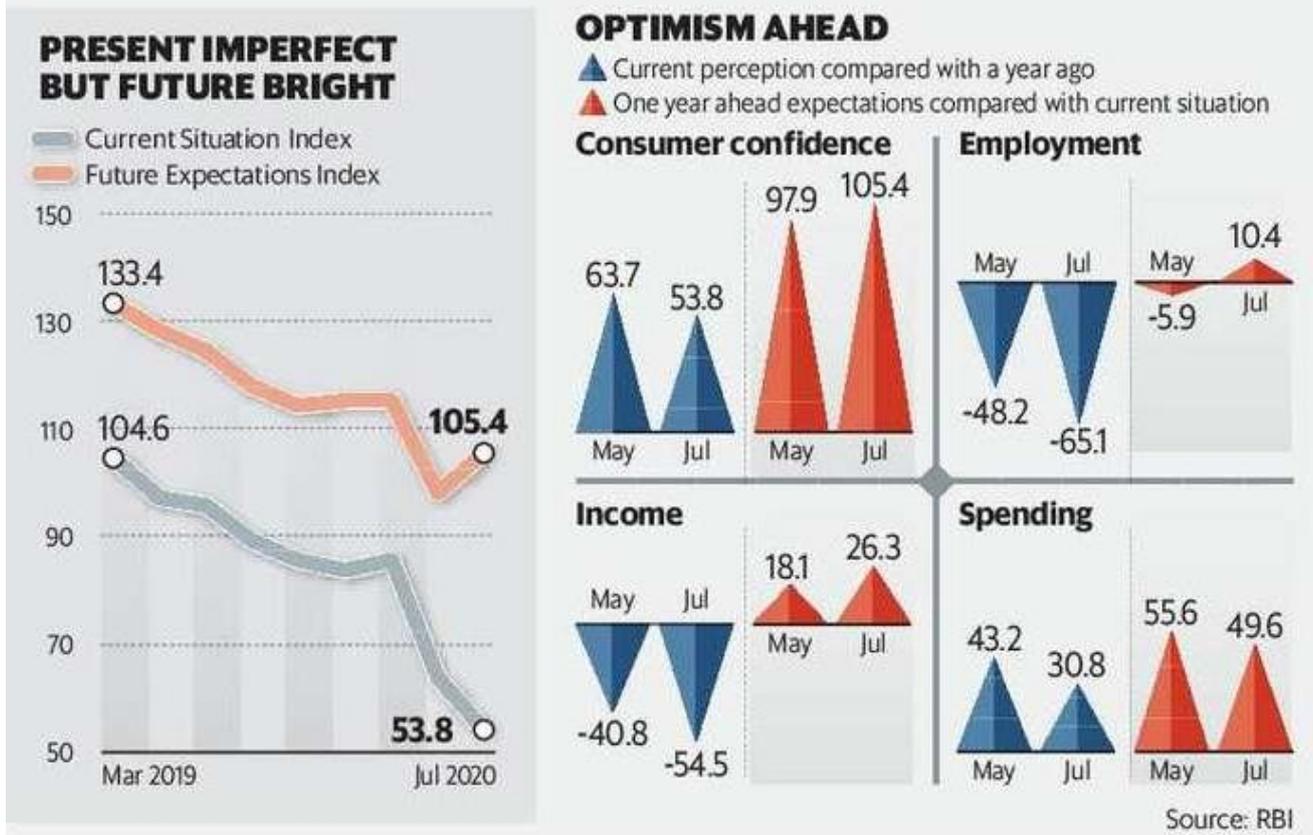
13. There was much consternation about this issue and perhaps deserves a little more detailed explanation.
14. As it turns out, there is rather compelling evidence to suggest that the RBI may not cut rates even in its next policy review on October 1.
15. You would have already read that RBI, which has been furiously cutting repo rate (rate at which it lends to banking system) since February 2019, **paused this time** because it was concerned about high inflation in economy. (To understand link between inflation and interest rate **read this explainer**).
16. It is true that RBI's focus is to ensure retail prices do not grow at a rate less than 2% or more than 6%; ideally, they should grow at 4%. This, in a nutshell, is so-called inflation-targeting regime. This calendar year, retail inflation has been above 6% in all months barring March and as such, RBI is obviously concerned.
17. But there are two other and less obvious reasons.
18. The first reason is that according to RBI Act, if retail inflation stays outside 2%-6% range for more than three consecutive calendar quarters, then the RBI Governor Shaktikanta Das would have to explain to the government why India's central bank failed to contain inflation within the specified range.
19. To be sure, there is a very real fear of this happening. Research analysts at ICICI Securities reckon that with retail inflation likely staying above 6%-mark in July and August, "there is a good probability of inflation averaging 6% or higher for three consecutive calendar quarters, which would trigger provision 45ZN in RBI Act requiring Governor to write a letter to government explaining the breach..."
20. The second reason, as shown in **CHART 6**, relates to poor monetary transmission. In other words, inadequate manner in which interest rate cuts by RBI are transmitted to broader economy which includes you and me.



Source: RBI, Credit Suisse

21. The red line in this chart represents the lending rate or the interest rate that banks charge people who borrow money from it. The blue line is the repo rate or the interest rate that the RBI charges banks when banks borrow from the RBI.
22. The crucial bit in the chart is the green dotted line that represents the difference between the blue and red lines. According to Neelkanth Mishra of Credit Suisse, this difference is at an all-time high.
23. In other words, while RBI is reducing the interest rate it charges the banks, the banks have not reduced their lending rates to you and me commensurately enough. In fact, this difference is at a record high.
24. That is why it makes sense for RBI to wait for greater monetary transmission to happen before it cuts repo rate further.
25. In conclusion: Even though economy, especially manufacturing sector that has the highest potential to create jobs, is running on empty, the RBI may not be able to provide any further direct boost.
26. The onus of propelling growth over the next 3-4 months is perhaps solely on the central government.

Consumer confidence fell to a record low in July, an RBI survey showed. There is a glimmer of hope though, with consumers turning cautiously optimistic about the coming year.



TOPIC 17. NATIONAL DISASTER RESPONSE FORCE

1. Teams of rescuers from the National Disaster Response Force (NDRF), in their orange uniforms, are now a familiar sight at most of the natural calamities or man-made disasters in India. On Friday, you might have seen images of personnel conducting rescue operations after an Air India Express flight **crash landed in Kerala's Kozhikode**. You also may have noticed personnel helping out in Mumbai, when the heavy rains cause waterlogging in several parts of the city. The NDRF is equipped and trained to handle a range of difficulties, from borewell accidents to chemical, biological and radioactive emergencies.
2. Amid a busy season for the agency, a look at how it came into being, how personnel are deputed from the Central Armed Police Forces (CAPF), and how they are trained.
3. **Origins lie in the National Disaster Management Act, 2005**
 - a. Parliament passed National Disaster Management Act in 2005 as a much-needed step towards determining responsibility and accountability for disaster response, something which was highlighted by major calamities like 2001 earthquake and 2004 tsunami. The legislation was also result of ongoing discussions about disaster management on international forums at time. The law laid down a legal framework for disaster response at national, state and district level.
 - b. The Act paved way for establishing Disaster Management Authorities at the national, state and district levels, setting up the National Disaster Response and Mitigation Funds, and formation of the National Disaster Response Force (NDRF).
 - c. The National Disaster Management Authority is chaired by the Prime Minister.



4. **The constitution of NDRF and its structure**

- a. NDRF was raised in 2006, initially with eight battalions, and now has 12 spread across country.
- b. Each battalion, which has a sanctioned strength of 1,150 rescuers, caters to particular states as their areas of responsibility. In case required, teams from other battalions are moved for emergency response.
- c. Battalions are divided into rescue teams which are self-contained emergency response units with specialist search and rescue groups, engineering, technical, electrical experts along dog

squads and paramedics. NDRF functions under purview of Ministry of Home Affairs (MHA) and is headed by a Director General.

- d. NDRF officials believe that strategies of preemptive availability and pre-positioning of teams anticipating emergency situations, facilitated by nationwide presence of its battalions, has made sure that damages are contained. In many cases, NDRF teams have been airlifted by Indian Air Force (IAF) for deployment. It has been recently announced that four more NDRF battalions will be raised, and teams of women rescuers will also be inducted.



5. Personnel and training of the NDRF

- a. The NDRF gets personnel and officers on deputation from the CAPF for a period of seven years. After serving their tenure, personnel go back to their force.
- b. Currently, NDRF has battalions staffed by personnel from the Central Reserve Police Force (CRPF), Border Security Force (BSF), Central Industrial Security Force (CISF), Indo Tibetan Border Police (ITBP) and Sashastra Seema Bal (SSB).
- c. After personnel and officers are deputed to the NDRF, they undergo a first responder course for five months. Subsequently, sections of personnel get advanced specialised training in deep diving, special search and rescue, collapsed structure search and rescue, Chemical Biological Radiological Nuclear emergencies and also psycho-social intervention. Some of the personnel further undergo specialised training with national and international institutions including those on chemical and biological warfare situations.
- d. There are some very specific and specialised training modules like the borewell rescue course — because of a number of incidents across India where children fall into uncovered borewells.

6. NDRF operations

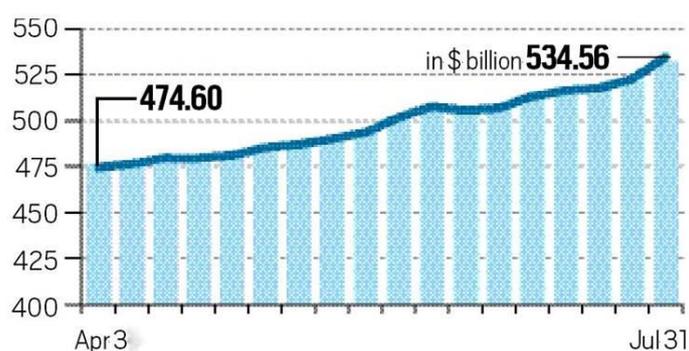
- a. The agency has conducted relief, rescue, evacuation operations during all the major natural or man-made disasters in the country, including floods, cyclones, earthquakes, landslides, structure collapses and even some cases of retrieval or radiological materials. NDRF teams have also responded to road and train accidents, and also boat capsizes.
- b. NDRF has received global appreciation for aiding Japan in 2011, when it was struck by an earthquake, tsunami and a nuclear emergency. It was also praised for its efforts in 2015 Nepal earthquake.
- c. While the NDRF has been able to keep upgrading its technology, officials say more needs to be done. For example, the agency acquired Unmanned Aerial Vehicles in the past, but officials say an all weather UAV which can even function in extreme conditions is the need of the hour. Officials said they also require upgraded versions of life detection systems, which will further enhance capabilities during structure collapse responses.
- d. While the NDRF will remain the main national agency, there is urgent need to build efficient State Disaster Response Forces (SDRFs) across states.

TOPIC 18. FOREX RESERVES



1. Covid-hit India's foreign exchange reserves jumped by a record \$11.9 billion in week ending July 31 to hit a **fresh high of \$534.5 billion**, making it 5th largest holder of reserves in world. During 10-month period between September 27, 2019 and July 31, 2020, foreign exchange reserves have swelled by \$100 billion.
2. At a time when the economy is under stress and the growth is expected to contract in 2020-21, the rising forex reserves have come as a breather as it can cover India's import bill of more than one year.
3. **India's foreign exchange reserves: How has the rise been?**
 - a. Trend of rising foreign exchange reserves started after Finance Minister Nirmala Sitharaman announced a sharp cut in corporate tax rates on September 20, 2019. While investor sentiments turned weak after budget announcement in July to impose higher surcharge, government's decision to reverse its budget decision relating to higher surcharge impact on FPIs along with a cut in the corporate tax rate in September played a significant role in turning the investors mood and draw them to invest in the Indian economy and markets.
 - b. Between September 20, 2019 and July 31, 2020, reserves have grown by \$106 billion and, since beginning of April, it has grown by \$60 billion. So, in 10 months India has added 25 % of reserves it had till September 20, 2019. India is now 5th in global ranking behind China (\$ 3,298 billion), Japan (\$ 1,383 billion), Switzerland (\$ 896 billion) and Russia (\$ 591 billion).
4. **What has led to this rise in forex reserves?**
 - a. The rise has been in several stages and has been led by different factors over last ten months.
 - b. Experts say that rise in foreign exchange inflows through Foreign portfolio investment (FPI) and Foreign Direct Investment (FDI) and has also been supported by decline in import bill over last 4-5 months on account of dip in crude prices and trade impact following Covid-19 pandemic.

FOREX RESERVES SO FAR IN FY21



5. **Some of the key factors include:**

- a. **FPI inflows:** While it started with a sharp rise in FPI inflows following the government's decision in September to cut corporate tax rate. Between April and December 2019, FPIs pumped in a net \$15.1 billion, according to the RBI.
- b. **Dip in crude oil prices:** India's oil import bill declined as the global spread of coronavirus since February 2020 not only roiled the stock markets but also led to a crash in the Brent crude oil prices. While crude accounts for almost 20 per cent of India's total import bill, Brent crude oil prices fell to levels of \$20 per barrel towards March end, it dropped further and traded between \$9 and \$20 in April. In January 2020, Brent crude was trading between \$60 and \$70 per barrel.
- c. **Import savings:** Lockdown across countries in response to Covid-19 pandemic impacted global trade and has resulted in a sharp dip in import expenditure — electronics, gold and also crude oil prices among others.
- d. **FDI inflows:** Between September 2019 and March 2020 foreign direct investments stood at \$23.88 billion and in April and May it amounted to \$5.9 billion. Market experts say that a lot of FDI has also come in June and July too, especially the Rs 1 lakh crore plus investment by global tech giants in Jio Platforms. Thus FDI inflow has been a significant contributor to the rise in foreign exchange reserves.
- e. **Dip in gold imports:** Gold which was a big import component for India witnessed a sharp decline in the quarter ended June 2020 following the high prices and the lockdown induced by the Covid-19 pandemic. According to World Gold Council (WGC), gold imports plummeted by 95 % to 11.6 tonnes in the quarter as compared to 247.4 tonnes in same period a year ago due to logistical issues and poor demand. The value of gold transacted during the June quarter fell to Rs 26,600 crore, down by 57 per cent as compared to Rs 62,420 crore a year ago, WGC said.

6. **What does the rising forex reserves mean?**

- a. The rising forex reserves give a lot of comfort to the government and the Reserve Bank of India in managing India's external and internal financial issues at a time when the economic growth is set to contract by 5.8 per cent in 2020-21. It's a big cushion in the event of any crisis on the economic front and enough to cover the import bill of the country for a year. The rising reserves have also helped the rupee to strengthen against the dollar. The foreign exchange reserves to GDP ratio is around 15 per cent. Reserves will provide a level of confidence to markets that a country can meet its external obligations, demonstrate the backing of domestic currency by external assets, assist the government in meeting its foreign exchange needs and external debt obligations and maintain a reserve for national disasters or emergencies. "Adequate forex reserves should provide room for the RBI to cut rates and support recovery. We estimate that the RBI can sell \$50 bn to defend the rupee in case of a speculative attack. Of note, RBI action to support growth should attract FPI equity flows," says a Bank of America report.

7. **What does the RBI do with the forex reserves?**

- a. The Reserve Bank functions as the custodian and manager of forex reserves, and operates within the overall policy framework agreed upon with the government. The RBI allocates the dollars for specific purposes. For example, under the Liberalised Remittances Scheme, individuals are allowed to remit up to \$250,000 every year. The RBI uses its forex kitty for the orderly movement of the rupee. It sells the dollar when the rupee weakens and buys the dollar when the rupee strengthens. Of late, the RBI has been buying dollars from the market to shore up the forex reserves. When the RBI mops up dollars, it releases an equal amount in the rupees. This excess liquidity is sterilised through issue of bonds and securities and LAF operations to prevent a rise in inflation.

8. **Are forex reserves giving returns to India?**

- a. Only gold reserves have given big returns to India. While the RBI has not disclosed the actual returns from forex reserves, experts estimate India is likely to get only negligible returns as interest rates in the US and Eurozone are around one per cent. On the contrary, India could be facing a cost to keep the reserves abroad. Out of the total foreign currency assets, as much as 59.7 per cent was invested in securities abroad, 33.37 per cent was deposited with other central banks of other countries and the BIS and the balance 7.06 per cent comprised deposits with commercial banks overseas as of March 2020. Further, as at end-March, 2020, the RBI held 653.01 tonnes of gold, with 360.71 tonnes being held overseas in safe custody with the Bank of England and the Bank for International Settlements, while the remaining gold is held domestically. With gold prices shooting up around 40 per cent to over Rs 55,000 per 10 grams this year, the value of gold holdings has shot up

CIVILSIAS

TOPIC 19. RBI'S NEW LOAN RECAST SCHEME

1. In its monetary policy review on Thursday, Reserve Bank of India gave green signal to a **loan restructuring scheme** for stressed borrowers. A special window providing one-time loan restructuring to companies and individuals, it will provide relief specifically to those impacted by Covid-19 pandemic.
2. **Who will benefit from the scheme?**
 - a. Only those companies and individuals whose loans accounts are in default for not more than 30 days as on March 1, 2020, are eligible for one-time restructuring. For corporate borrowers, banks can invoke a resolution plan till December 31, 2020 and implement it till June 30, 2021. Such loan accounts should continue to be standard till the date of invocation. The one-time restructuring window is available across sectors.
 - b. It is expected to provide relief to companies that were servicing loan obligations on time but could have found it difficult after March, as the pandemic affected their revenues. Companies that were already in default for more than 30 days as on March 1, however, cannot avail this facility. Industry sources said this could affect revival plans of companies that were about to regain profitability but got hit when the lockdown was imposed.
 - c. For personal loans, the resolution plan can be invoked till December 31, 2020 and will be implemented within 90 days thereafter. This too is for accounts classified as standard, but not in default for more than 30 days as on March 1.
3. **How will it be implemented?**
 - a. The RBI has set up a five-member expert committee headed by K V Kamath, former Chairman of ICICI Bank, which will make recommendations on the financial parameters required. While the RBI has given the broad contours, the panel will recommend the sector-specific benchmark ranges for such parameters to be factored into each resolution plan for borrowers with an aggregate exposure of Rs 1,500 crore or above at the time of invocation. The committee will also undertake a process validation of resolution plans for accounts above a specified threshold. The RBI will notify this along with modifications in 30 days. This means the RBI will have the last word on who will be eligible and the parameters.
 - b. According to the RBI's systemic risk survey, the three sectors most adversely affected by the pandemic are tourism and hospitality, construction and real estate, and aviation.
4. **How will the scheme impact banks?**
 - a. The biggest impact will be that banks will be able to check rise in non-performing assets (NPAs) to a great extent. However, it will not bring down NPAs from the present levels; legacy bad loans of close to Rs 9 lakh crore will remain within system. Banks will have to maintain additional 10% provisions against post-resolution debt, and lenders that do not sign Inter-Creditor Agreement (ICA) within 30 days of invocation of plan will have to create a 20% provision. This will be a burden for banks. While a section of borrowers who have gone for a moratorium is likely to apply for scheme, banks won't face much of a problem in working out individual resolutions plans: they will have to tackle only borrowers who were in stress after pandemic hit.
5. **Were earlier such schemes not misused by banks and corporates?**
 - a. **CDR:** The RBI discontinued corporate debt restructuring (CDR) scheme from April 1, 2015. For several years, corporates were misusing the debt recast plans with the regulator turning a blind eye to manipulations by shady promoters in connivance with some banks. Banks also created a separate CDR cell with erstwhile IDBI overseeing the process. The promoters of many big corporates siphoned off bank funds while their units suffered. They approached the CDR Cell and to get their loans recast, some of them more than once. These promoters managed to get fresh loans and they used liberal loan recasts to evergreen their accounts and keep out of the NPA books. Some of them are now in the bankruptcy court.

- b. **SDR:** Under the Strategic Debt Restructuring (SDR) scheme, banks were given an opportunity to convert the loan amount into 51% of equity which was to be sold to the highest bidder, once the firm became viable. This was unable to help banks resolve their bad loan problem as only two sales have taken place through this measure due to viability issues.
 - c. **S4A:** In the Sustainable Structuring of Stressed Assets (S4A) scheme, banks were unwilling to grant write-downs as there were no incentives to do so, and write-downs of large debtors could exhaust banks' capital cushions.
 - d. The **5/25 scheme** was derailed because refinancing was done at a higher rate of interest so that banks could preserve the net present value of the loan amount. There was a perception that this was one of the tools deployed to cover NPAs by banks.
 - e. **ARC:** In the asset reconstruction scheme, the major problem was that asset reconstruction companies (ARCs) were finding it difficult to resolve assets they had bought from banks. Therefore, they wanted to purchase the loans only on low prices. Consequently, banks were reluctant to sell them loans on a large scale.
 - f. **IBC:** The Insolvency and Bankruptcy Code kicked off; the RBI announced a stringent loan resolution process through its June 7 circular.
6. **Does the new scheme have safeguards against misuse?**
- a. Yes, RBI has built in safeguards in resolution framework to ensure it does not lead to ever-greening of bad loans as in past. Restructuring of large exposures will require independent credit evaluation done by rating agencies and a process validation by Kamath-led expert committee.
 - b. Unlike in the case of restructuring of larger corporate exposures, for personal loans there will be no requirement for third party validation by the expert committee, or by credit rating agencies, or need for ICA. The RBI has said that the term of loans under resolution cannot be extended by more than two years. In the case of multiple lenders to a single borrower, banks need to sign an ICA. To mitigate the impact of expected loan losses, banks need to make a 10% provision against such accounts under resolution. For banks not willing to be part of the ICA, a penal provision of 20% has been specified.
7. **What are the major differences with previous recast schemes?**
- a. The earlier restructuring schemes did not have any entry barrier, unlike the current scheme that is available only for companies facing Covid-related stress, as identified by the cut-off date of March 1. Strict timelines for invocation of resolution plan and its implementation have been defined in the scheme, unlike in the past when this was largely open-ended. The structuring of the scheme makes signing of the ICA largely mandatory for all lenders once the resolution plans has been majority-voted for, otherwise they face twice the amount of provisioning required. Independent external evaluation, process validation and specific post-resolution monitoring are further safeguards.

TOPIC 20. NATIONAL HANDLOOM DAY

1. With partition of Bengal, Swadeshi Movement gained strength. It was on August 7, 1905 that a formal proclamation was made at Calcutta Town Hall to boycott foreign goods and rely on Indian-made products. More than a century later, in 2015, Prime Minister Narendra Modi inaugurated first National Handloom Day. It was a salute to weavers and others in industry to promote handmade and handwoven.
2. **What is handloom?**
 - a. Be it Tamil Nadu's famous Kanchipuram saris or Assam's Muga (golden silk) mekhela sadors, the Paithani weaves of Maharashtra or Benarasi brocades of Uttar Pradesh, India has the largest and widespread weaving industry in the world.
 - b. While different definitions for the word have evolved since the Handloom (Reservation and Articles for Production) Act, 1985, where 'handloom' meant "any loom other than powerloom", in recent years it has become more elaborate. In 2012, a new definition was proposed: "Handloom means any loom other than powerloom; and includes any hybrid loom on which at least one process of weaving require manual intervention or human energy for production." It basically made room for a relaxed entry for powerloom weavers. However, social media campaigns such as #vocal4handmade have been trending with ministers from the government, film personalities and fashion designers championing the cause.
3. **Is there cause to celebrate?**
 - a. Any weaving village today will testify that if there were five looms in every home may be less than half a decade ago, today finding one loom among five households may be a stroke of luck. There are numerous reasons why weavers have been getting the short end of the stick.
 - b. **Raw Material:** The Fourth All India Handloom Census (2019-2020) cites raw material support needed by nearly 59.5 per cent of weaver household (base = 25,45,312). From cotton, silk, and woollen yarn to dyes, costs have increased and so has the shortage. In 2015, a representation of the Confederation of Indian Textile Industry had raised concerns of the shortage of cotton for weavers in Andhra Pradesh, Telangana and Maharashtra. That they had to travel long distances to get cotton added to their transportation costs. Besides, smaller weavers have been unable to buy in bulk leading to lower output of material.
 - c. **Credit Support:** The Textile Association of India records that the budget allocation for the textile sector came down to Rs 4,831 crore in (2019-2020) from Rs 6,943 in the previous fiscal. This also means that various schemes be it housing, subsidies, health insurance will affect the weaver too. Quite often smaller weavers are at the mercy of money lenders, and suicides have made headlines in these recent years.



- d. **Reduced numbers:** With many traditional families moving to cities for jobs as labourers, weavers have been leaving the loom. While the recent Handloom Census (2019-2020) records that there are nearly 31.44 lakh handloom households, and it has seen a rise from 27.83 lakh in the last census, the numbers are still dismal. If in 1995-96, the numbers were at 65.51 lakh, there is no denying that there is immense cause for concern.
 - e. **Lack of access:** Poor infrastructure, older looms and inaccessibility to reach prime markets have made lives of handloom weavers even more difficult. While many organisations and NGOs have been helping local communities to reach consumers directly, there is a need to make it a level playing field of weavers of every income bracket, be it a master weaver with over 50 people working under him, or a smaller weaver, who with his six-member family works from home. While there are nearly 13 government schemes currently for weavers, there's basically three per cent that is aware of the Weavers Health Insurance Scheme and only 10.5 per cent know of the credit waivers for loans that they can avail (Handloom Census 2019-2020).
4. The need for awareness, accessibility to markets and design R&D, easy access to raw material and better credit support can make a difference to weavers in different corners of the country. And then we can truly celebrate a National Handloom Day.



NATIONAL HANDLOOM DAY – 7 AUGUST 2020

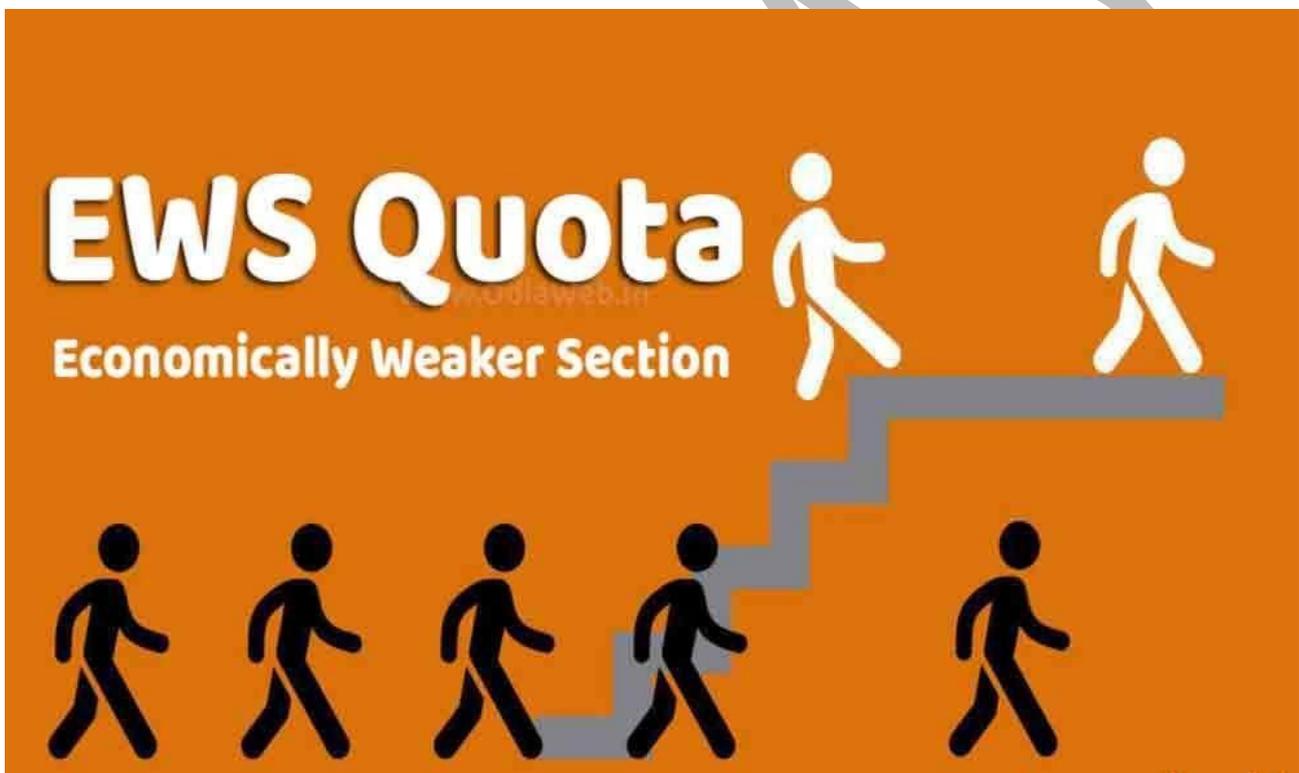
TOPIC 21. EWS QUOTA LAW

1. Supreme Court has **referred to a five-judge Constitution Bench** a batch of petitions challenging 103rd Constitution Amendment of 2019 that provides 10% reservation for Economically Backward Section (EWS).
2. **What is the amendment?**
 - a. It provides for 10% reservation in government jobs and educational institutions for EWS, by amending Articles 15 and 16 that deal with the fundamental right to equality.
 - b. While Article 15 prohibits discrimination on grounds of religion, race, caste, sex or place of birth, Article 16 guarantees equal opportunity in matters of public employment. An additional clause was added to both provisions, giving Parliament the power to make special laws for EWS like it does for Scheduled Castes, Scheduled Tribes and Other Backward Castes. The states are to notify who constitute EWS to be eligible for reservation.
3. **What does the reference mean?**
 - a. A reference to a larger Bench means that the legal challenge is an important one. As per Article 145(3) of the Constitution, “the minimum number of Judges who are to sit for the purpose of deciding any case involving a substantial question of law as to the interpretation of this Constitution” shall be five.
 - b. The Supreme Court rules of 2013 also say that writ petitions that allege a violation of fundamental rights will generally be heard by a bench of two judges unless it raises substantial questions of law. In that case, a five-judge bench would hear the case.
 - c. Laws made by Parliament are presumed to be constitutional until proven otherwise in court. The SC had refused to stay the 103rd Amendment. A reference will make no difference to the operation of the EWS quota.
4. **What are the grounds of challenge?**
 - a. The law was challenged primarily on two grounds. First, it violates the Basic Structure of the Constitution. This argument stems from the view that the special protections guaranteed to socially disadvantaged groups is part of the Basic Structure and that the 103rd Amendment departs from this by promising special protections on the sole basis of economic status. Although there is no exhaustive list of what forms the Basic Structure, any law that violates it is understood to be unconstitutional.
 - b. The petitioners have also challenged the amendment on the grounds that it violates the SC’s 1992 ruling in Indra Sawhney & Ors v Union of India, which upheld the Mandal Report and capped reservations at 50%. In the ruling, the court held that economic backwardness cannot be the sole criterion for identifying backward class.
 - c. Another challenge has been made on behalf of private, unaided educational institutions. They have argued that their fundamental right to practise a trade/profession is violated when the state compels them to implement its reservation policy and admit students on any criteria other than merit.
5. **What are the government’s arguments?**
 - a. Ministry of Social Justice and Empowerment filed counter-affidavits to defend amendment. When a law is challenged, the burden of proving it unconstitutional lies on the petitioners.
 - b. The government argued that under Article 46 of the Constitution, part of Directive Principles of State Policy, it has a duty to protect the interests of economically weaker sections. “The State shall promote with special care the educational and economic interests of the weaker sections of the people, and, in particular, of the Scheduled Castes and the Scheduled Tribes, and shall protect them from social injustice and all forms of exploitation,” the law says.
 - c. On the challenge that the amendment violates the Basic Structure, the government argued that “to sustain a challenge against a constitutional amendment, it must be shown that the very identity of the Constitution has been altered”.

- d. Countering the claims that the amendment violates the Indra Sawhney principle, the government relied on a 2008 ruling— Ashok Kumar Thakur v Union of India, in which the SC upheld the 27% quota for OBCs. The argument is that the court accepted that the definition of OBCs was not made on the sole criterion of caste but a mix of caste and economic factors, to prove that there need not a sole criterion for according reservation.
- e. For the unaided institutions, the government argued that the Constitution allows the Parliament to place “reasonable restrictions” on the right to carry on trade.

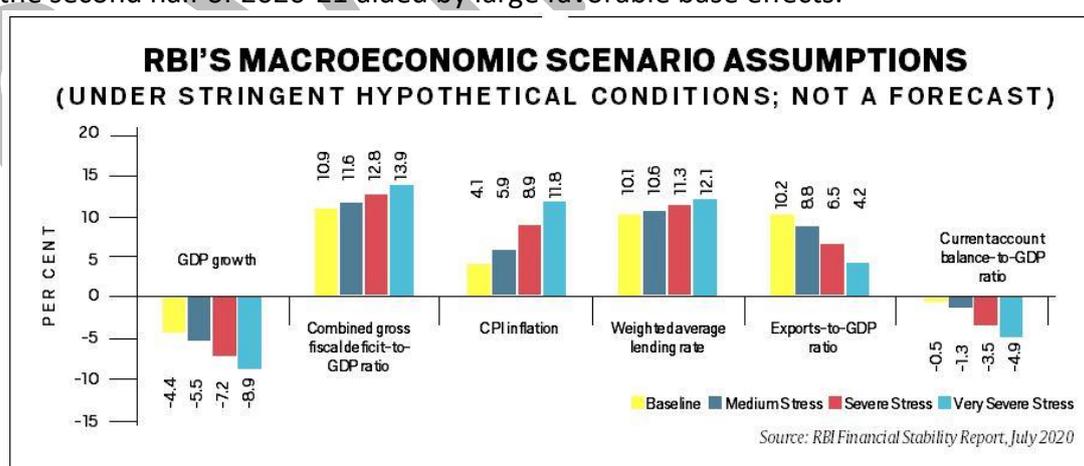
6. **What are the terms of reference framed by the court?**

- a. SC agreed that case involved at least three substantial questions of law, whether: economic criteria alone cannot be the basis to determine backwardness; the EWS quota exceeds the ceiling cap of 50% set by the court; the rights of unaided private educational institutions.
- b. Although Chief Justice of India S A Bobde heads the Bench that made the reference, the case could wait to be heard by a larger Bench. The timing depends on the court’s resources as it would have to spare five judges and allocate time to the larger Bench hearing. As of July 1, there are at least pending 46 cases that require hearing by a minimum of five judges.



TOPIC 22. RBI INTEREST RATES

1. Reserve Bank of India **kept interest rates on hold** on Thursday, seeking to contain a rise in retail inflation even as growth remains a concern. The RBI has slashed policy rates by 115 basis points since February this year, and pumped close to Rs 10 lakh crore liquidity into financial system. In its bi-monthly monetary policy review on Thursday, it has also given the green signal to a loan restructuring scheme to bail out stressed borrowers.
2. **Why did the Monetary Policy Committee not slash interest rates?**
 - a. While Governor Shaktikanta Das said the RBI's accommodative stance continues, the holding of rates runs counter to broad market expectations of a slash in policy rates to enable banks to lend more. Retail inflation, measured by the Consumer Price Index, rose in June to 6.09% from 5.84% in March, breaching the RBI's medium-term target range of 2-6%. That seems to have been a major red flag that prompted the MPC's unanimous decision.
 - b. Moreover, Das flagged concerns over domestic food inflation remaining elevated. Given uncertainty surrounding the inflation outlook and weak state of economy amid the pandemic, the policy panel decided to keep the policy rate on hold, while remaining watchful for a durable reduction in inflation to use the available space to support a revival of the economy.
3. **Why is RBI worried about inflation?**
 - a. RBI Governor made it clear that headline retail inflation prints of April-May 2020 require more clarity. The inflation objective itself is further obscured by spike in food prices because of floods in eastern India, lockdown-related disruptions and cost-push pressures in form of high taxes on petroleum products, hikes in telecom charges, and rising raw material costs reflected in rise in steel prices and gold prices on safe haven demand.
 - b. Headline inflation in June after a gap of two months, and imputed prints of inflation for April-May, have added uncertainty to the inflation outlook. Supply chain disruptions on account of Covid-19 persist, with implications for both food and non-food prices. While price pressure in key vegetables is yet to abate, protein-based food items could also emerge as a pressure point, given the tight demand-supply balance in the case of pulses.
 - c. The RBI observes that the inflation outlook of non-food categories is fraught with uncertainty. Volatility in financial markets and rising asset prices also pose upside risks to the outlook. Headline inflation may remain elevated in the second quarter of 2020-21, but may moderate in the second half of 2020-21 aided by large favorable base effects.



4. **Is the previous interest rate cut working?**
 - a. The RBI has claimed that cumulative reduction of 250 basis points in the repo rate since February 2019 is working its way through the economy, lowering interest rates in money, bond and credit markets, and narrowing down spreads. In May, the MPC had cut the repo rate by 40 bps to 4%, while maintaining its accommodative policy stance. In effect, over the last seven months, the MPC has already slashed the repo rate by 115 bps, although transmission by banks to customers is still to kick in fully. However, the RBI says transmission to bank lending rates has

improved, with the weighted average lending rate on fresh rupee loans declining by 91 bps during March-June. On the other hand, deposit rates have also fallen, hitting savers.

5. What is the RBI assessment of the economy?

- a. It says economic activity had started to recover from lows of April-May following uneven reopening of some parts of country in June. However, fresh Covid-19 infections have forced renewed lockdowns in several cities and states, and several high-frequency indicators have levelled off. The RBI and many experts, including HDFC Chairman Deepak Parekh, have said recovery in rural economy is expected to be robust, buoyed by the progress in kharif sowing.
- b. Manufacturing firms responding to the RBI's industrial outlook survey expect domestic demand to recover gradually from Q2 and sustain through Q1 of 2021-22. For 2020-21 as a whole, real GDP growth is expected to be negative. Early containment of the pandemic may improve the outlook. A more protracted spread, deviations from the forecast of a normal monsoon, and global financial market volatility are the downside risks.

6. Is the RBI depending on the liquidity push to bring down rates and boost growth?

- a. Liquidity measures announced by RBI since Feb 2020 aggregated to about Rs 9.57 lakh crore — equivalent to about 4.7% of 2019-20 nominal GDP. RBI said liquidity measures so far have helped in significant lowering of interest costs for corporate borrowers, resulting in effective transmission of lower policy rates and improvement in financial conditions. The situation for non-banking financial companies and mutual funds has stabilized since Covid-19 first jolted markets in March.
- b. The RBI on Thursday announced an additional special liquidity facility of Rs 10,000 crore at policy repo rate — Rs 5,000 crore each to National Housing Bank and NABARD. This is expected to improve fund flow to the housing sector, NBFCs and microfinance institutions. Measures like loan restructuring are aimed at improving the liquidity position of companies and individuals.

7. What is the new loan restructuring framework for stressed assets?

- a. As the moratorium on loan repayments will end on August 31, banks and the RBI expect a spike in bad loans. Non-performing assets could rise to as high as 14.7% of total loans in the worst-case scenario by March 2021. In a big relief to stressed sectors hit by the pandemic, the RBI has opened an across-the-board, one-time restructuring window for those who are in default for not more than 30 days as on March 1, 2020. For restructuring of corporate and large loans, strict monitoring and adherence to norms have been specified to prevent ever-greening of bad loans. For corporate borrowers, banks can invoke a resolution plan until December 31, 2020 and implement it until June 30, 2021. In a major relaxation for the banks, the RBI said loan accounts should continue to be standard till the date of invocation.
- b. Restructuring of large exposures will require independent credit evaluation by rating agencies and a process validation by an expert committee to be chaired by K V Kamath. To mitigate the impact of expected loan losses, banks need to make a 10% provision against such accounts under resolution. In case of multiple lenders to a single borrower, banks need to sign an Inter-Creditor Agreement (ICA). The loan recast plan is expected to keep bad loan level under check.

8. What about resolution of personal loans?

- a. For these, RBI has put in place a separate framework. Only those personal loan accounts which were classified as standard, but were not in default for more than 30 days as on March 1, 2020, are eligible for resolution. However, credit facilities provided by lenders to their own personnel/staff are not eligible. The resolution plan for personal loans can be invoked until December 31, 2020 and shall be implemented within 90 days thereafter. Unlike in case of restructuring of larger corporate exposures, there will not be any requirement for third party validation by expert committee, or by credit rating agencies, or need for ICA in case of personal loans. The term of loans under resolution cannot be extended by more than two years.
- b. Resolution plans may include rescheduling of payments, conversion of any interest accrued, or to be accrued, into another credit facility.

TOPIC 23. INFLATION RATE AND INTEREST RATE LINKED

1. India's central bank, Reserve Bank of India, decided to keep the **benchmark interest rates of economy unchanged** on Thursday. The decision was taken after three days of deliberations by Monetary Policy Committee of RBI.
2. Going into bimonthly review of monetary policy on August 4, there were varying expectations from RBI. There were people who expected RBI to cut repo rate - interest rate that RBI charges when banking system borrows from it - given increasingly worsening forecast about India's economic growth.
3. To be sure, forecasts for India's gross domestic product (GDP) growth have been rolled back sharply ever since Covid-19 disruption hit economy. At present, most experts expect the economy to contract sharply — by as much as 10 % — in the current financial year. There were others who expected RBI to stay put and avoid cutting the repo rate because retail inflation — the key variable that RBI is supposed to target — had been above the RBI's comfort zone for most of this calendar year.
4. Eventually, the RBI's MPC unanimously chose to maintain the status quo on the repo rate.
5. **What is the link between growth, inflation and interest rates?**
 - a. In a fast-growing economy, incomes go up quickly and more and more people have the money to buy existing bunch of goods. As more and more money chases existing set of goods, prices of such goods rise. In other words, inflation (which is nothing but rate of increase in prices) spikes.
 - b. To contain inflation, a country's central bank typically nudges up the interest rates in the economy. By doing so, it incentivizes people to spend less and save more because saving becomes more profitable as interest rates go up. As more and more people choose to save, money is sucked out of the market and inflation rate moderates.
6. **What happens when growth rate decelerates or contracts?**
 - a. When growth contracts, as is happening in the current financial year, or when its growth rate decelerates, as was happening right through 2019, then typically, people's incomes also get hit. As a result, less and less money is chasing the same quantity of goods. This results in either the inflation rate decelerating (that is, prices grow at 1% instead of 5%; also called "disinflation") or it actually contracts (also called "deflation"; that is, prices reduce by 1% instead of growing at 5%).
 - b. In such situations, a central bank nudges down the interest rates so as to incentivise spending and by that route boost economic activity in the economy. Lower interest rates imply that it is less profitable to keep one's money in the bank or any similar saving instrument. As a result, more and more money comes into the market, thus boosting growth and inflation.
7. **Why has RBI not raised interest rates when retail inflation has been above the comfort zone of 2 to 6% for most of the year?**
 - a. RBI is facing an odd situation at present: GDP is contracting even as inflation is rising. This is happening because pandemic has reduced demand, on the one hand, and disrupted supply on the other. As a result, both things are happening — falling growth and rising inflation.
 - b. It is true that for containing inflation, RBI should raise interest rates. And under normal circumstances, it would have done just that. But raising interest rates at this stage would be catastrophic for India's GDP growth.
 - c. However, RBI could not have cut interest rates as well because inflation rate has been above the 6% mark for all months in 2020 barring March. If the RBI cuts the interest rate, it may be fueling retail inflation further. It must be remembered that inflation hits the poor the hardest.
 - d. So, the RBI has chosen to do what many expected it to do: stay put and wait for another couple of months to figure out how growth and inflation are shaping up.
 - e. It will take a call in October when the MPC reconvenes to calibrate the monetary policy.

TOPIC 24. HIROSHIMA AND NAGASAKI

1. On August 6, 1945, the **US dropped an atomic bomb on the Japanese city of Hiroshima**, and three days later, on August 9, it dropped another bomb on Nagasaki, killing hundreds of thousands of people and affecting many more who would suffer the effects of the radiation from the blast and the “black rain” that fell in the aftermath of the explosions.
2. The US War Department had said an “impenetrable cloud of dust and smoke” cloaked Hiroshima after the bomb exploded,
3. Last week, a district court in the city of Hiroshima **recognised the survivors of “black rain”** who proved to the court that they suffered medical conditions caused by the post-explosion rain and, therefore, were eligible to avail benefits, including free medical care, being given to survivors of the blasts who are known as “Hibakushas”.
4. **Why did the US bomb Hiroshima and Nagasaki?**
 - a. After the conclusion of World War II in 1945, the relations between Japan and the US worsened, especially after Japan forces decided to take an aim at Indochina with the intention of capturing the oil-rich areas of the East Indies. Therefore, US president Harry Truman authorised the use of atomic bombs in order to make Japan surrender in WWII, which it did.



- b. Harry S Truman, the US President of the time, had warned: “We are now prepared to obliterate more rapidly and completely every productive enterprise the Japanese have above ground in any city. It was to spare the Japanese public from utter destruction that the ultimatum of July 26 was issued at Potsdam. If they do not now acknowledge our terms they may expect a rain of ruin from the air.”
 - c. But there are other theories. One historian Gar Alperovitz argued in his 1965 book that the use of nuclear weapons on Japanese cities was “intended to gain a stronger position for postwar diplomatic bargaining with the Soviet Union, as the weapons themselves were not needed to force the Japanese surrender,” a US government website mentions.
5. **What happened on August 6 and August 9, 1945?**
 - a. On the morning of August 6, at 8:15 am local time, a B-29 bomber Enola Gay dropped the atomic bomb called “Little Boy” with a force of over 20,000 tonnes of TNT on the city of Hiroshima, when most of the industrial workers had already reported to work, many were en route and children were in school. The US Strategic Bombing Survey of 1946 notes that the bomb, which had exploded slightly northwest of the centre of the city, killed over 80,000 people and injured as many.
 - b. Three days later, another atomic bomb called “Fat Man” was dropped over Nagasaki around 11:00 am local time killing more than 40,000 people. The 1946 survey notes that due to the uneven terrain of Nagasaki, damage there was confined to the valley over which the bomb exploded and, therefore, “the area of nearly complete devastation” was much smaller, about 1.8 square miles.

6. **Why were Hiroshima and Nagasaki chosen?**

- a. Truman decided that only bombing a city would make an adequate impression and, therefore, target cities were chosen keeping in mind the military production in the area and while making sure that the target sites did not hold cultural significance for Japan, like Kyoto did. This was because the aim was to destroy Japan's ability to fight wars.
- b. Hiroshima was primarily a military target with a population of about 318,000 people. Hiroshima at the time was also the seventh-largest city of Japan and served as the headquarters of the Second Army and of the Chugoku Regional Army, making it one of the most important military command stations in Japan. It was also the site of one of the largest military supply depots and the foremost military shipping point for troops and supplies.
- c. The atomic bomb was a result of British and American scientific knowledge and was built at two plants in the US, while a scientific laboratory was maintained separately, all of which came under the ambit of the Manhattan Project, which was the codename for this research effort.
- d. Before Truman, President Franklin Roosevelt set up a committee to look into the development of a nuclear weapon after he received a letter from Albert Einstein in 1939, who warned him about the likelihood that Nazi Germany was developing a nuclear weapon.

TOPIC 25. AMMONIUM NITRATE

EXPLAINED SCI-TECH



1. The catastrophic **explosion at Beirut port on Tuesday evening** (August 4) that has so far killed at least 100 people and injured around 4,000, with an unknown number feared trapped under rubble was, according to the government of Lebanon, caused by over 2,700 tonnes of ammonium nitrate kept in storage for over six years.
2. A common chemical ingredient of agricultural fertilisers, the nitrogen rich compound is also the main component of the explosive composition known as ANFO — ammonium nitrate fuel oil.
3. **What is this chemical, how and where is it used or misused, what hazards does it present, and what are the rules and regulations about its use in India?**
 - a. Ammonium nitrate, the substance
 - i. In its pure form, ammonium nitrate (NH_4NO_3) is a white, crystalline chemical which is soluble in water. It is the main ingredient in the manufacture of commercial explosives used in mining and construction.
 - ii. In India, The Ammonium Nitrate Rules, 2012, under The Explosives Act, 1884, define ammonium nitrate as the “compound with formula NH_4NO_3 including any mixture or compound having more than 45 per cent ammonium nitrate by weight including emulsions, suspensions, melts or gels but excluding emulsion or slurry explosives and non explosives emulsion matrix and fertilizers from which the ammonium nitrate cannot be separated”.
 - b. Ammonium nitrate as an explosive
 - i. Pure ammonium nitrate is not an explosive on its own. It is classified as an oxidiser (Grade 5.1) under the United Nations classification of dangerous goods. If mixed with ingredients like fuel or some other contaminants, or because of some other external factors, it can be very explosive.
 - ii. However, for combinations to explode, triggers like detonators are required. Many Improvised Explosive Devices (IEDs) used by terrorists around the world have ANFO as the main explosive, triggered by primary explosives like RDX or TNT. In the majority of terror attacks in India, including those in Pulwama, Varanasi, Malegaon, Pune, Delhi,

Hyderabad, and Mumbai, ammonium nitrate has been used along with initiator explosives like RDX.

c. Stored ammonium nitrate is a major fire hazard

- i. Large quantities of stored ammonium nitrate are regarded as a major fire hazard, with multiple reported cases across the world. The explosion of large storage can happen primarily in two ways.
- ii. One is by some type detonation or initiation because the storage comes in contact with explosive mixture. Second, the blast can result due to a fire which starts in the ammonium nitrate store because of the heat generated due to the oxidation process at large scale. The second one seems to be the primary likely cause of the incident at Beirut port. There are several documented examples of deadly ammonium nitrate fire and explosion incidents in the past, some with large numbers of fatalities like in China in 2015 and in Texas in 1947.

4. Regulations in India about ammonium nitrate

- a. Because it is used as an ingredient for the production of industrial explosives, anaesthetic gases, fertilisers, cold packs and has a strong possibility of misuse, ammonium nitrate is highly regulated in India, at least in letter.
- b. The manufacture, conversion, bagging, import, export, transport, possession for sale or use of ammonium nitrate is covered under The Ammonium Nitrate Rules, 2012. The rules also make storage of ammonium nitrate in large quantities in populated areas illegal in India.
- c. For the manufacture of ammonium nitrate, an Industrial licence is required under the Industrial Development and Regulation Act, 1951. A license under the Ammonium Nitrate Rules, 2012 is also required for any activity related to ammonium nitrate.

After the apocalypse

A massive warehouse explosion on Tuesday sent a devastating blast wave across Beirut city, killing at least 135 people and injuring nearly 5,000

▪ Facades of central Beirut buildings were ripped off, furniture was sucked onto streets and roads were strewn with glass and debris. Cars near the port were flipped over

2,750 tonnes of ammonium nitrate, used in fertilizers and bombs, had been stored for six years at the port without safety measures

3 lakh people have temporarily been made homeless by the blast

\$3 billion is estimated to be the cost of the damage

Killer blow: A view of damaged grain silos at Beirut harbour, a day after an explosion tore through Lebanon's capital. AFP

■ ECONOMIC WOES

- Much of the port district is flattened, disabling the main route for imports in Lebanon, which is already struggling to house and feed hundreds of thousands of refugees from Syria
- It defaulted on sovereign debt earlier this year
- A crippling devaluation has sent poverty levels soaring to an estimated 50% of the population of more than 6 million people
- Severe economic crisis has ignited mass protests in recent months

■ POOR GOVERNANCE

- Many Lebanese blamed the blast on decades of corruption and poor governance by the entrenched political class
- The health system is confronting a coronavirus surge, and there were concerns the virus could spread as people flooded hospitals. Saint George University Hospital was out of commission after suffering major damage

Govt. is determined to hold the responsible and the negligent accountable, and to sanction them with the most severe punishment
- MICHEL AOUN, PRESIDENT



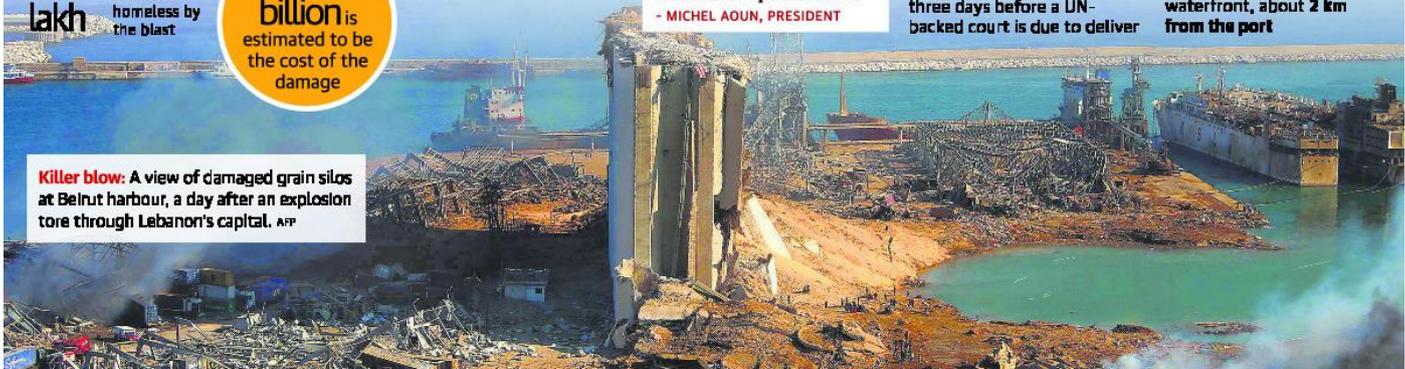
■ HARIRI VERDICT AWAITED



▪ The explosion occurred three days before a UN-backed court is due to deliver

a verdict in the trial of four suspects from Hezbollah over a 2005 bombing that killed former Prime Minister Rafik al-Hariri and 21 others

▪ Hariri was killed by a huge truck bomb on another part of the Beirut waterfront, about 2 km from the port



SOURCE: AGENCIES

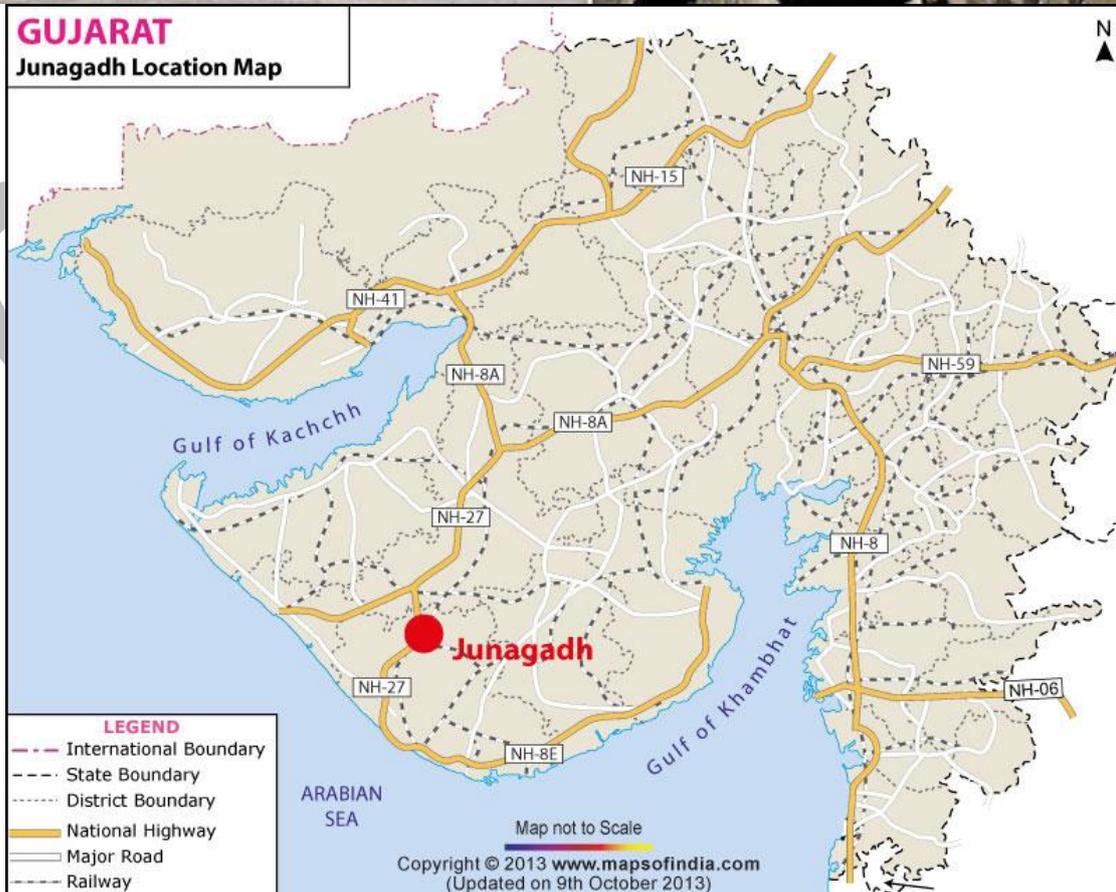
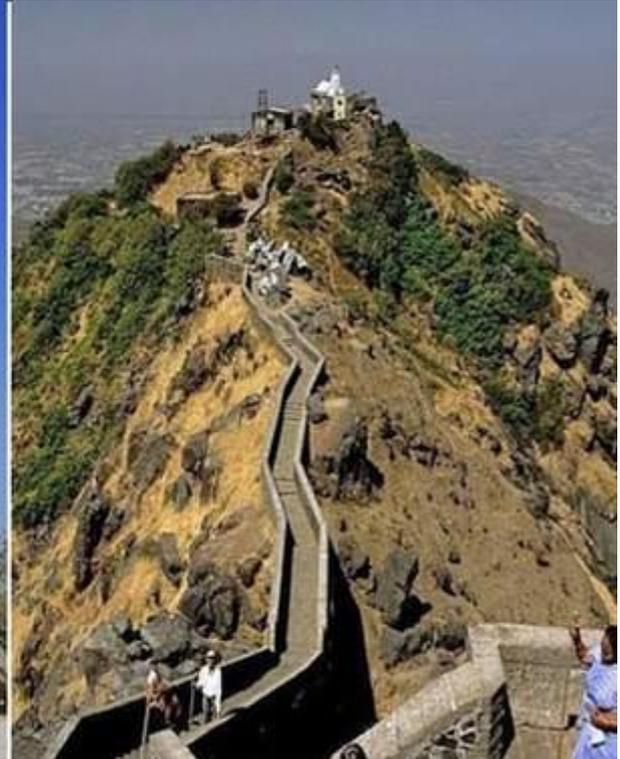
TOPIC 26. JUNAGADH

1. Pakistan Prime Minister Imran Khan Tuesday **unveiled a new political map** that includes all of Jammu & Kashmir, Ladakh, Sir Creek and Junagadh. Khan and Pakistan Foreign Minister Shah Mahmood Qureshi have said this would be the new map of Pakistan.
2. Released a day before the first anniversary of the the BJP-led NDA government's August 5 decisions **rolling back special status of J&K** and the bifurcation of the state into two, "it was the first time", said Foreign Minister Shah Mahmood Qureshi in reference to the inclusion of J&K and Ladakh, "that a map reflected the aspirations of the people". The federal cabinet, the Kashmiri leadership and Pakistan's political leadership has endorsed the government's move, he added.
3. India has dismissed map as an "exercise in absurdity" that made "untenable claims" to territories in India. "These ridiculous assertions have neither legal validity nor international credibility," a statement from Ministry of External Affairs said. The statement added that release of the new map confirms Pakistan's "obsession with territorial aggrandizement" supported by cross-border terrorism.
4. Pakistan's inclusion of J&K and Ladakh appears to be a tit-for-tat for India's inclusion of Pakistan Occupied Kashmir as part of the union territory of Jammu & Kashmir, and of Gilgit Baltistan as part of Ladakh in the new map the government released on November 2 after the re-organization of J&K came into effect on October 31 last year.
5. However, two other inclusions have caused surprise. One is Sir Creek on the Kutch coastline, a 96-km estuary on the India-Pakistan through Gujarat and Sindh, on which India and Pakistan had nearly reached agreement in 2007-08, and which was once seen as "low hanging fruit" for bilateral resolution. Pakistan claims the entire width of the estuary, while India says the demarcation should be in the middle. Those who were part of negotiations say the entire disagreement has revolved around the size of the nib used to demarcate the estuary in an old map. The agreement, whenever it happens, will determine the Exclusive Economic Zone of both countries from where the estuary opens out into the Arabian Sea.
6. Other inclusion is that of Junagadh, also in coastal Gujarat, whose decision to join India in 1947, formalized through a Plebiscite in 1948, was not accepted by Pakistan then, but was overtaken by first India-Pakistan war over Kashmir that began at end of October 1947 and continued for over a year.
7. Junagadh was mentioned by Pakistan when the Security Council took up the issue of the hostilities in J&K in January 1948. Under the UN Security Council resolution 39, a commission was set up for the "peaceful resolution of the Kashmir conflict", and the mandate of this commission was to investigate allegations by India of the situation in J&K, as well as "other issues" raised by Pakistan, which included Junagadh that Pakistan accused India of "annexing and occupying by force".
8. But after the initial resistance from Pakistan, Junagadh has been seen as a settled matter in the bilateral relationship, brought up sometimes in conversations in Pakistan by those wishing to make the point that when India could not countenance the accession of a Hindu-majority state with a Muslim ruler to Pakistan, it should have applied the same yardstick in Kashmir and accepted Pakistan's claim on a Muslim-majority state with a Hindu ruler.
9. Exactly the inverse argument has been presented by Indian scholars and historians. Rajmohan Gandhi has written how India's first home minister, Sardar Vallabhai Patel, who was in charge of integrating the newly independent India's provinces and the princely states in one union, had absolutely no objection to let Kashmir join Pakistan, but changed his mind on September 13, 1947, the day Pakistan accepted Junagadh's accession.
10. "If (Muhammad Ali) Jinnah could take hold of a Hindu-majority State with a Muslim ruler (Junagadh), why should Sardar not be interested in a Muslim-majority State, with a Hindu ruler (Kashmir)? From that day Junagadh and Kashmir, pawn and Queen, became his simultaneous concerns," Gandhi wrote in his biography of Patel (Patel: A Life, 1991). For Patel, the King was Hyderabad, an exact mirror of Junagadh – Muslim ruler, Hindu subjects. "Had Jinnah allowed King and pawn to go to India, Patel, as we have seen, might have let Queen go to Pakistan, but Jinnah rejected deal," Gandhi wrote.

11. Junagadh's accession to India

- a. Junagadh was in the Kathiawar region, where most other princely states had already acceded to India. The ruler of Junagadh was Nawab Mahabatkhan Rasulkhanji, who V P Menon, Secretary in the Ministry of States under Patel, described in his book 'The Story of Integration of the Indian States (1956)' as "an eccentric of rare vintage". The state was not contiguous with Pakistan. Eighty per cent of the population was Hindu. Somnath, where the famous Shiva temple was ransacked by Mahmud Ghazni, is located in Junagadh, near the port of Veraval.
 - b. In May 1947, Dewan-ship of state changed hands through palace intrigue to a Muslim Leaguer from Karachi, Shah Nawaz Bhutto (his son Zulfikar Ali Bhutto would become Prime Minister of Pakistan). Under his influence, the Nawab decided to accede to Pakistan on August 15, though he had earlier given the impression that the future of his Kathiawari state lay in joining India.
 - c. "Junagadh was an economic and administrative unit embedded in and deriving its sustenance from Kathiawar. Its detachment would turn it into a hothouse plant with no powers of survival. What worried me most were immediate potentialities for turmoil when stability was crying need of hour. Nawab's action would have undesirable effects on law and order in Kathiawar as a whole. It would extend communal trouble to areas where at present there was peace. There was also fear that it would encourage intractable elements in Hyderabad," Menon wrote.
 - d. After failing over a month to get a response from Pakistan to an offer by Nehru "to accept and abide by the verdict of the people of Junagadh in respect of the accession of the State to either of the Dominions", starting from the last week of September to the end of October, India put in place a series of measures that held the threat of military action against Junagadh, mainly by deploying troops around the state, in an effective blockade. The Nawab of Junagadh fled to Karachi by air, with his family, his favourite dogs and valuables. According to Menon, he took all the cash balance of the state and all the shares and securities in the Treasury.
12. On October 27, Bhutto wrote to Jinnah about the precarious situation in Junagadh – no money, no food, and even the Muslims of Kathiawar were not interested in the promise that Junagadh's accession to Pakistan had initially held: "...The situation has therefore so worsened that responsible Muslims and others have come to press me to seek a solution of the impasse. I do not wish to say much more. ... The question is delicate but I feel it must be settled honourably to the satisfaction of all. It is impossible for me to court any further bloodshed, hardship and persecution of loyal people."
13. In September, a parallel government of Junagadh called Arzi Hukumat had been formed in Mumbai, and when the Nawab fled, they began to take over parts of Junagadh, and some of them also indulged in looting and arson. On November 7, Bhutto held talks with Samaldas Gandhi, head of the Arzi Hukumat, asking him to take over the administration and restore law and order. But a day later, on the urging of Muslim residents, he asked the government of India to directly take over the administration of Junagadh through the regional commissioner at Rajkot. The handover to M N Buch, Rajkot Commissioner, took place on November 9.
14. Pakistan characterised the takeover as a "direct act of hostility", and asked India to relinquish charge to the rightful ruler and withdraw its troops. India replied it had stepped in to restore law and order and prevent a complete breakdown of the administration only at the request of the Dewan of Junagadh who was acting on behalf of the Nawab, who was himself in Karachi. India had indicated that it would want to formalise the arrangement through a plebiscite. This was held on February 20, 1948. Of 2,01,457 registered voters, 1,90,870 cast their votes. Of this number only 91 cast their votes in favour of accession to Pakistan. A referendum was also held in five neighbouring territories. Out of 31,434 votes cast in these areas, only 39 were for accession to Pakistan.
15. Sardar Patel visited Junagadh on November 13, 1947 four days after Bhutto relinquished charge to India to a "rousing reception" at Bahauddin College, where he publicly disclosed what the calculations around Junagadh were, by both sides.

16. Rajmohan Gandhi wrote in his biography of Patel: "After complimenting Bhutto and Jones for their realism and the Indian forces for their restraint, he touched on Kashmir and Hyderabad: If Hyderabad does not see the writing on the wall, it goes the way Junagadh has gone. Pakistan attempted to set off Kashmir against Junagadh. When we raised the question of settlement in a democratic way, they (Pakistan) at once told us that they would consider it if we applied that policy to Kashmir. Our reply was that we would agree to Kashmir if they agreed to Hyderabad."



TOPIC 27. MUMBAI RAINS

1. In a revival of southwest monsoon over the west coast, continuous rain has been lashing Mumbai and parts of Konkan since Sunday night. Recording over 1,400 mm, Mumbai experienced one of its heaviest showers of July. But now, more rain is expected over maximum city all through this week.
2. The India Meteorological Department (IMD) has placed five districts, including Mumbai, on a red alert as intense rain is expected during the next few hours, and continuous rain till August 6.

3. What is causing such heavy rain over Mumbai?

- a. Multiple and simultaneous favourable weather systems are presently active, which have revived the southwest monsoon. Since Sunday night, there has been continuous heavy rainfall reported all along the west coast of Maharashtra, Goa and Kerala, with very heavy rain in Mumbai, Ratnagiri and Mahabaleshwar.
- b. On Tuesday, a low pressure system formed in the Bay of Bengal that has once pushed the monsoon into its active phase, bringing heavy spells for the west coast. In addition, the monsoon trough, which now lies at its normal position, is expected to shift southwards which will further intensify rainfall activity in the coming three to four days. As a result of these two systems, the monsoon winds coming in from the Arabian Sea will strengthen, causing widespread heavy to very heavy rainfall (115 mm – 204.4 mm) over parts of Mumbai, Ratnagiri, Goa and Kerala till the end of the week.

4. How much has it rained in Mumbai?

- a. Here is the 12-hour rainfall recorded between August 3 (8.30 pm) and August 4 (8.30 am) along Konkan and Goa: Mira Road – 273 mm; Mumbai (Santacruz) – 261 mm; Dhaisar – 254 mm; Ram Mandir – 230 mm; Mumbai (Colaba) – 223 mm; Mahalaxmi – 180 mm; Vasai – 175 mm; Meera Bhayander – 156 mm; and Thane – 120 mm.
- b. Intense rainfall lashed Ratnagiri (189 mm) and Sindhudurg (158 mm) during the same period.

5. What is the weather forecast for Mumbai?

- a. IMD has forecast issued a Nowcast warning, valid for the next six hours, for intense spells over Borivili, Powai, Thane, Kalyan, Mulund, Raigad, Harnai, Shrivardhan, Dahanu, Alibag, Ratnagiri, Vijaydurg and Sindhudurg.
- b. With the weather systems likely to remain active, heavy to very heavy rainfall will continue to occur over Mumbai, Raigad, Ratnagiri, Sindhudurg and Palghar districts till August 6. Ghat areas shall experience extremely heavy spells (more than 204.4 mm) during the next few days.
- c. All these districts have been put on 'red' alert, suggesting occurrence of extremely heavy rainfall.



TOPIC 28. LOCUSTS

1. On Monday, Rajasthan Chief Minister Ashok Gehlot wrote to Prime Minister Narendra Modi urging him to declare the locust outbreak in the state a “national disaster”. His letter came at a time when locust swarms seen in several states in May-June have ceased to be spotted in urban centers.
2. **What happened to the swarms?**
 - a. After fresh swarms arrived in April, much before their usual sighting time of May, absence of standing crops led to swarms migrating in search of green fodder. Thus, parks of Jaipur, orange orchards of Nagpur, sugarcane fields of eastern Uttar Pradesh, and parts of Madhya Pradesh reported locusts in May-June.
 - b. Once monsoon started, sightings became rarer with swarms flying back to Rajasthan. Location indicators of both UN Food and Agriculture Organization (FAO) and Union Agriculture Ministry’s Locust Warning Organization (LWO) shows concentration of swarms in Rajasthan districts along India-Pakistan border.
3. **What took them back to Rajasthan?**
 - a. The reason behind this can be found in locusts’ egg-laying habits. The female drills a hole around 10-15 cm into ground and lays eggs in pods. And sandy soil is most conducive for this.
 - b. Swarms that had returned to Rajasthan earlier have completed their lifecycle and young hoppers have emerged from eggs there. Such hopper bands have been reported from Hanumangarh, Ganganagar, Jaipur and Bikaner in Rajasthan, and Bhuj in Gujarat. Breeding is going on Barmer, Bikaner, Jodhpur, Churu and Nagaour, as well as Bhuj.
4. **How serious is the situation?**
 - a. LWO scientists say localised breeding should not be a concern. “For first and second growth stages or instars, hoppers can’t fly. They crawl out of their pods in search of food and can be easily controlled through spraying of chemicals or mechanical means,” a scientist said. Till date, control operations for swarms and young hoppers have been carried out over 4.28 lakh hectares across country.
5. **Do locusts not devour everything green on their way?**
 - a. Following the swarms’ return to Rajasthan, there have been reports of damage to pulses, soyabean etc. While farmers from some districts have reported damage to their castor crops, LWO has said extent of damage has been low. LWO scientists say it is easier to control fully grown, yellow adults than immature, pink ones (latter can fly around 100 km in a night, and former only around 40-50 km).
6. **Will there be a locust problem in the rabi season?**
 - a. LWO officials say chances appear to be slim, as they are confident of controlling remaining swarms by end of September. Also, swarms from Horn of Africa did not arrive in mid-July as was expected.
 - b. Bhagirath Choudhary, founder director of South Asia Biotechnology Centre, cautioned against officials lowering their guard. “We should ensure locust does not become endemic to India and remains seasonal visitors only,” he said.

TOPIC 29. TIME CAPSULES

1. Ahead of the laying of the foundation stone for the Ram temple in Ayodhya, claims and denials have emerged about plans by the Ram Janmabhoomi Teerth Kshetra Trust to put in a time capsule, or 'kaal patra'. While Trust member Kameshwar Chaupal said the "capsule would carry a message about Ayodhya, Lord Ram and his birthplace and it will be preserved so as to last thousands of years", the Trust's general secretary Champat Rai has dismissed reports of a time capsule being installed on August 5.

2. What is a time capsule?

- a. It is a container of any size or shape, which accommodates documents, photos and artefacts typical of the current era and is buried underground, for future generations to unearth. The time capsule requires special engineering so that the contents don't decay, even if pulled out after a century. Material such as aluminium and stainless steel are used for the encasing, and documents are often reproduced on acid-free paper.
- b. While the term "time capsule" was coined in the 20th century, among the earliest examples of one dates back to 1777, found by historians inside the statue of Jesus Christ in a church in Spain during restoration work in December 2017.
- c. The International Time Capsule Society (ITCS), based in the US and formed in 1990, is now defunct but continues estimating the number of time capsules in the world. As per its database, there are "10,000-15,000 times capsules worldwide".

3. Are there any time capsules in India?

- a. There have been a number of prominent examples. One time capsule, outside the Red Fort and placed underground in 1972 by Prime Minister Indira Gandhi, was dug out by the subsequent government. Other time capsules are at a school in Mumbai, IIT-Kanpur, Lovely Professional University in Jalandhar, and Mahatma Mandir in Gandhinagar.
- b. The Red Fort time capsule was supposed to be dug out after 1,000 years. Professor Salil Misra, a historian who currently teaches at Delhi's Ambedkar University, said, "In 1972, Mrs Gandhi decided to create a repository. These were huge, cylindrical shaped cases made of metal which could endure the test of time. Inside, there were written records, data and artefacts. In 1977, when the Janata Party came in to power, they dug out the time capsule."
- c. JD(U) national spokesperson K C Tyagi, who was 22 at the time the capsule was installed, told The Indian Express that the Opposition of the time, including Hiren Mukherjee, Jyotirmoy Basu and Atal Bihari Vajpayee, protested against the move. "The apprehension was that only those aspects of India's history which are related to her or her family were being preserved in the time capsule. There was a lot of opposition to this inside Parliament and outside it too. She was accused of only preserving the contribution of her family in the Freedom Movement, in post-Independence India, and in nation building," said Tyagi.
- d. He said that the contents were not made public after the time capsule was dug out.

4. What have the other time capsules preserved?

- a. On March 6, 2010, President Pratibha Patil buried the time capsule on the IIT Kanpur campus. An aerial map of the institute, annual reports of 1961, 1984 and 2008, menu of the hostel mess, the blazer crest, a DVD of a film on IIT Kanpur, some photographs, and oral records of the interviews conducted by Sunil Shanbag are inside the time capsule.
- b. IIT Kanpur deputy director Manindra Agarwal told The Indian Express, "All the documents were printed on acid-free paper... A lot of information was put on pen-drives and external hard-drives, put in the capsule, and then oxygen was taken out so that no decay happens. It is made of brass and the encasing is an inch thick, so no oxygen goes in. We suggested that when the institute completes a centenary, the capsule may be taken out but it all really depends on the set of people then because none of us will be around!"
- c. On March 31, 2014, a time capsule of stainless steel was installed at The Alexandra Girls' English Institution in Mumbai, which was set up in the 19th century. Apart from the school

uniform, first annual report, USBs containing photos and videos of events at the school, the time capsule also has precious letters written by students and principal Freny Mehta — addressed to future students, and principals, and emphasising the importance of a library in the life of students. The time capsule is to be unearthed on September 1, 2062.

- d. In January 2019, a square time capsule, which contains 100 items that represent modern-day technology in India, was installed at Jalandhar's Lovely Professional University. Buried 10 feet by Nobel laureates Avram Hershko (biochemist), F Duncan M Haldane (physicist) and Thomas Christian Sudhov (biochemist), it is supposed to be unearthed after 100 years. As per an LPU spokesperson, "items such as landline telephone, a smartphone, weighing machine, water pump, stop-watch, headphones, a handy cam, and pen drive are inside the capsule".

5. How significant are time capsules?

- a. Historians often criticise the idea as being motivated. Professor Misra said, "This exercise is inevitably a subjective exercise, geared towards glorification not to construct the real picture. All historians look at this time capsule exercise with suspicion. It's not a valid historical method — who decides what matter, what artefacts, written documents are going in to it?"
- b. Historian Aditya Mukherjee said, "When kings and queens of the past had their whole stories written by courtiers, historians don't take that to be the fact. You use other sources to verify it." He said it would be "far more sensible to form a committee for people with different opinions to make the time capsule if at all."
- c. Political scientist Zoya Hasan, Professor Emerita, JNU, said historical research is based on critical inquiry and evidence. "No historian worth his or her name will rely on a capsule to write history. But who cares for evidence and facts when political message becomes the function of history and so-called academic research", she said.
- d. Misra also said that historians of future generations are going to find all kinds of data and records in order to reconstruct our current time, "so if historians a century from now want to write about the Ram Janmabhoomi Movement, there will be enough data in newspapers and other written records... No one needs to artificially create a preserved record about it".



TOPIC 30. TURKEY AND GREECE

1. NATO allies Turkey and Greece have locked horns twice over the past two weeks – first after Turkey converted the 1,500-year-old Hagia Sophia from a museum into a mosque, and then over who gets to explore hydrocarbons in the Eastern Mediterranean.
2. Relations between two nations have seen a marked downturn this year. In February, Turkey had allowed thousands of migrants to cross border into Greece and the European Union, irking the latter.
3. **The Mediterranean neighbours**
 - a. For centuries, Turkey and Greece have shared a chequered history. Greece won independence from modern Turkey's precursor, the Ottoman Empire, in 1830. In 1923, the two countries exchanged their Muslim and Christian populations – a migration whose scale has only been surpassed in history by the Partition of India.
 - b. The two nations continue to oppose each other on the decades-old Cyprus conflict, and on two occasions have almost gone to war over exploration rights in the Aegean Sea.
 - c. Both countries are, however, part of the 30-member NATO alliance, and Turkey is officially a candidate for full membership of the European Union, of which Greece is a constituent.
4. **The Hagia Sophia row**
 - a. The centuries-old Hagia Sophia, listed as a Unesco World Heritage site, was originally a cathedral in the Byzantine Empire before it was turned into a mosque in 1453, when Constantinople fell to Sultan Mehmet II's Ottoman forces.
 - b. In the 1930s, however, Mustafa Kemal Ataturk, the founder of the Republic of Turkey, shut down mosque and turned it into a museum in an attempt to make the country more secular.
 - c. Many Greeks continue to revere the Hagia Sophia, and view it as a key part of Orthodox Christianity. So, when Turkish President Recep Tayyip Erdogan ordered the structure open to Muslim worship last month, tensions escalated.
 - d. On July 24, when Friday prayers were held at the Hagia Sophia for the first time in 90 years, church bells tolled across Greece in protest. Greek Prime Minister Kyriakos Mitsotakis called the site's conversion an "affront to civilisation of the 21st century", describing Turkey's move as a "proof of weakness".
 - e. A day later, Turkey's foreign ministry hit back, saying, "Greece showed once again its enmity towards Islam and Turkey with excuse of reacting to Hagia Sophia Mosque being opened to prayers".
5. **The Eastern Mediterranean dispute**
 - a. For 40 years, Turkey and Greece have disagreed over rights to the Eastern Mediterranean and the Aegean Sea, which covers significant oil and gas deposits.
 - b. On July 21, Turkey announced that drilling ship Oruc Reis would be exploring a disputed part of sea for oil and gas. Greece responded by placing its air force, navy and coastguard on high alert.
 - c. French President Emmanuel Macron expressed support for Greece, and said that Turkey should be "sanctioned" for its violations in the Aegean.
 - d. After German Chancellor Angela Merkel intervened, Turkey said last week that it had halted the drilling operation, and that it was "ready to discuss" the issue with Greece.



TOPIC 31. FARM

1. To say agriculture is roaring may be an exaggeration, but it is definitely one sector where things are closest to business-as-usual in today's Covid-ravaged Indian economy.
2. One indicator of that is sowings. Farmers have in the current kharif (monsoon) season so far planted 13.9% more area compared to last year's coverage at this time. Moreover, acreages are higher in all major crops, barring jute (**Table 1**).

TABLE 1: AREA SOWN UNDER KHARIF CROPS*
(LAKH HECTARES)

	2020	2019
1. Rice	266.60	223.96
2. Pulses	111.91	93.84
■ Arhar	40.05	37.09
■ Urad	33.38	27.64
■ Moong	29.57	21.52
3. Coarse cereals	148.34	139.26
■ Maize	74.30	72.58
■ Bajra	54.74	48.75
■ Jowar	12.39	12.11
■ Ragi	3.60	3.31
4. Oilseeds	175.34	150.12
■ Soyabean	116.62	107.64
■ Groundnut	45.45	30.53
■ Sesamum	10.51	9.65
5. Cotton	121.25	108.95
6. Sugarcane	51.78	51.20
7. Jute & Mesta	6.95	7.05
TOTAL	882.18	774.38

**Progressive as on July 31.
Source: Ministry of Agriculture & Farmers' Welfare.*

TABLE 2: ALL-INDIA RETAIL FERTILISER SALES
(LAKH TONNES)

	2018-19	2019-20	% GROWTH
Oct	48.37	45.17	-6.62
Nov	63.26	73.84	16.72
Dec	70.86	87.08	22.89
Jan	58.04	64.50	11.13
Feb	30.39	46.61	53.37
Mar	24.60	28.96	17.72
Apr	14.17	20.56	45.10
May	20.24	40.02	97.73
Jun	38.35	68.74	79.24
Jul	68.69	92.31	34.39

Source: Department of Fertilisers.

3. The increased plantings have been largely due to a normal southwest monsoon, with all-India area-weighted rainfall during June-July, at 453.3 mm, marginally above long-period average of 452.2 mm for these two months. The same period last year, by contrast, recorded 412.3 mm rain — an 8.8% shortfall.
4. A second indicator of agricultural operations going on unhindered is sale of fertilisers to farmers. July marked the ninth consecutive month of it registering double-digit growth (Table 2).
5. That, again, has a strong correlation with the monsoon. Last year, rainfall was 32% below normal in June and the cumulative deficiency remained at 18.6% till July 24. A spectacular recovery followed thereafter and the monsoon season as a whole (June-September) ended up with 10.4% surplus precipitation. But the main kharif sowing window was already over by then. The benefits from the monsoon's second-half turnaround, leading to a significant recharging of groundwater tables and filling of dam reservoirs, were reaped only in the rabi (winter-spring) cropping season. Rabi plantings went up 9.5% over the previous year and it was also reflected in fertiliser sales from November.
6. **Trends carried forward**
 - a. The ongoing kharif is basically a continuation of the trend from the 2019-20 rabi season, which produced a bumper crop. Farmers could, moreover, harvest this crop, as the movement of labour and machines for agricultural operations were exempted from the coronavirus-induced

lockdown restrictions. The Food Corporation of India and state agencies also procured an all-time-high 389.75 lakh tonnes (lt) of wheat and 504.86 lt of rice (111.18 lt after lockdown) from the 2019-20 crop. That, along with the minimum support price-based purchases of rapeseed-mustard, chana (chickpea) and arhar (pigeon-pea) plus direct benefit transfers under the Pradhan Mantri Kisan Samman Nidhi scheme, injected roughly Rs 1,38,000 crore of government liquidity into the farm economy between April and July.

- b. The above liquidity is being redeployed into production during this kharif. Farmers have simultaneously sought to take maximum advantage of the improved soil moisture conditions — thanks to the surplus rains right from the second half of 2019 and extending to winter and pre-monsoon seasons — by sowing aggressively and investing in fertilisers and high-yielding seeds.

7. Sources of uncertainty

- a. There are, however, at least three sources of uncertainty for agriculture right now.
- b. The first one is from the monsoon itself. The country received 17.6% above-normal rains in June. But July reported a 9.9% deficit, with this widening to 19.2% in the second half of the month. The India Meteorological Department has forecast rainfall during August-September to be 104% of long-period average with a model error of $\pm 8\%$. The prediction assumes “neutral” ENSO (El Nino) and Indian Ocean Dipole conditions continuing during the remaining part of the monsoon season. As things stand, though, Madhya Pradesh, Rajasthan, mainland Gujarat, Vidarbha, Jammu & Kashmir and Himachal Pradesh are among the regions beginning to experience some moisture stress. That could have a bearing on the already-planted crop in vegetative growth stage. The next few days, therefore, matter.
- c. The second threat is from desert locusts. The UN Food and Agriculture Organization has warned that the breeding of these insects is under way along both sides of the Indo-Pakistan border. “In India, numerous adult groups and swarms are laying eggs over a wide area of Rajasthan between Jodhpur and Churu, while hatching and band formation from earlier laying have occurred further south from Phalodi to Gujarat,” its latest report dated July 29 has said. The problem would arise when the immature winged adults resulting from this breeding form swarms that can feed on the growing kharif crop. Government agencies, on their part, have undertaken pesticide spraying and control operations in almost 4.57 lakh hectares area across 10 states till July 30. Earlier swarm invasions in May-June, it may be noted, caused no damage because the rabi crop had already been harvested.
- d. The final pressure point is from milk, India’s largest “crop” both by volume and value. As a crop that is harvested and sold daily, it is source of supplementary income as well as liquidity for most farmers. The crash in milk prices by Rs 10 per litre or more since the March 25 lockdown will certainly impact rural incomes. Out of the country’s estimated 50 crore litres of daily production, 12-12.5 crore litres is handled by organised cooperative and private sector dairies. A Rs 10/litre price fall even on this means an income loss of Rs 120-125 crore per day. The losses could mount with the start of buffalo calvings and milk production rising in the natural course as temperatures dip along with improved fodder availability. A lackluster festival season and poor demand for milk-based sweets isn’t going to help matters either.
- e. Agriculture until now has been a bright spark amid the economic gloom unleashed by Covid. But the coming days may also expose weak spots.

TOPIC 32. ECUADOR

1. 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 aquatic species such as manta rays and sharks have been endangered by commercial fishing.
2. The Galapagos Islands, spread over almost 60,000 sq km, are a part of Ecuador, and are located in the Pacific Ocean around 1,000 km away from the South American continent. Every year, Ecuador faces the challenge of protecting its natural habitat from Chinese vessels.
3. **Chinese fishing around Galapagos**
 - a. According to the Madrid-based El País, the flotilla, which also consisted of some Liberia and Panama-flagged vessels, was detected in an international water corridor situated between two areas of Ecuadorian jurisdiction– 200 miles away from both the Galapagos Islands and mainland Ecuador.
 - b. Ecuador’s Defence Minister said the situation is repeated every year, when ships reach the outer limit of the archipelago, outside the country’s exclusive zone. Last year, 245 Chinese fishing vessels were sighted in the area where Ecuador’s writ does not extend.
 - c. In 2017, when a Chinese ship did enter Ecuador’s waters, its authorities seized it and discovered 300 tonnes of wildlife on board, mostly the critically endangered scalloped hammerhead sharks – a delicacy in China. As per an *Economist* report, two-thirds of hammerhead shark fins found in Hong Kong markets come from the Galapagos area.
 - d. According to the Guayaquil-based El Universo, Chinese ships frequent Ecuador’s waters this time of the year when the cold Humboldt Current brings in nutrients that lead to a high congregation of marine species.
 - e. Chinese vessels have also run into trouble with other countries in the region. In 2016, Argentina’s coast guard chased and sank a vessel that it claimed had been illegally fishing in the South Atlantic.
4. **Diplomatic consequences**
 - a. While Ecuador’s navy announced that it had sighted the flotilla in international waters on July 16, it was only during this week that the matter escalated to a diplomatic level, when Ecuador officially expressed its “discomfort” to China.
 - b. President Lenin Moreno has said that Ecuador will discuss the “threat” with Peru, Chile, Colombia, and Panama – coastal countries of the region that have also been affected in the past.
 - c. The United States, which is already opposing China on multiple fronts, expressed its support for Ecuador. On July 29, the US National Security Council tweeted, “The United States stands with President @Lenin and our friends and partners in #Ecuador against any aggression directed toward their economic and environmental sovereignty.”
 - d. China on its part has maintained that it is a “responsible fishing nation” having a “zero tolerance” policy toward illegal fishing.
5. **The Galapagos Islands**
 - a. Renowned worldwide for its unique species, the islands host a wide array of aquatic wildlife, including marine iguanas, fur seals, and waved albatrosses. The giant tortoises found here – ‘Galápagos’ in old Spanish– give the islands its name.
 - b. Ecuador made a part of the Galapagos a wildlife sanctuary in 1935, and the sanctuary became the Galapagos National Park in 1959. In 1978, the islands became UNESCO’s first World Heritage Site.
 - c. It was here that the British naturalist Charles Darwin made key observations in 1835 that shaped his theory of evolution. Darwin described the islands as a “world in itself”.
 - d. According to an AP report, the warming of oceans due to climate change is expected to further increase fishing pressure around the islands, which would offer a better catch than other regions.

TOPIC 33. INDIA'S BORDERS

MINT GRAPHITI

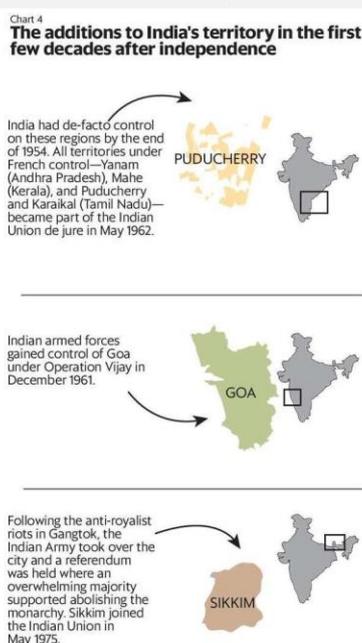
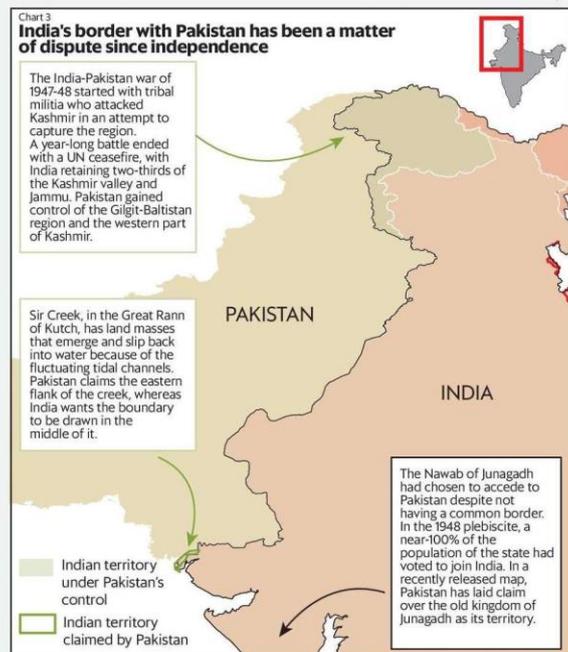
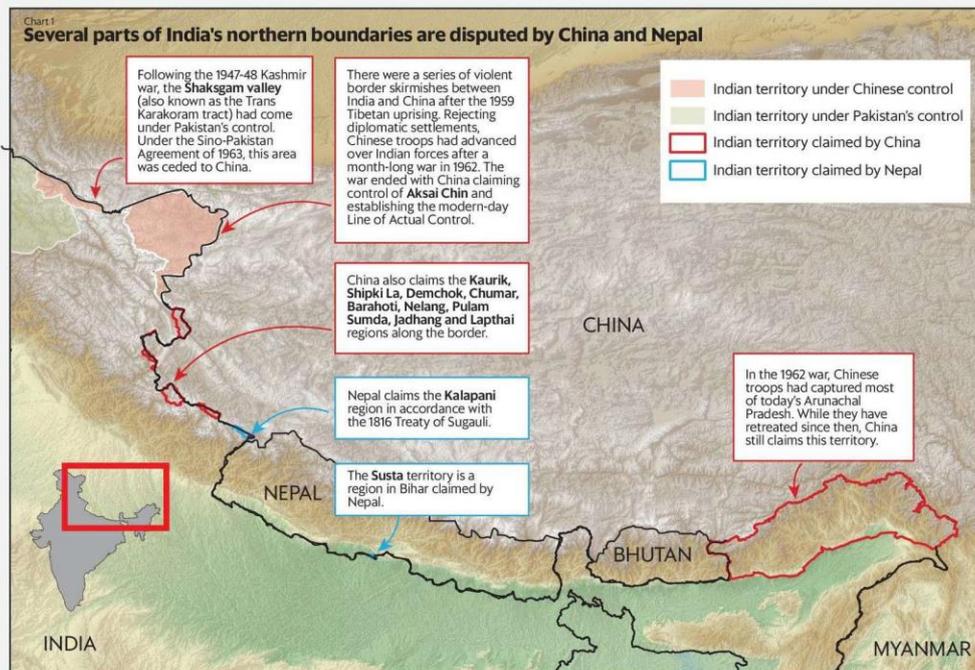


Chart 2
Timeline of changes and disputes in India's boundaries since independence

- Aug 1947** Most princely states accede to India in 1947, but some still hold out.
- Feb 1948** In a plebiscite, a near-100% of the population of Junagadh votes to join India.
- Sep 1948** Under Operation Polo, Indian armed forces annex Hyderabad, defeating the militant razzakars.
- Jan 1949** A year-long battle with Pakistan ends on a UN ceasefire, with India retaining two-thirds of the Kashmir valley and Jammu.
- Oct 1949** Merger agreements with Manipur and Tripura come into effect.
- Feb 1950** An international tribunal resolves border issues between India and East Pakistan (now Bangladesh), over several rivers along the border.
- May 1950** A plebiscite in Chandernagore, West Bengal, results in favour of it being integrated with India.
- Mar 1953** India gifts Kabaw valley near Manipur to the Myanmar government as a token of peace.
- Dec 1961** An Indian passenger's death due to Portuguese troops leads to military action to liberate Goa.
- May 1962** All territories under French control—Puducherry, Mahe, Yanam and Karaikal—become part of the Indian Union.
- Nov 1962** Following the Indo-China war, soldiers of both countries station themselves around what is called the Line of Actual Control.
- Mar 1963** Under the Sino-Pakistan Agreement of 1963, Pakistan hands control of the Shaksgam valley (the Trans Karakoram tract) to China.
- Feb 1968** The Indo-Pakistani Western Boundary Case Tribunal announces that 90% of the Rann territory would belong to India.
- May 1974** India cedes Katchatheevu, an uninhabited island in the Palk Strait, to Sri Lanka under the Indo-Sri Lankan Maritime agreement.
- Jun 1974** India and Bangladesh sign the Land Boundary Agreement (LBA). Bangladesh hands over the South Berubari corridor to India.
- May 1975** Sikkim joins the Indian Union in May 1975.
- Apr 1984** The Indian Army takes control of the strategic Siachen glacier as part of Operation Meghdoot.
- Dec 2015** The 2015 LBA facilitates the transfer of several enclaves between India and Bangladesh.

Source: Datameet, Mint research

1. A brief history of INDIA'S borders through wars, conquests and accessions, India's boundaries continued to change in the first few decades following its independence in 1947
2. A defence ministry document noting Chinese "transgressions" in eastern Ladakh that was hurriedly disowned last week has reignited the debate on the extent of territory that India may have lost to China. Chinese incursions in the region have revived memories of the bloody 1962 war, and brought the world's two largest armies face-to-face in a tense stand-off along the Line of Actual Control (LAC) separating the two countries.
3. The current bone of contention may be in Ladakh, but India's border dispute with China extends all along the Himalayan range. China still claims large parts of Arunachal Pradesh on its official maps. Although the eastern Himalayan border has been largely peaceful this time, it faced the brunt of the Chinese attack in 1962. Chinese troops had then advanced up to Tezpur in Assam, handing India a humiliating defeat, before moving back. The 1962 war allowed China to consolidate its position in

- Aksai Chin. India claims Aksai Chin as part of Ladakh but China claims it as its own territory, and had been making incursions since the 1950s, before cementing its hold in 1962 (*see chart 1*).
4. After the mid-June Galwan valley clash that claimed the lives of 20 Indian soldiers, China claimed the entire valley as its own territory. It has also claimed other disputed parts of the border along the Depsang plains and Pangong Tso lake as its own, positioning its troops to mark its claims. India has demanded that Chinese troops move back to their old positions, and status quo ante be restored. If that does not happen, it will mark one of the most significant border changes in decades.
 5. India's external boundaries have been relatively stable since the mid-1980s but there was considerable flux till that time. Through conquests, wars and accessions, India both gained and lost significant chunks of territories in the first few decades following independence in 1947 (*see chart 2*).
 6. On 15 August 1947, when India gained freedom, its map was still unclear. Several princely states had yet to decide how and on what terms they would join the Indian Union. The Indian Army played a key role in annexing Hyderabad in September 1948 but integration of independent territories through other means also led to changes in its map. Junagadh in Gujarat joined India through a plebiscite in February 1948. The north-eastern states of Manipur and Tripura joined India following merger agreements in 1949.
 7. The first major crack in India's territory appeared in January 1949 when the United Nations intervened in the Indo-Pak war. India retained two-thirds of the Kashmir valley while Pakistan was granted control over Gilgit-Baltistan and Pakistan-occupied-Kashmir (PoK). In 1963, Pakistan would hand over a part of the territory it had acquired in the Ladakh region—the Trans Karakoram tract—to China (*see chart 3*).
 8. In 1984, the Indian Army seized control over the Siachen glacier as part of Operation Meghdoot. While Siachen was considered part of India in its official documents, Pakistan had begun showing it as part of its territory in its official maps since the 1960s, following up with travel expeditions in the 1970s. Operation Meghdoot put an end to Pakistani ambitions by seizing control over the entire glacier just when the Pakistani army was reportedly planning to move into the area. Since then, the Line of Control (LoC) between India and Pakistan has remained largely unchanged. Although Pakistani infiltrators did manage to secure a toe-hold in Kargil in 1999, they were evicted in war that followed.
 9. There were also several additions to India's territory till the 1970s. The Indian Army was deployed to annex Goa in 1961. The French enclaves of Puducherry and Chandernagore joined India through referendums. Sikkim joined India same way in 1975, and remains last territory to merge with India (*see chart 4*).
 10. In several cases, India has deployed quiet diplomacy to resolve its border issues with friendly neighbours. In 1953, India handed over the Kabaw valley in Manipur to the Myanmar government as a goodwill gesture. In 1974, India handed over the island of Katchatheevu to Sri Lanka.
 11. India was also able to solve a major border dispute with Bangladesh in 2015, with mutual exchange of territories. India's boundary dispute with Nepal has flared up now as a new source of friction in the neighbourhood. But that may still be easier to resolve than India's deep-rooted conflicts with its two nuclear-armed neighbours.

TOPIC 34. GROWTH IN INDIA

MINT GRAPHITI

Chart 1 Just five states account for almost half of India's GDP

% share in India's GDP in 2018-19

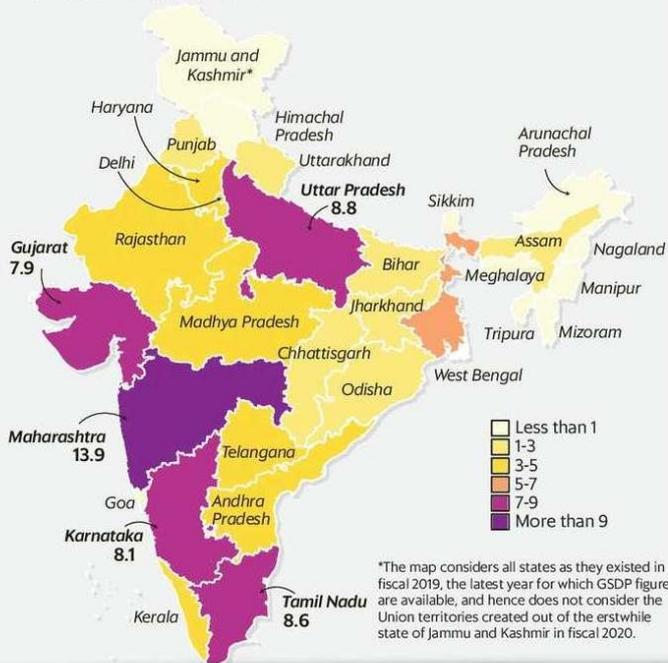


Chart 2 Countries with per capita GDP comparable to Indian states

Per capita GSDP in current \$ (2018-19)

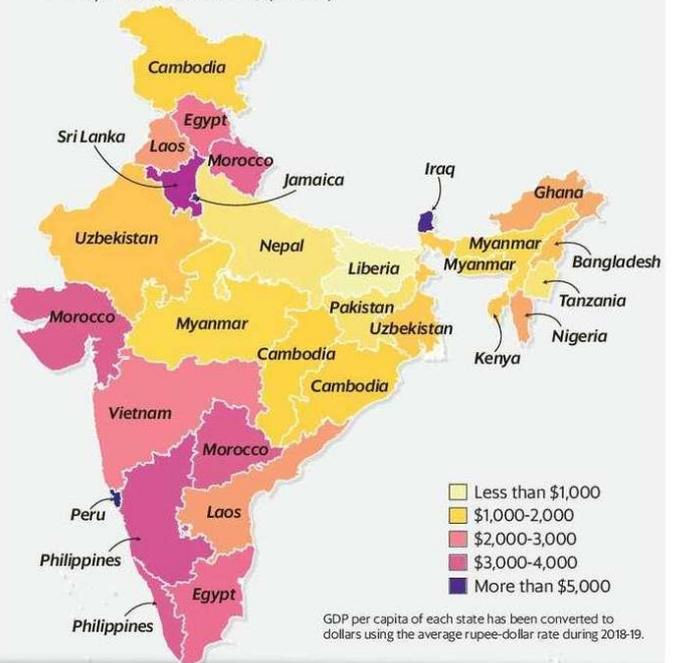


Chart 3 Among major Indian states, Bihar, Odisha and UP have grown the least since 1980



Chart 4 If poorer states had grown faster, India would have been far richer

GDP per capita in 2013-14 (current \$)

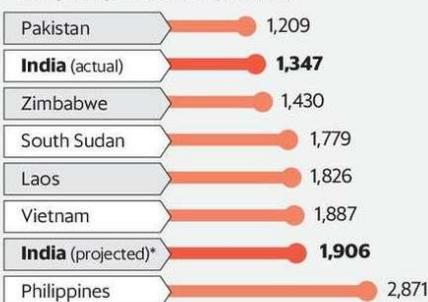
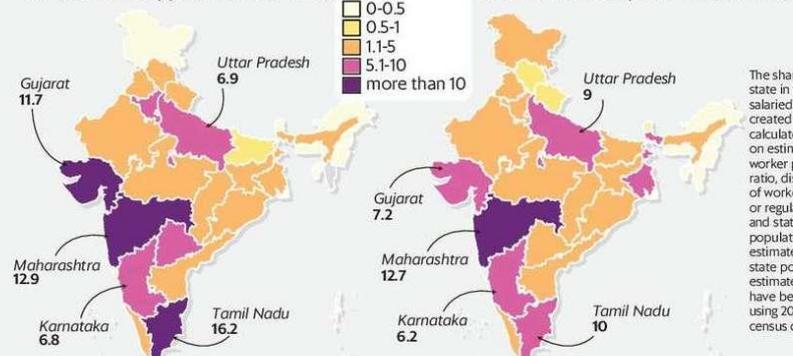


Chart 5 The big five state economies account for roughly half of factory jobs and salaried jobs

% share of factory jobs in India (2017-18)



Source: CMIE, ASI, World Bank, Bloomberg, PLFS (2018-19), census, Mint calculations

1. The geography of growth in INDIA more broad-based growth process will boost overall GDP in India, reduce regional disparities, and generate jobs where they are needed the most
2. A striking feature of India's growth boom since the 1980s has been the concentration of economic activity in a handful of states. Roughly half of India's gross domestic product (GDP) came from just five states then, as it does now. Maharashtra, Uttar Pradesh, Tamil Nadu, Karnataka, and Gujarat accounted for 47% of the country's output in 2018-19. The same set of states accounted for roughly the same share of India's output nearly four decades ago, in 1980-81 (*see chart 1*).
3. India's big five state economies may be similar in size, but they are not all at the same stage of development once we consider their per capita incomes. Maharashtra is as affluent as Vietnam, while Uttar Pradesh is comparable to Nepal. The gap in per capita incomes between the richest and the poorest states has grown over the past few decades. As these pages have pointed out earlier, at the beginning of the millennium, the per capita income of the five richest states was 145% higher than that of the bottom five states. That difference rose to 289% in 2010-11 and further to 322% in 2018-19. India looks like a continent of diverse countries once we map the per capita income of each state to the closest comparable country (*see chart 2*).
4. Conventional economic theory suggests that poorer states should have grown faster during India's growth boom since the 1980s. Return to investments tend to be higher in poorer regions. Economists call this process "convergence" or the "catch-up effect". Even as India managed to catch up to some extent with the rest of the world, poorer states within India have failed to play catch-up.
5. The changes in the way gross state domestic product (GSDP) figures are being calculated since the change in methodology in 2014-15 may be responsible for accentuating the divergence across states in recent years. However, even if one considers the period up to 2013-14 and uses the old GDP series, the story remains one of divergence rather than convergence.
6. The regional skew poses a big challenge for the country. However, it also presents an opportunity. If this divergence can be reversed and the natural "catch-up" process is allowed to play out, that alone will provide a big thrust to India's next growth surge. That growth surge will also be more evenly balanced than the previous one.
7. Consider India's growth journey over the 1980-2014 period. States such as Delhi, Gujarat, Maharashtra, Haryana and Tamil Nadu were the main engines of growth, while Bihar, Odisha and Uttar Pradesh lagged (*see chart 3*).
8. If all Indian states had grown at the same rate since 1980 as the five fastest-growing states (7.2%), India's GDP per capita would have been close to \$1,900 by 2014, 1.4 times higher than the actual \$1,347. India would have surpassed Vietnam, which had a per capita income of \$1,887 at the time (*see chart 4*).
9. A more broad-based growth process would also have generated jobs where they are needed the most. A majority of India's factory jobs are clustered in Tamil Nadu, Maharashtra, Gujarat, Uttar Pradesh and Karnataka, according to the Annual Survey of Industries (ASI) data for 2017-18. The five states also account for a little less than half of all salaried jobs in India, the latest Periodic Labour Force Survey (PLFS) data for 2018-19 shows (*see charts 5a and 5b*).
10. The concentration of economic activity and jobs in a few states has meant that the most populous states of the country are job-deficit regions. Bihar, for instance, accounts for 7% of the working-age population in the country (aged 15-59 years, according to the last census). However, it accounts for less than 3% of salaried jobs and barely 1% of factory jobs.
11. Even Uttar Pradesh does not generate the number of jobs that its vast population requires, though it counts among the five largest state economies because of its sheer size. India's most populous state accounts for 15% of the country's working-age population, but accounts for just 9% of salaried jobs and barely 7% of factory jobs.
12. By driving hordes of migrant workers to their states of origin, the pandemic-induced lockdown may have put the spotlight on regional inequalities. However, the regional skew has been a long-running feature of India's development journey.

13. Economists have argued that in the absence of state interventions to facilitate investments, capital tends to move towards already developed regions. This partly explains why states such as Maharashtra, Gujarat, and Tamil Nadu have outperformed other states since the 1980s.
14. "Private corporate investment is potentially highly mobile across states and is, therefore, likely to flow to states that have a skilled labour force with a good 'work culture', good infrastructure... and good governance generally," wrote former Planning Commission chief Montek S. Ahluwalia in a 2000 *Economic and Political Weekly* article on the wide variation in growth performance of states. What Ahluwalia wrote then remains true even today.
15. If laggard states are to catch up with richer ones, they will need bigger investments in both physical and social infrastructure. Faster growth for the poorer states would give a fillip to the country's overall growth rates even while bringing down inequality. Such an inclusive growth process would also help prevent India's economic fault lines from turning into deep political chasms.

CIVILSIAS

TOPIC 35. CONTACT-TRACING APPS

MINT GRAPHITI

Chart 1
Countries with a centralized approach to contact-tracing apps have seen higher adoption

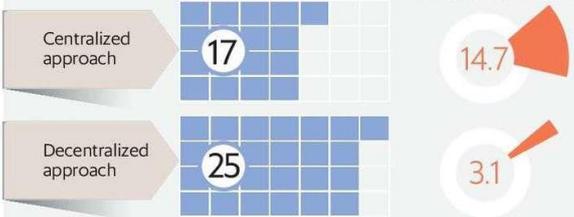
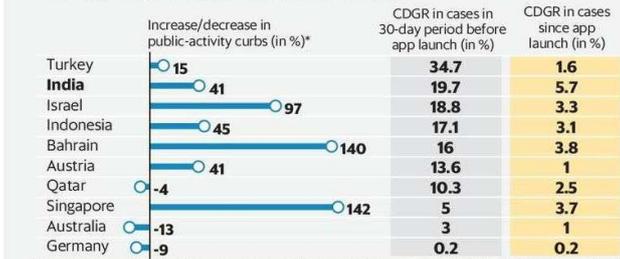


Chart 3
Decline in case growth since the launch of the app coincided with an increase in curbs



*Change in the Oxford Covid-19 Government Response Stringency Index between two time periods: 30 days before app launch and since app launch. An increase in value indicates greater curbs. Note: 1. CDGR: Compound daily growth rate. 2. Graph shows only those countries that had a contact-tracing app and had recorded at least 10,000 confirmed cases of coronavirus.

Chart 2
India leads in contact-tracing app downloads, but has significantly lower penetration

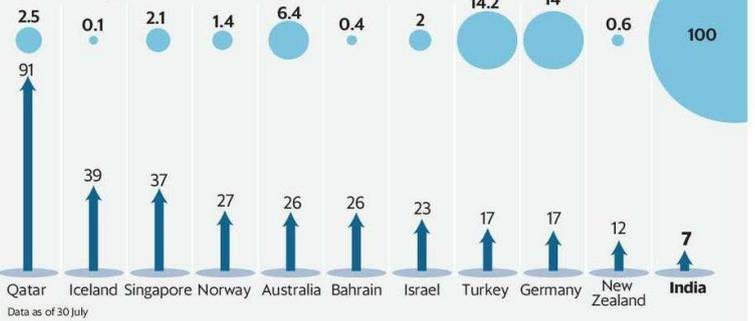


Chart 4
Decentralized contact-tracing apps scored higher on data privacy than centralized ones



Data privacy policies were measured against five parameters: 1. Voluntary: Explicit permission has to be sought from a user on data usage. 2. Limited: Strong limitations in place on use of data for purposes other than public health. 3. Data destruction: Policies in place to ensure tracking does not outlive the covid fight. 4. Minimized: Policies in place to destroy data when no longer needed for public health. 5. Transparent: Identity of users is kept anonymous at all times.

Source: MIT Technology Review Covid Tracing Tracker, ourworldindata.org

- Limits of contact-tracing apps, these apps are not the silver bullet for coronavirus they are sometimes pitched as, and they don't always protect civil liberties of users as they should
- The number of coronavirus cases worldwide is nearing 18 million, with 700,000 deaths, and public health systems in many countries are struggling to cope with the pandemic. A few nations have launched contact-tracing apps to support other measures such as lockdowns and physical distancing in an effort to slow down the spread of the virus.
- Governments collecting personal data of individuals for a public-health objective is not new. But the ongoing pandemic is the first public-health crisis where data collection by governments seeks to leverage digital technologies and big data on a universal scale. Contact-tracing apps are where all this comes together.
- The MIT Technology Review's Covid Tracing Tracker has data on 47 such apps, and it paints a diverse picture in approach, timing, adoption and privacy. The data shows that such apps are not the silver bullet they are sometimes pitched as, and they don't always protect civil liberties as they should.
- There are, broadly speaking, two approaches to contact-tracing apps: centralized and decentralized. Under the centralized approach, typically, all information of infected people and their contacts is stored on a central server with the government for matching contacts and alerting people at risk. Further, besides the user, the central server also tracks information on the location and people the user has met. Under the decentralized approach, the apps store data in a user's phone, leaving users in charge of their personal data. These apps only send the ID of the user in an anonymous format to a central database once the user is confirmed positive, while the matching is done on user phones.
- Of the 47 countries in the MIT database, information on centralization or decentralization is available for 42. Of these, 17 have chosen the centralized approach. These include India's Aarogya Setu, France's StopCovid and Australia's COVIDSafe. Decentralized apps include Germany's Corona-Warn-App, Italy's Immuni and Ireland's COVID Tracker. The centralized set has seen greater adoption. The median population penetration of contact-tracing apps from the centralized set was nearly five times that of the decentralized set (see chart 1).
- With 100 million installations, India's Aarogya Setu is the world's most downloaded contact-tracing app. As a share of population, however, the number is just 7.4%. That ranks India in the 12th spot among the 30 countries for which such data is available in the MIT database. Countries with relatively

- smaller populations have greater penetration levels, such as Singapore (37%), Australia and Norway (26% each) (**see chart 2**).
8. Most countries have seen their case growth rate reduce after the introduction of such an app. Yet, the role of these apps in controlling the spread of the virus is difficult to ascertain quantitatively as they were mostly accompanied by strict lockdown measures.
 9. Of the 30 countries for which complete data was available in the MIT database, 19 countries have registered at least 10,000 confirmed cases of covid. Of the top 10 among these by app penetration, nine have shown a decline in rate of case growth since their app launch, as compared to the 30-day period before the launch (**see chart 3**).
 10. Equally, a before-app and after-app comparison shows that seven of these 10 countries increased the severity of their lockdown. This includes high app-penetration countries, such as Qatar (91%), as well as low app-penetration ones, such as Indonesia and India (around 7%).
 11. A June 2020 *Economic and Political Weekly* article by lawyer-academic Kritika Bhardwaj highlights the restricted scope of contact-tracing apps, especially in a developing-country. They depend on self-reporting by individuals. This depends on large-scale testing, on which India has lagged peers. Further, such apps run on smartphones, which most Indians don't have.
 12. Then, there is the prickly issue of data privacy. Data-privacy policies of countries taking the decentralized approach did well in MIT's review, with nine out of 10 countries scoring a maximum 5 on the parameters it had set for protection. By comparison, the average score for countries following the centralized approach was 2.5. India's Aarogya Setu scored 2, indicating that data safeguards are weak compared to those in most other countries (**see chart 4**).
 13. Bharadwaj, in the same piece, says that India lacks a "well-defined legal regime for public health". Aarogya Setu, for instance, "collects a large amount of personal information from users when they sign up, and constantly builds on this by collecting location and Bluetooth data in real time. This allows the app to create a social graph of a person's interactions."
 14. Further, under the current terms, Aarogya Setu can be used beyond contact-tracing for other covid-related aspects and the time period specified for user data to be deleted can be extended. Such barriers have reined in adoption of contact-tracing apps and reduced their effectiveness.

TOPIC 36. COVID-19 CURE

MINT GRAPHITI

Chart 1
India's clinical management protocols have offered little explanation for inclusion or exclusion of drugs

Date	Suggested drug	Whether still part of clinical management protocol	Evidence of effect so far
17 March	Lopinavir + ritonavir	✓	No
	Methylprednisolone	✓	No
23 March	Hydroxychloroquine (prophylactic)	✓	No
31 March	Hydroxychloroquine + azithromycin for treatment of severe disease	✓	No
13 June	Hydroxychloroquine for treatment of high-risk mild cases, and all moderate cases	✓	No
	Methylprednisolone for moderate and severe cases	✓	No
	Enoxaparin etc. for moderate and severe cases	✓	Some positive results
	Remdesivir as investigational therapy for moderate cases	✓	Some positive results
	Convalescent plasma as investigational therapy for moderate cases	✓	No
	Tocilizumab as investigational therapy for moderate cases	✓	No
27 June	Methylprednisolone or dexamethasone for moderate and severe cases	✓	Some positive results

No longer part of clinical protocol
 Still part of clinical protocol
 Part of clinical protocol but with modifications

Chart 3
The majority of drug research focuses on antivirals, with repurposed drugs leading the charge

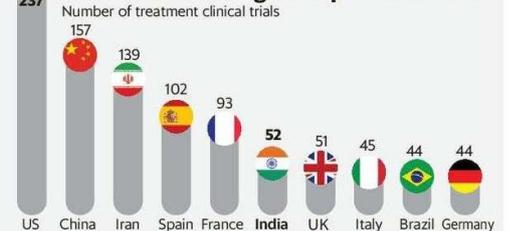
	Discovery	Phase							Unspecified	Emergency use authorization	
		Pre-clinical	I	I/II	II	II/III	III	IV			
Repurposed drug	Antivirals	0	78	2	0	11	11	22	9	10	0
	Anti-inflammatory*	1	1	4	1	16	5	12	4	0	0
	ARDS	0	0	0	0	1	0	1	0	0	0
	Cell-based therapy	0	0	0	2	0	0	0	0	0	0
	Dietary supplement	0	0	0	0	0	0	1	0	0	0
Novel	Antivirals	19	62	6	3	6	2	2	0	1	1
	Anti-inflammatory*	1	9	1	1	5	1	3	0	1	0
	Cell-based therapy	1	4	0	0	1	0	0	0	0	0
	Others	1	1	0	0	0	0	0	0	0	0
Preventive	Antiviral	0	0	0	0	0	0	1	0	0	0

*Immunomodulator The database counts only unique candidates and combinations, and not the number of trials for each type of drug

Chart 2
The two drugs that India recommends for 'investigational therapy' rest on mixed evidence

Investigational therapy	India's current recommendation	Current US recommendation	Evidence
Remdesivir	Under emergency use authorization, may be considered in patients with moderate disease who are on oxygen support	Prioritized for use in hospitalized patients who are on oxygen but not ventilation. Insufficient data to recommend either for or against in mild or moderate cases	Data from large multinational trial showed remdesivir reduced time to recovery, effect limited to those needing supplemental oxygen only
Tocilizumab	May be considered in patients with moderate disease or in ventilated patients not improving despite use of steroids. Long-term safety unknown	Not currently recommended for or against	Small trial in France claimed benefits in a press release but has since been discredited and no study published, small Italian trial lacked comparison data. Roche trial found no impact except reduced recovery time

Chart 4
The US leads in clinical trials, but India also features among the top 10 countries



- When India's National Task Force on covid-19 recommended against including Tocilizumab, Biocon's psoriasis drug, in its treatment guidelines a few days ago, move represented two key aspects of global scramble for a cure for covid-19: problematic bar for evidence and sheer size of the challenge.
- The task force's decision stemmed from dissatisfaction of its members about the adequacy of evidence generated from Biocon's 30-person clinical trial. Similar doubts were expressed by many in the medical and scientific fraternities in the days after the Drug Controller General of India granted emergency use authorization for the drug.
- However, the bar for evidence has not been uniform, or, at the very least, transparent. In the US, the recommendation by its National Institutes of Health for or against most known drugs is accompanied in its clinical guidelines with the evidence behind each such recommendation.
- In India, drugs appear and disappear from the protocol, which is published by the Union health ministry, with no explanation. In the second week of March, a Jaipur hospital declared "success" in treating an elderly Italian couple infected with the virus with a combination of antiretroviral drugs used in the treatment of HIV—lopinavir and ritonavir. Three days later, the drug combination had made it to the health ministry's treatment guidelines. The ministry recommended lopinavir-ritonavir for high-risk patients, including those above 60, those with diabetes, kidney failure, chronic lung disease, and the immuno-compromised. By the next iteration of the treatment guidelines, this combination was replaced by hydroxychloroquine (HCQ)—again, with no explanation.
- Perhaps no drug candidate in the race for a cure for covid-19 has seen as much controversy as the anti-malarial drug, from being recommended heavily by US President Donald Trump who said he took it as a preventive, to being first proven as ineffective by a major study published in *The Lancet*, which then had to retract it for numerous problems centring around opaque and implausible data. On 4 July, the World Health Organization announced that it was discontinuing the hydroxychloroquine arm of its global "solidarity" clinical trial because little to no evidence of its effectiveness was emerging, alongside some "safety signals", meaning there were concerns it was instead causing harm. Yet India continues to recommend its use.
- India's clinical management protocol at present focuses on supportive therapies and recommends only a few types of drugs. For mild cases, it recommends hydroxychloroquine for high-risk patients. For moderate cases, it also recommends anticoagulants to prevent blood clots and corticosteroids

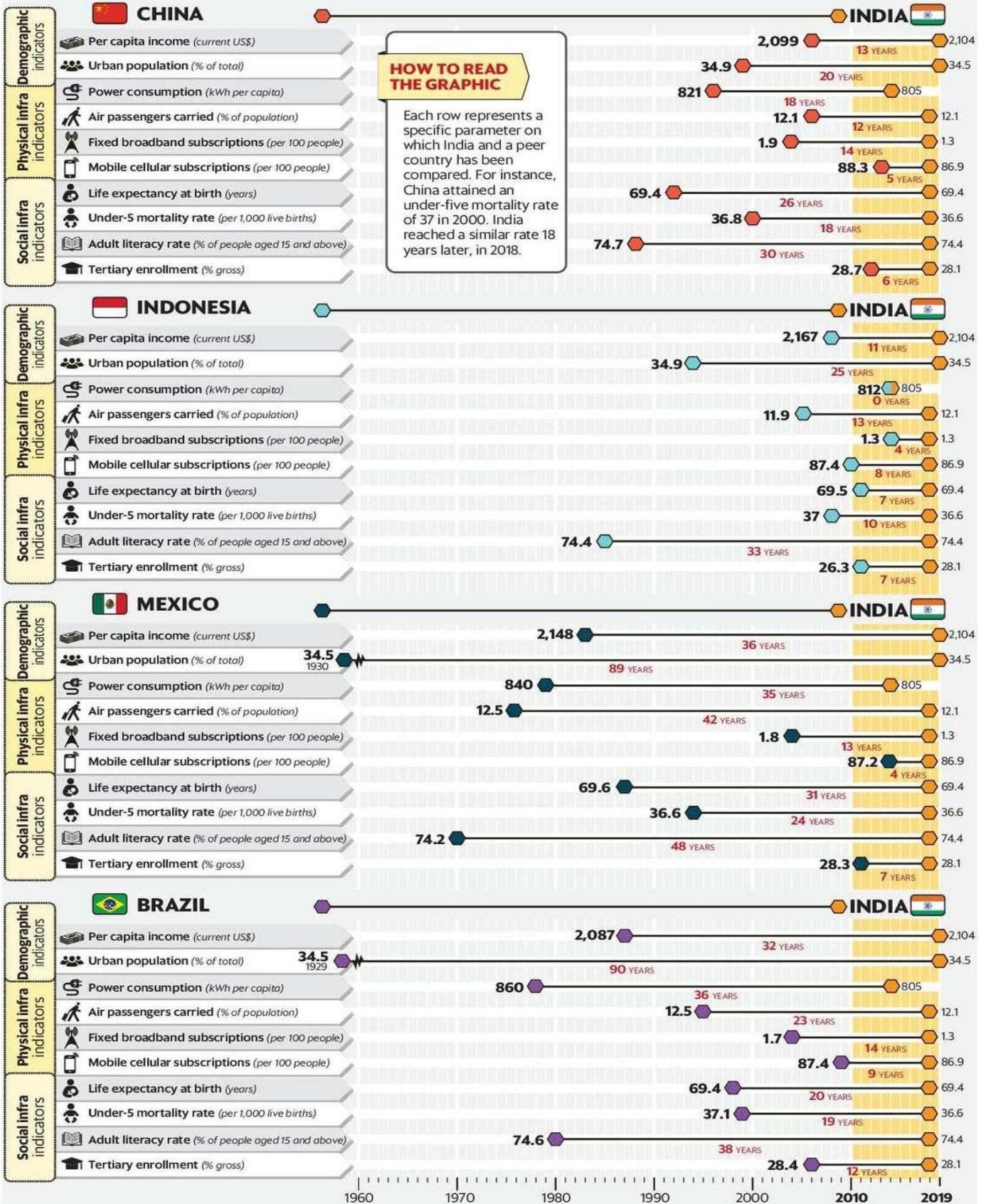
such as dexamethasone, the drug that reduced mortality by one-third in ventilated patients in the University of Oxford's recovery trial. For severe cases, it recommends the same set of drugs, but not hydroxychloroquine (**see chart 1**).

7. India's guidelines also suggest three "investigational therapies" for which there is limited evidence, but which can be used at doctor's discretion. Of these, remdesivir, the drug initially developed by Gilead for use in hepatitis C but subsequently used for the treatment of ebola, is also recommended by the US. US also did not find enough evidence to recommend for or against Tocilizumab, Roche's rheumatoid arthritis medicine. It has also found no evidence to recommend for or against non-drug convalescent plasma therapy that has been used extensively in Delhi in particular (**see chart 2**).
8. Research into a cure is broadly divided into three types of drugs being investigated: antivirals such as remdesivir, anti-inflammatory drugs such as dexamethasone, and others including protein inhibitors, according to Policy Cures Research, a British think tank. Most of the drugs being investigated are repurposed variants of existing drugs (**see chart 3**). The COVID-NMA project, led by an international team of researchers from the British charity Cochrane, as well as from the University of Paris and other universities, tracks ongoing research on covid-19. The project, backed by WHO, identifies 1,236 clinical trials focused on treatment (as opposed to preventive vaccines) across the world, 52 of them in India (**see chart 4**).
9. Globally, the success rate of ongoing research remains low, with the NMA project raising concerns about the quality of evidence in claims put forward by most trials that are reporting data. In that respect, India's experiments with recommending drugs to treat covid-19 are not unusual. What stands apart, however, is the opacity over its reasoning.

TOPIC 38. SOCIAL INFRASTRUCTURE

MINT GRAPHITI

India lags far behind peers in social infrastructure



Note: The latest year values are as reported by the World Bank. For a couple of indicators for which World Bank does not provide historical data for all years, the figures are based on secondary research and interpolation.

Source: World Development Indicators, Mint research

1. It is well-recognized today that India's infrastructure deficit needs to be fixed. From erratic power supply to clogged ports, India's strained infrastructure drags down productivity and hurts growth. Unsurprisingly, the Reserve Bank of India (RBI) governor Shaktikanta Das called for a big infra push to revive India's growth engines at a Confederation of Indian Industry (CII) event a few days ago.
2. What is less well recognized is the role of India's social infrastructure deficits, in education, skills, health, and nutrition, that have stifled its growth potential. A *Mint* analysis of a broad range of economic indicators suggests that India's deficits in social infra may be harder to bridge than its deficits in physical infra.
3. Only countries with gross domestic product above \$2 trillion (purchasing power parity, current international dollars) and with per capita incomes at most three times India's current levels have been considered for this analysis. There are four such countries in the world: China, Indonesia, Mexico and Brazil. The analysis considers the gap between India and each of these countries in terms of the number of years separating them by examining when each peer was at the same level as India is right now, on various parameters.
4. On some infra indicators, such as mobile and internet connectivity, India is less than a decade behind its peers. However, it is several decades behind most peers on all social indicators (see chart).
5. About three-fourths of adults in India are literate today. China reached the same level of literacy in 1988, Indonesia reached that milestone in 1985. Brazil and Mexico reached the same levels of literacy earlier. The gap in life expectancy is narrower than the gap in literacy but still very large. In 2018, India reached a life expectancy of 69.4. China reached the same levels in 1992, 26 years before India. Mexico reached the same levels in 1987, 31 years before India. Brazil reached the same level in 1998, 20 years before India. India's life expectancy gap with Indonesia is relatively smaller, with Indonesia reaching India's current level only in 2011.
6. While China's lead over India in terms of its impressive physical infrastructure is widely commented upon, China's early efforts in providing education and healthcare to the masses deserve attention. Its early investments in social infra during the Mao Zedong era provided a solid launch pad for its growth take off in the post-Mao era, wrote Pranab Bardhan, emeritus professor of economics at the University of California, Berkeley, in his 2011 book, *Awakening Giants, Feet Of Clay: Assessing The Economic Rise Of China And India*. Deng Xiaoping, who took charge of the Chinese communist party in 1978, unshackled many of the Mao-era socialist controls to usher in an era of unprecedented prosperity. However, the Maoist legacy of heavy investments in broad-based education, healthcare, and rural electrification also helped Deng's cause, Bardhan argued.
7. The World Bank's first study on the Chinese economy published in 1983 noted that despite low per capita consumption levels, China's "most remarkable achievement has been to make low-income groups far better off in terms of basic needs than their counterparts in most other poor countries."
8. The story of the Asian tigers is broadly similar to China in this respect. All four of the so-called Asian tigers—Hong Kong, Singapore, Taiwan, and South Korea—which made the transition from being underdeveloped countries to developed economies in less than half a century, embraced wide-ranging state interventions, including heavy investments in education and health.
9. During the first half of the 20th century, Japan's rule over Korea and Taiwan left both countries with "a major accumulation of human and physical capital", wrote American economist Henry J. Bruton in a 1998 review of the experiences of fast-growing emerging economies. Most colonial rulers saw their colonies as markets for their own factories. In contrast, Japan used its colonies as production hubs as it prepared for war. The Japanese also borrowed from the best European practices to create a world-class health infrastructure in these colonies. The superior health outcomes of Taiwan and South Korea, and the resilience shown by them during the ongoing pandemic is partly because of that legacy. Japan was certainly as brutal as any other colonial ruler but it helped equalize opportunities in otherwise unequal societies.
10. By the time Japanese rule ended, the labour force in Korea and Taiwan was vastly superior to that of any other developing country, wrote Bruton. It is the early development of human capital, Bruton

argued, that allowed Korea and Taiwan to deploy global best practices rapidly on shop floors, boosting productivity and growth. In contrast, mass education and healthcare were neglected in India, first by British colonial rulers, and then by successive Indian governments post independence.

11. Despite the “strong pro-education rhetoric” in the Indian freedom movement, progress on mass schooling was remarkably slow in India, economists Jean Drèze and Amartya Sen wrote in their 2013 book, *An Uncertain Glory: India And Its Contradictions*. While the Nehruvian period gave birth to several world-class institutions of higher learning, school education did not see a big push. Even today, the gap between India and peers in basic literacy is higher than the gap in tertiary enrolment rates, as the accompanying graphic shows.
12. Although access to schooling in India has improved over the past two decades, learning outcomes continue to be poor. In the last international comparison of learning outcomes that India participated in 2009, India ranked 72nd out of 73 countries, outranking only Kyrgyzstan.
13. India’s meagre investments in health have been even more lop-sided, with greater investments in curative facilities than in preventive public health initiatives such as disease surveillance and waste management. Among curative care facilities, tertiary medical centres have received far more attention than primary health centres. The upshot: India has always ranked among the countries with the highest toll from contagious diseases, much before the novel coronavirus landed on our shores.
14. The legacy of poor investments in education and health shows up in poor productivity numbers. According to a 2016 *The Lancet* study, an average Indian’s peak productive period was just seven years—less than half of that of an average Chinese worker— due to poorer health and quality of learning.
15. The lack of quality education and healthcare also make it difficult for the less privileged to take part in India’s growth process. As these pages have pointed out earlier, the premium on higher education in India’s job market has climbed sharply since the turn of the century. With greater digitization and automation in the post-covid world, such returns are likely to increase even further. Unless educational opportunities are equalized, existing inequalities will only widen in the years ahead. It will become even more difficult to sustain growth in the face of such inequities.
16. The key to the “East Asian miracle” lay in the ability of their political leadership to make “shared growth credible”, wrote the researchers Hilton L. Root and Jose Edgardo Campos in a 1996 Brookings Institution report. That’s a challenge Indian leaders have perennially struggled with.

TOPIC 39. PAKISTAN NEW MAP

1. The story so far:

- a. On August 4, Pakistan Prime Minister Imran Khan announced a new political map of Pakistan (picture). With this, Pakistan became the third country to launch a new political map after India and Nepal did the same in November 2019 and May 2020, respectively. India had reiterated its territorial claims in Jammu and Kashmir, and Ladakh with the new map; this triggered a reaction from Nepal which contested Indian claims in the Kalapani region of Pithoragarh district. The territorial claims of Pakistan are, however, of a far greater extent and challenge many of the past understandings and treaties.

2. What are the features of the new map?

- a. The new political map of Pakistan has claimed the entire region of Jammu and Kashmir stretching all the way to the edge of Ladakh. The map also claims Junagarh and Manavadar, a former princely State and territory, respectively, that are part of present-day Gujarat. It leaves out a claim line at the eastern end of J&K indicating Pakistan's willingness to make China a third party in the Kashmir issue. This clearly runs counter to the Simla Agreement which treated Kashmir as a bilateral matter. At the launch of the map, Pakistan Prime Minister Imran Khan said the border in that area will be fixed after resolving the Kashmir issue. Pakistan also claimed the entire territory and water bodies that fall in the Sir Creek region in the westernmost part of India.

3. How different is it from previous ones?

- a. A similar map has been part of school textbooks of Pakistan for many years which highlights the territorial aspiration of Pakistan over the northern part of the subcontinent. The document also maintains bits of reality on the ground as it shows the Line of Control in Kashmir in a red-dotted line.

4. What will be the impact of this cartographical warfare?

- a. The map is likely to lead to changes in Pakistan's position on territorial disputes with India. By demanding the entire Jammu and Kashmir region, Mr. Khan is changing the main features of Pakistan's Kashmir discourse as it includes the Jammu region prominently. The inclusion of Junagarh and Manavadar opens fundamental issues of territorial sovereignty of India. Manavadar, a princely territory, joined India on February 15, 1948 and Indian troops marched into Junagarh in September that year incorporating it into Indian territory. By normalising Islamabad's claims over these former princely territories, Pakistan is most likely to assert its rights over the former princely State of Hyderabad as well. The map may be used to provide legal cover for some of Islamabad's territorial ambitions, especially in Kashmir and Sir Creek.

5. What does Pakistan plan to gain by this exercise?

- a. Sir Creek is a collection of water bodies that extend from the Arabian Sea deep inside the territory of Kutch and is rich in biodiversity and mangrove forests. India's position on Sir Creek is based on the Kutch arbitration case of 1966-69. The new map can be used to reassert Pakistan's claims regarding the Rann which it had lost in the arbitration conducted in Geneva. India's position regarding Sir Creek is based on the fact that the arbitration had granted the entire Rann and its marshy areas to India while leaving the solid land across the Rann to Pakistan. By demanding the demarcation to shift towards the eastern bank, Pakistan appears to be going back also on the spirit of the Rann of Kutch arbitration where the overwhelming evidence of maps supported India's claims over the Rann and its marshlands.

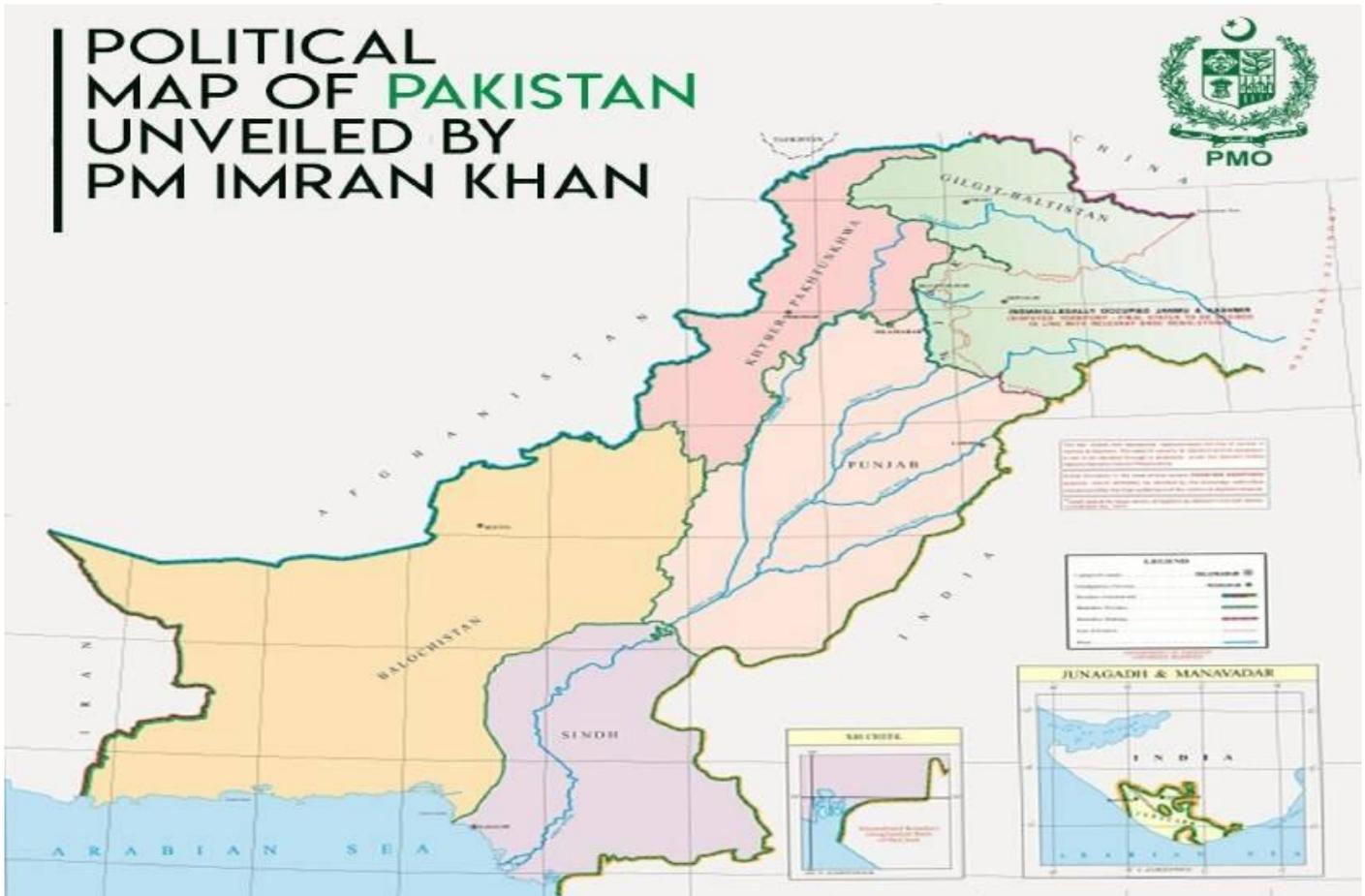
6. Are there any claims on its western borders?

- a. The map is silent about territorial claims in the west and northwest of Pakistan. It indicates Islamabad's acceptance of the Durand Line as the border with Afghanistan. The reality on the ground however shows problems that continue to haunt Pakistan on that front as well where law and order has been difficult to maintain because of free movement of armed fighters. A deadly clash between Afghan civilians and Pakistani troops led to the loss of at least 20 Afghan

lives during the last Eid ul Azha holidays when Afghans wanted to cross to the other side of the traditional Pakhtoon territory which is part of Pakistan's Khyber-Pakhtoonkhwa province. The resultant situation has placed Afghan and Pakistani troops in a confrontational position.

7. **Will the map trigger a diplomatic battle?**

- a. While launching the map, Mr. Khan described it as a document that depicts the aspiration of the people of Pakistan. However, by describing it as the new political map of Pakistan that will be showcased to the world, Mr. Khan has indicated that the map will eventually trigger diplomatic battles with India as it negates previous understandings. In Delhi, the Ministry of External Affairs said Pakistan's new political map is an exercise in "political absurdity".



TOPIC 40. GOVERNOR

1. The story so far:

- a. In Rajasthan, Governor Kalraj Mishra repeatedly turned down the advice of the Council of Ministers to convene a session of the Rajasthan Assembly. He insisted that a 21-day notice is essential for a session, demanded to know the purpose of calling it, and put other conditions such as maintenance of social distancing norms and recording of proceedings. He agreed to summon the House on August 14, only after the Council of Ministers agreed to the 21-day notice. The Governor's action has raised the question whether he has the power to turn down the recommendation of the Council of Ministers.

2. What are the powers of a Governor?

- a. The controversy in Rajasthan now is around the Governor's refusal to summon a session as desired by the Council of Ministers; in Arunachal Pradesh in 2015, the Governor changed the schedule of a session and set its agenda without a recommendation from the Chief Minister. In 2016, a five-judge constitution Bench of the Supreme Court dealt with questions arising out of the situation, which was comparable to Rajasthan today — rebellion in the ruling Congress and the Governor appearing eager to help the rebels. In the resulting *Nabam Rebia, Bamang Felix v. Deputy Speaker and others* case, the Supreme Court of India examined the powers of the Governor, particularly with reference to summoning an Assembly session. The top court reiterated that "the functions, duties and powers of the Governor by or under the Constitution are 'cabined, cribbed, confined'." The Bench explored the Governor's powers vis-à-vis the executive and the legislature.

3. Who summons an Assembly session?

- a. The Supreme Court held that the Governor's power "under Article 174 to summon, prorogue and dissolve the house(s) must be exercised in consonance with the aid and advice of the chief minister and his council of ministers. In the above situation, he is precluded [from taking] an individual call on the issue at his own will, or in his own discretion". The "discretion given to the Governor in respect of his relations with the Legislative Assembly is not only limited and circumscribed by the Constitution but also by the Rules framed by the Legislative Assembly under Article 208 of the Constitution".

4. Can the Governor direct the agenda or procedure of the legislature?

- a. The proceedings of the legislature are guided by rules made by it, and the Governor cannot have any say in it, points out P.D.T. Achary, former Secretary General of the Lok Sabha. Courts have directed video recording of procedure on occasions, but Mr. Achary says that is an overreach. For instance, the rule of 21-day notice for the session was first set by the Lok Sabha and adapted by State legislatures. The Lok Sabha has since reduced it to 15 days. But the Speaker has the powers to call a session with a shorter notice.

5. When can the Governor act without the advice of the Council of Ministers?

- a. In some States, the Governor has special powers to advance tribal welfare. A Governor can reserve a bill passed by the legislature for the consideration of the President of India, and he or she can recommend President's rule in a State. If the Chief Minister and his Council of Ministers lose their majority, or they refuse to recommend a session in six months, or there is a reasonable doubt about their majority, the Governor could demand a session. The Governor invites a person who he thinks has the legislative majority to form a government, but the use of this power cannot be arbitrary. If there is a Council of Ministers with a majority, the Governor has to go by its recommendation to dissolve the legislature. In the event of a Chief Minister and his Council of Ministers losing the majority, the Governor can use his or her discretion to either explore the formation of a new government or dissolve the House.

6. Is the Governor bound by people's representatives?

- a. The Constituent Assembly very consciously limited the Governor's discretionary powers. The misuse of the Governor's office by parties in power at the Centre to disturb State governments

in control of the Opposition has remained a scourge. But the constitutional scheme is very clear, as stated in the 2016 Supreme Court judgment that a Governor “cannot have an overriding authority, over the representatives of the people, who constitute... the state legislature... and/or even the executive government functioning under the council of ministers with the Chief Minister as the head”.

CIVILSIAS

TOPIC 41. ENVIRONMENT IMPACT ASSESSMENT

1. The story so far:

- a. The Ministry of Environment, Forest and Climate Change (MoEF&CC) has published the draft Environment Impact Assessment (EIA) Notification 2020, with the intention of replacing the existing EIA Notification, 2006 under the Environment (Protection) Act, 1986. The government wants to incorporate modifications made to the regulations through amendments in the interim period. An EIA makes a scientific estimate of the likely impacts of a project, such as a mine, irrigation dam, industrial unit or waste treatment plant. There is also a provision for public consultation in the rules, including a public hearing at which the local community and interested persons can give opinions and raise objections, based on the draft EIA report prepared by experts for the project.

2. How does the draft EIA Notification differ from the one now in force?

- a. Among the major departures from existing regulations is the removal of several activities from the purview of public consultation. A list of projects has been included under Category B2, expressly exempted from the requirement of an EIA (Clause 13, sub cl. 11).
- b. The projects under this category include offshore and onshore oil, gas and shale exploration, hydroelectric projects up to 25 MW, irrigation projects between 2,000 and 10,000 hectares of command area, small and medium mineral beneficiation units, small foundries involving furnace units, some categories of re-rolling mills, small and medium cement plants, small clinker grinding units, acids other than phosphoric or ammonia, sulphuric acid, micro, small and medium enterprises (MSMEs) in dye and dye intermediates, bulk drugs, synthetic rubbers, medium-sized paint units, all inland waterway projects, expansion or widening of highways between 25 km and 100 km with defined parameters, aerial ropeways in ecologically sensitive areas, and specified building construction and area development projects.
- c. The projects in this list are, under existing norms, identified on the basis of screening by Expert Appraisal Committees, rather than being exempted through listing in the Schedule. Also, coal and non-coal mineral prospecting and solar photovoltaic projects do not need prior environmental clearance or permission in the new scheme.

3. What are the apprehensions?

- a. There is apprehension that the exemption from EIA and public consultation for listed B2 category activity and expansion and modernisation projects will seriously affect the environment, since these will be carried out without oversight. Combined with a new provision for post-facto environmental clearance (of projects executed without prior clearance), this would further weaken protections. Moreover, the notice period for public hearing has been cut from 30 days to 20 days. This will make it difficult to study the draft EIA report, more so when it is not widely available or provided in the regional language.
- b. Similarly, for project modernisation and expansion, the norms in Notification 2020 are liberal, with only those involving more than 25% increase requiring EIA, and over 50% attracting public consultation.
- c. Under the proposed changes, project proponents need to submit only one annual report on compliance with conditions, compared to the existing two. The move is seen as retrograde, because the CAG found in 2016 that the deficiency in semi-annual compliance reporting was between 43% and 78%, while failure to comply with conditions ranged from 5% to 57%. Non-compliance was encountered particularly in river valley and hydroelectric power projects and thermal power projects. After the gas leak at LG Polymers in Visakhapatnam on May 7, the Environment Ministry told the National Green Tribunal that the unit lacked environment clearance, exposing the low effectiveness of rules.

4. How would the new rules enable post-facto approval of violations?

- a. The MoEF&CC cites its own order of March 14, 2017 enabling appraisal of projects involving violations — where construction had begun or expansion or modernisation was carried out

without clearance — and an order of the Jharkhand High Court asking for consideration of a case on merits, independent of penal action for violation, to introduce a beneficial scheme for violators.

- b. The EIA Notification 2020 excludes reporting by the public of violations and non-compliance. Instead, the government will take cognisance of reports only from the violator-promoter, government authority, Appraisal Committee or Regulatory Authority. Such projects can then be approved with conditions, including remediation of ecological damage, which, again, will be assessed and reported by the violator (and not an unconnected agency), although Central Pollution Control Board guidelines must be used.

5. **How does the draft notification compare with global norms?**

- a. EIA rules must meet the requirements of the precautionary principle of avoiding harm, and intergenerational equity. The European Union, as an evolving example, has modified its processes in accordance with the Aarhus Convention, 1998, which stipulates that environmental rights and human rights are linked, the present generation owes an obligation to future generations, sustainable development can be achieved only through the involvement of all stakeholders, government accountability and environmental protection are connected, and interactions between the public and public authorities must take place in a democratic context. The EU Directive on EIA includes climate change and biodiversity concerns.
 - b. The rules in India, including EIA 2006, it can be argued, privileged the interests of the project proponent by whittling down public consultations, accepting flawed and faulty EIA reports resulting from external influences, and ignoring the non-renewable nature of resources. Notification 2020 deepens the impact of that paradigm.
6. The draft EIA Notification 2020 proposed by the Ministry of Environment, Forest and Climate Change has met with massive opposition. This is not surprising, according to Shibani Ghosh, fellow, Centre for Policy Research, and Advocate-on-Record, Supreme Court.
7. “The stakes for the environment — and people — are staggeringly high. There is a crying need to overhaul the environmental clearance system. But the Ministry’s proposal perpetuates the faults and weaknesses of the current EIA Notification 2006, dilutes it further in some respects, and fails to acknowledge the grave ecological crises that the country is facing,” writes Shibani in her opinion piece in The Indian Express.
8. She gives five reasons for holding this view and demanding its withdrawal.
- a. One, the draft notification is legally untenable as it does not conform to its parent Act — the Environment (Protection) Act 1986. The Act requires the Centre to take measures to protect and improve the environment. “By reducing the ambit and stringency of the scrutiny of impact assessment, the proposed regulatory processes will prove severely detrimental to the environment,” she states.
 - b. Two, the proposed mechanism to deal with violations is illegal and worrying. “...the proposed notification allows the government to grant an ex post facto environmental clearance to projects that have commenced illegally without a clearance,” she points out.
 - c. Three, there is no mention of climate change and related consideration.
 - d. Four, the draft undermines procedural environmental rights. “The public consultation processes currently in force under the EIA Notification 2006 are already unsatisfactory, but the draft notification curtails their scope further”. It also reduces access to relevant information for project-affected persons.
 - e. Five, there is no effort to put in place processes that will improve the quality of decision making, particularly of the expert appraisal committees which perform the critical function of independent evaluation of projects.

TOPIC 42. CONTEMPT OF COURT

1. The story so far:

- a. Contempt of court, as a concept that seeks to protect judicial institutions from motivated attacks and unwarranted criticism, and as a legal mechanism to punish those who lower its authority, is back in the news in India. This follows the initiation of contempt proceedings by the Supreme Court of India, on its own motion, against advocate-activist Prashant Bhushan.

2. How did the concept of contempt come into being?

- a. The concept of contempt of court is several centuries old. In England, it is a common law principle that seeks to protect the judicial power of the king, initially exercised by himself, and later by a panel of judges who acted in his name. Violation of the judges' orders was considered an affront to the king himself. Over time, any kind of disobedience to judges, or obstruction of the implementation of their directives, or comments and actions that showed disrespect towards them came to be punishable.

3. What is the statutory basis for contempt of court?

- a. There were pre-Independence laws of contempt in India. Besides the early High Courts, the courts of some princely states also had such laws. When the Constitution was adopted, contempt of court was made one of the restrictions on freedom of speech and expression. Separately, Article 129 of the Constitution conferred on the Supreme Court the power to punish contempt of itself. Article 215 conferred a corresponding power on the High Courts. The Contempt of Courts Act, 1971, gives statutory backing to the idea.

4. What are the kinds of contempt of court?

- a. The law codifying contempt classifies it as civil and criminal. Civil contempt is fairly simple. It is committed when someone wilfully disobeys a court order, or wilfully breaches an undertaking given to court. Criminal contempt is more complex. It consists of three forms: (a) words, written or spoken, signs and actions that "scandalise" or "tend to scandalise" or "lower" or "tends to lower" the authority of any court (b) prejudices or interferes with any judicial proceeding and (c) interferes with or obstructs the administration of justice.
- b. Making allegations against the judiciary or individual judges, attributing motives to judgments and judicial functioning and any scurrilous attack on the conduct of judges are normally considered matters that scandalise the judiciary. The rationale for this provision is that courts must be protected from tendentious attacks that lower its authority, defame its public image and make the public lose faith in its impartiality.
- c. The punishment for contempt of court is simple imprisonment for a term up to six months and/or a fine of up to ₹. 2,000.

5. What is not contempt of court?

- a. Fair and accurate reporting of judicial proceedings will not amount to contempt of court. Nor is any fair criticism on the merits of a judicial order after a case is heard and disposed of.

6. Is truth a defence against a contempt charge?

- a. For many years, truth was seldom considered a defence against a charge of contempt. There was an impression that the judiciary tended to hide any misconduct among its individual members in the name of protecting the image of the institution. The Act was amended in 2006 to introduce truth as a valid defence, if it was in public interest and was invoked in a bona fide manner.

TOPIC 43. NATIONAL EDUCATION POLICY, 2020

1. The story so far:

- a. The Union Cabinet approved a new National Education Policy on July 29, after a 34-year gap. The National Education Policy, 2020 is meant to provide an overarching vision and comprehensive framework for both school and higher education across the country. The new NEP, approved by the Cabinet, has not been presented in Parliament. It is the first to be formulated by a Bharatiya Janata Party government and the first in the 21st century. It is only a policy, not a law; implementation of its proposals depends on further regulations by both States and the Centre as education is a concurrent subject.

2. What are some of the key proposals?

- a. The NEP proposes to change the school curricular structure from the current 10+2 (Class 1-10 of general education followed by two years of higher secondary school with specialised subjects) with a 5+3+3+4 structure, bringing children from ages 3 to 5 years within the formal education system for the first time, and ensuring curricular continuity in the last four years. A mission for foundational literacy and numeracy, free breakfasts being added to free lunches in government schools, vocational education along with internships from Class 6, and proposed redesign of the board examinations are some other major initiatives for school education.
- b. For higher education, a new umbrella regulator has been proposed with separate verticals for regulation, standard setting, accreditation and funding. It will absorb arts and science, technical and teacher education into its fold, replacing several existing regulatory bodies, and also ensure a level playing field for public and private players. Top foreign universities will be allowed to set up campuses in India. For students, the biggest change may be the introduction of four-year undergraduate degrees, with options for entry and exit at various stages, a credit transfer system, and the abolition of the M Phil programme.

3. What is the timeline for implementation?

- a. The policy is meant to transform the education system by 2040. Some proposals will be implemented immediately, starting with the change in the name of the Ministry of Human Resource Development into the Ministry of Education. "There are over 100 action points from the Policy. Implementation will be done in phases, based on time, region and types of institutions with Institutes of Eminence (IoEs) and Central Universities taking the lead," said Higher Education Secretary Amit Khare. For instance, four-year undergraduate degrees with multiple entry-exit options will be introduced in the 20 IoEs from the 2020-21 academic year, while others continue with the existing three-year degree courses. Existing M.Phil students can continue until they complete their degree, although new admissions for the programme will not be accepted.
- b. The National Testing Agency will introduce a pilot version of the common entrance test by December 2020, which will be used for admission to all IoEs and central universities in 2021. Some Indian Institutes of Technology are working on developing the technical structure of the Academic Credit Bank, which will also be established by December, and become applicable to all new students joining central universities next year.
- c. The National Foundational Literacy and Numeracy Mission which is to be implemented by 2025 will be launched by the end of this year, said Mr. Khare. The National Council of Educational Research and Training (NCERT) will introduce the curricular framework for the new school structure, including early childhood care, by the next academic year.

4. Where do the difficulties lie?

- a. Some of the proposals require legal changes. The draft Higher Education Commission of India Bill has been languishing in the Ministry for over a year, but is likely to be published for feedback by September. The proposal for a Board of Governors for universities may also require amendments of the Central and State Universities Acts. A Cabinet note has already

- been moved to set up the National Research Foundation as a trust under the government, but in order to make it a fully autonomous body, an Act may be required.
- b. Others require funding. Free breakfasts can only be considered in next academic year if a budget allocation is made to cover it. The process of converting affiliated colleges into degree granting autonomous institutions and then further into fully fledged universities is estimated to take at least 15 years, as the Centre will have to provide financial assistance for this purpose.
 - c. The Ministry feels that an increase in government funding of education to 6% of GDP will be sufficient to cover the financial implications of the NEP. However, such an increase in funding has been proposed but not achieved for the last half-century, point out experts. The proposal to make the mother tongue the medium of instruction till Class 5, which has stirred up the fiercest debates, is dependent on State governments, according to the Education Minister, who would not even confirm that the policy will be implemented by centrally-run schools.

No green shoots

About two months into the stringent lockdown owing to the COVID-19 crisis, a significant share of farmers across India were not able to sow their seeds, harvest their crop and sell their produce on time, according to the Gaon Connection and Lokniti-CSDS Covid Rural Survey 2020. Significantly, the distress came despite a slew of exemptions and relaxations for agriculture and allied sectors from the lockdown
By **The Hindu Data Team**

1. Were you able to harvest your crop on time during the lockdown?

Yes	52.2
No	41.4
No response	6.4

2. Were you able to sow on time during the lockdown?

Yes	37.9
No	42.4
No response	19.7

3. Were you able to sell your crop on time during the lockdown?

Yes	27.8
No	55.3
No response	16.9

All respondents interviewed were the main earners of their households, and were primarily men

4. If you were able to sell your crop, then where did you sell it?

Govt. purchasing centre	41.7
Govt. market yard/middleman there	8
Private trader	38.1
Somewhere else	3.1
No response	9.1

HOW TO READ THE TABLES | The survey is based on face-to-face interviews with 25,371 respondents in rural households between May 30 and July 16 this year across 179 districts. About 26.7% of them were farmers. Only the questions presented to the farmers are compiled here (except Q7 which was posed to all). Even among them, the questions were posed to pertinent farmers. For instance, in Q1, 41.4% of farmers who usually harvest were unable to do so in the period. The % response mentioned excludes those farmers who don't harvest their crop. Figures are in %



5. If you were able to sell your crop, were you able to do so at the government rate or lower?

Same as the government rate	58
Lower than the government rate	31.6
More than the government rate	4.6
No response	5.8

6. If you were able to sell your crop, how much difficulty did you face in taking your crop to the buyer?

Extreme difficulty	30.7
A lot of difficulty	27.5
Some difficulty	23.9
Not much difficulty	10.7
No difficulty at all	4.6
No response	2.7

7. Did you sell any land during the lockdown?

Yes	2
No	79
Didn't sell but mortgaged it	2.7
Don't own land	11.1
No response	5.2

Behind the moves

The most common reason that migrant workers gave for returning to their village from the city was COVID-19, according to the Gaon Connection and Lokniti-CSDS COVID Rural Survey 2020. One in four migrants either walked, cycled or travelled back to their village in hand-pulled rickshaws. More than half the respondents went a whole day without eating at least once before leaving their city. A significant share of the migrants said they would return to the city once the lockdown ended

HOW TO READ THE TABLES |

The survey is based on face-to-face interviews with 963 migrants in rural households between May 30 and July 16 across 179 districts. Each table lists the % share of different responses given by the migrants to a set of questions. For instance, in response to question 1, 51.7% of the migrants said they returned to their villages by some form of motorised transport such as train or motorcycle

1. How did you return from the city to the village?

Walking/bicycle/rickshaw/thela	25.3
Any motorised transport	51.7
Walking plus a vehicle	6.9
Other	6.2
No response	10

2. After the announcement of the lockdown, did your boss give you the entire salary or wages for your work?

Yes	48
No	28.4
Only one month pay	19.6
No response	4.1

3. Why did you deem it fit to return from the city to the village? What is the major reason?

No money/salary	28.9
Fear of COVID-19	35.6
Hunger/fear of dying of hunger	7.7
Wanted to be with family back home	7.5
Landlord was asking for money/evicted us	2
Work had stopped/lost job	5.3
I'm a student, had no money	1
No response	12

4. Were you ill-treated by a police person or a government official while coming here?

Yes	12.7
No	87.3

5. Were you ill-treated by people while coming here?

Yes	14.4
No	85.6

SOURCE: COVID RURAL SURVEY 2020, BY GAON CONNECTION AND CSDS-LOKNITI

6. Did you face food problems/scarcity while coming here?

Yes	40
No	60

7. When you were in the city during the lockdown, how often did you or any member of your household not eat anything at all the entire day due to lack of money or resources – often, sometimes, not much or never?

Many times	13.4
Sometimes	23.1
Not much	15.1
Never	35.3
No response	13.2

8. Would you like to go back to the city once the lockdown or the pandemic ends?

Yes	32.6
No	27.5
Maybe	15.6
Yes, but some other city	8.6
No response	15.7

9. In your opinion was the Modi government's attitude towards migrant workers during the lockdown very good, good, bad or very bad?

Very good	24.1
Good	43.9
Bad	17.2
Very bad	7.6
No response	7.2

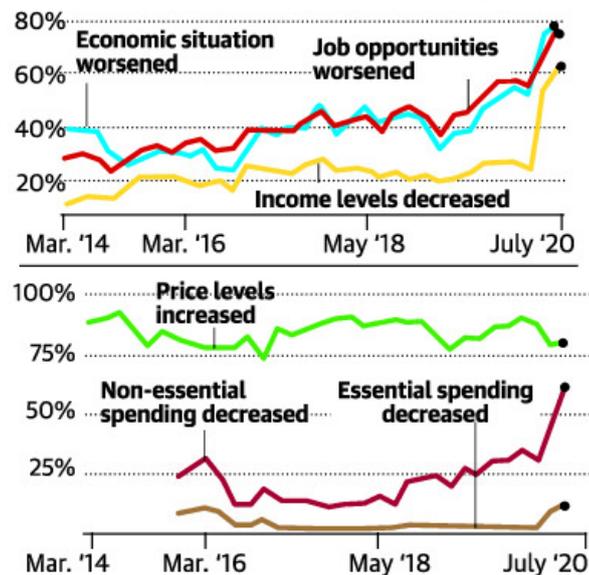
FACT 2. CONSUMER CONFIDENCE

Negative vibes

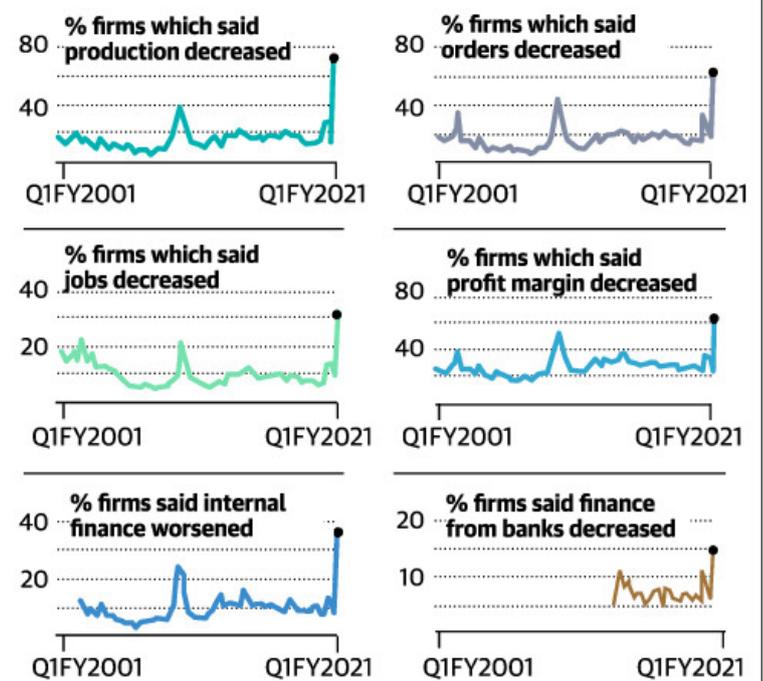
Both producers and consumers reported a pessimistic outlook on the state of the economy. Manufacturing firms have faced a difficult situation in Q1FY2021, with a high number of companies reporting low production levels and decreased orders. A record number of urban consumers reported low levels of confidence in July 2020 about the general economic situation, employment opportunities and income levels.

By **The Hindu Data Team**

PESSIMISTIC CONSUMERS | The graphs depict the responses to the RBI's Consumer Confidence Survey conducted between July 1 and 12, 2020, in 13 major Indian cities. About 78% of urban consumers said in July that the economic situation has worsened. About 78% said the jobs situation has worsened. Nearly 63% said their income levels have decreased. All three figures were the highest at least since March 2014, when the new format of the survey was launched. About 80% of consumers said the prices of commodities have gone up. A record % of respondents said their spending on both essential and non-essential commodities has decreased (61.4% and 12.1%, respectively)



PRODUCERS SUFFER | The graphs depict the responses of 802 companies in the Industrial Outlook Survey of the manufacturing sector conducted between April and June, FY2021 (Q1) by the RBI. Companies gave the lowest assessment of their business in Q1FY2021, since at least 2001. In Q1FY2021, close to 72% firms said their production decreased, 64% said their order books decreased, 32.5% said the employment situation worsened, 62% said their profit margin worsened, 38% said the availability of finance from internal accruals worsened and 16% said availability of finance from banks decreased. All figures in Q1FY21 were record highs



FACT 3. TAX REVENUE

Empty coffers

The government's tax revenues recorded a massive shortfall in the first three months of FY21 due to the stringent COVID-19-related lockdown. While all tax heads recorded falls, GST dropped year-on-year by 41% in that period. Even while revenue dwindled, expenditure recorded a marginal increase resulting in fiscal deficit widening to a whopping 83% of the year's target in the first quarter. By **The Hindu Data Team**

1. Tax revenue | India earns 80%-90% of its total revenue through taxes. Of this, corporation tax, income tax and GST contribute about 20%-25% each. In FY21, the share of gross tax revenue is budgeted to be only 78.3% of total revenue against 89.8% in FY19. This means that dependency on tax revenue has come down lately though it still remains high

Share of tax revenue as a % of total revenue

Year	Share of gross tax	Share of corporation tax	Share of income tax	Share of GST
FY19	89.8%	28.6%	20.4%	25.1%
FY20	80.2%	22.6%	20.7%	22.7%
FY21	78.3%	22.0%	20.6%	22.3%

^ Revised estimates for FY20; Budget estimates for FY21

2. Income comes down | The table compares the revenues from tax sources in Q1FY21 (April-June) with the same quarter last year. In FY20, by the first quarter, 16.3% of the year's gross tax revenue target was achieved, while in FY21, by the first quarter, only 11.1% was achieved. The gross tax revenue fell by 32.7% in Q1FY21 compared to Q1FY20

Taxes	% achieved of FY20's target by first quarter	% achieved of FY21's target by first quarter	% change in tax collected in Q1FY21 compared to Q1FY20
Gross tax	16.3%	11.1%	-32.7%
Corporation tax	9.2%	8.0%	-23.3%
Income tax	17.0%	9.7%	-35.9%
GST	47.4%	26.8%	-41.0%

SOURCE: GST.GOV.IN, BUDGET DOCUMENTS, CGA.NIC.IN, PIB

3. Spending goes up marginally | The table compares the expenditure in Q1FY21 with the same quarter in the previous year. India spent 26.8% of this year's target expenditure by the first quarter, while only 25.9% was spent in the same period last year. Expenditure increased by 13.1% in the first quarter of FY21 compared to the same period last year. Due to revenue shortfall, fiscal deficit (revenue minus expenditure) widened to 83.2% of the year's target, which is a record high for any first quarter

Parameter	% of FY20's target achieved by Q1FY20	% of FY21's target achieved by Q1FY21	% change in figure in Q1FY21 compared to Q1FY20
Expenditure	25.9%	26.8%	+13.1%
Fiscal deficit	61.4%	83.2%	+53.3%

4. State-wise | Graph shows the GST collected in Q1 of FY21 and the change from the same period last year. Except two States in the Northeast, collections fell in all other States

