

CURRENT AFFAIRS FOR UPSC

25th April to 1st May, 2021







INTERNATIONAL

A STREAM OF AWARDS

After last year's Oscar sweep by Parasite, there were those who peddled the myth that lightning will not strike the same place twice. It kind of did in the 93rd Academy Awards, when the Best Supporting Actress award went to South Korean Youn Yuh-jung, for her role as granny Soon-ja in the heart-warming Minari, beating off competition from Glenn Close's mad-haired Mamaw in Hillbilly *Elegy.* Anthony Hopkins winning his second Best Actor Oscar (he first won for The Silence of the Lambs) for The Father was disappointing, even if deserving. The sentimental favourite was the late Chadwick Boseman, who turned in an incendiary performance as the mercurial trumpeter, Levee Green, in Ma Rainey's Black Bottom. As expected, Nomadland won big with Best Picture, Best Director for Chloé Zhao and Best Actress (Frances McDormand). It is a historic win for Zhao as she is only the second woman to win the award and the first woman of colour to do so. While elegiac in its beauty, Nomadland should have looked at privilege. Only a white person can feel safe enough to drop off the grid. Wandering white people, even if they are hulking ex-military policemen, are enlightened and definitely not lost, while a homeless black person will always be looked at with suspicion. In this year of pandemics and lockdowns, the old rules of movies playing for a certain amount of time in theatres to be considered for the awards was relaxed. Movies directly released on streaming platforms made the cut. David Fincher's Mank got 10 nominations and won two — for cinematography and production design. Other favourites such as Ma Rainey's Black Bottom, Sound of Metal, Pieces of a Woman, Hillbilly Elegy, One Night in Miami and The Trial of the Chicago 7 were also streamed. One gem of a film was Two Distant Strangers, which won for Best Live Action Short. The film effectively marries two burning issues — violence against black Americans by white policemen and being caught in a time loop. Black graphic designer, Carter James, just wants to get back to his dog and he is shot every time by a white policeman, Merk. The film brings alive memories of police brutality at home as well. Every time Carter wakes up after being shot, to live the day again, it is a reminder of the year of blursdays that passed by. One should, however, be thankful for blursdays — if one cannot distinguish one day from the next, it means nothing hideous happened to make the day stand out. That, in these days of shock and dread is definitely something to be grateful for.

AN IDEA ON TAXATION THAT IS WORTH A TRY (ARUN KUMAR - MALCOLM ADISESHIAH CHAIR PROFESSOR, INSTITUTE OF SOCIAL SCIENCES, NEW DELHI, AND AUTHOR OF 'INDIAN ECONOMY'S GREATEST CRISIS: IMPACT OF CORONAVIRUS AND THE ROAD AHEAD')

United States Secretary of the Treasury Janet L. Yellen's proposal for global coordination of corporate taxation has huge implications. She has proposed a global minimum tax rate. If the major world economies agree and the U.S. Congress approves the increased tax rates, it would constitute a reversal of the trend in tax policies since the collapse of the Soviet Bloc 30 years back. Would Ms. Yellen succeed in convincing OECD countries and the U.S. Congress? David R. Malpass, President of the World Bank, representing the interest of global capital, has voiced his opposition. He was shooting from the shoulders of the poor countries when he said the proposal "…would hinder poor countries' ability to attract investment". The initiative which has been long overdue is being forced







on the rich countries by the impact of the pandemic. Presently, governments need resources to help people through transfer of incomes, provision of more public services and also prevent business failures. But their resources have been adversely impacted by the economic downturn. Consequently, fiscal deficits have reached record high levels. In the pre-pandemic era, such levels of deficit would have led to the tanking of the stock markets but now they are booming in anticipation of demand being pumped in by these high deficits. The result is a massive increase in inequality between those who have gained in the stock markets and those who have lost employment and incomes.

Massive deficits in the budget

The Joe Biden administration is proposing a massive \$3 trillion package to boost the economy. A large part of this will be spent in 2021 but some of it will be staggered. This will be in addition to the \$1.9 trillion package of relief already approved soon after the Biden administration took office. This package came after former President Donald Trump signed on the \$900 billion stimulus package in end December 2020 and more than \$2 trillion in mid-2020. Thus, in addition to the pre-existing deficits in the budget an additional 15% of GDP is being added in both 2020 and 2021. These are unprecedented levels. Additional tax collections can help reduce these large deficits and that is the reason for the U.S. administration's current proposal. But businesses and conservative legislators will resist. However, some rich Americans like Jeff Bezos have supported the idea of taxing the rich more. Such proposals have been around since 2011 when many of the rich in the U.S. and Europe had supported higher taxation on the rich. Warren Buffet had floated this proposal to strengthen capitalist economies after the global financial crisis of 2007-09. Subsequently, this proposal has come up several times. But, instead of raising the tax rate on corporations, the Trump administration cut the highest marginal tax rate from 35% to 21% with effect from January 1, 2018. This gives a hint as to why it is both difficult to raise corporation tax rates and why Ms. Yellen has proposed a global agreement on corporate taxation. When the Soviet Bloc collapsed in 1990, nations in east Europe were badly hit and needed capital infusion to overcome their economic woes. To attract global capital, they cut their tax rates sharply. This resulted in a 'race to the bottom'. Nations in Europe were forced to cut their tax rates one after the other to not only attract capital but also to prevent capital from leaving their shores. This had global implications. Nations became short of resources and cut back expenditures on public services and encouraged privatisation. Governments lacked resources for education, health and civic amenities. The developing countries followed suit even though private markets do not cater to the poor. Thus, disparities increased within nations.

BEPS and loss of revenue

The world experienced Base Erosion Profit Shifting (BEPS). Namely, companies shifted their profits to low tax jurisdictions, especially, the tax havens. For instance, many of the most profitable companies like Google and Facebook are accused of shifting their profits to Ireland and other tax havens and paying little tax. EU has levied fines on Google and Apple for such practices. Former U.S. President Barack Obama in 2009 had said that the U.S. was losing \$100 billion in taxes due to such practices. Since all the OECD countries have suffered due to cuts in tax rates and BEPS, initiatives have been taken to check these practices. But they will not succeed unless there is agreement among all the countries. Any country facing economic adversity can cut its tax rates to attract capital and force others to follow suit. India has also cut its tax rates since the 1990s. Most





www.youtube.com/c/DreamIAS

recently in 2019 the corporation tax rate was cut drastically to match those prevailing in Southeast Asia. Such cuts have implications for both inequality as well as for funding the schemes for the poor and the quality of public services.

The regressive tax structure

Another implication of the reductions in direct tax rates has been that governments have increasingly depended on the regressive indirect taxes for revenue generation. Value-Added Tax and Goods and Services Tax have been increasingly used to get more revenues. This impacts the less well-off proportionately more and is inflationary. Direct taxes tend to lower the post-tax income inequality. The rising inequalities result in shortage of demand in the economy and to its slowing down which then requires more investment and that calls for more concessions to capital. However, that does not guarantee revival because investment in response to a tax cut is uncertain. Instead, increased government expenditures are sure to raise demand. Global financial capital which is highly mobile has effectively used tax havens and shell companies to shift profits and capital across the globe. This mobility has enabled it to extract concessions from countries by making them compete with each other to match the concessions given by another — that is the 'race to the bottom'. So, without global coordination, corporation tax rates cannot be raised. The U.S. is crucial to this coordination — without its cooperation and agreeing, other countries cannot raise the rates. Now that the U.S. is taking the lead, perhaps this will happen even though it will not be easy given the clout of global capital in the corridors of power in all countries. There will also have to be cooperation among countries to tackle the lure of the tax havens by enacting suitable global policies. The impact of all this will be far-reaching impacting inequalities, provision of public services and reduction of flight of capital from developing countries such as India and that will impact poverty. So, a global minimum tax rate is worth a try in spite of the objection raised by the World Bank President.

AMID U.S. EXIT, TALIBAN PROTECTED FOREIGN BASES

Taliban fighters have protected western military bases in Afghanistan from attacks by rival, or rogue Islamist groups for over a year under a secret annex to a pact for the withdrawal of all U.S. forces by May 1, three Western officials with knowledge of the agreement told Reuters. The U.S. State Department gave no immediate response to Reuters over the existence of any such document. Nor did it have any immediate comment on what the three officials described as a "Talib<mark>an ring of</mark> prot<mark>ection". Since United States</mark> stru<mark>ck</mark> a de<mark>al w</mark>ith the Taliban in February 2020, paying the way for America to end its longest war, there have been no U.S. combat deaths, and there have been only isolated attacks on U.S. bases. Instead, the Taliban intensified attacks on Afghan government forces, and civilian casualties have spiralled. Peace talks between the militants and the government, which started in September, have made no significant progress, and a UN report said civilian casualties were up 45% in the last three months of 2020 from a year earlier. Testing Taliban patience, U.S. President Joe Biden served notice that the U.S. withdrawal would overshoot the May 1 deadline agreed to by the previous U.S. administration, while giving an assurance that it would be completed by September 11 — the 20th anniversary of the al-Qaeda attacks on the U.S. When the deadline passes on Saturday, around 2,000 U.S. troops will still be in Afghanistan, according to a western security official in Kabul. The commander of foreign forces in Afghanistan, U.S. Army General Scott Miller earlier this week said an orderly withdrawal and the





www.youtube.com/c/DreamIAS

handing over of military bases and equipment to Afghan forces had begun. Afghan soldiers left manning those bases could need plenty of firepower to resist any offensive by Taliban fighters, who have been occupying strategic positions in surrounding areas.

Mounting attacks

In the past two weeks alone, the militants have killed more than 100 Afghan security personnel in a surge of attacks that followed Mr. Biden's announcement that a U.S. withdrawal would take a few months more. Two of the Western officials said Washington had accepted the Taliban's offer to shield the western military bases from attacks by the likes of Islamic State. The officials said the Taliban had wanted to demonstrate good faith by meeting a commitment to ensure Afghan soil was not used for attacks on U.S. interests — a key U.S. demand in the February agreement. "They provided a layer of cover, almost like a buffer and ordered their fighters to not injure or kill any foreign soldier in this period," said one western diplomat involved in the process. The western officials said it was also important for the Taliban to show its ability to control the more recalcitrant factions in its movement, like the Haqqani network, which has often followed its own agenda, though its leader Sirajuddin Haqqani is the second-highest ranking commander in the Taliban. A western security official said that militants had kept their side of the bargain. "The Taliban swiftly responded to even minor attacks by the Haqqani network and IS fighters around the bases," he said. eTaliban spokesman Zabihullah Mujahid declined to comment on the so-called "ring of protection" agreement.

MARKING THE BEGINNING OF A GREEN ERA (SAUD MOHAMMED AL-SATI - SAUDI ARABIA'S AMBASSADOR TO INDIA)

One of the lessons learned from the ongoing COVID-19 pandemic is the need for collective action among members of the international community to effectively address global challenges such as pandemics and climate change. The pandemic has created an unprecedented crisis that demands an exceptional global response. Even as countries rightly continue to focus on tackling the immediate health emergency, the need is to have a long-term vision to build a climate-resilient global economy for the future.

Progress towards goals

Ambition alone cannot attain goals. Good results depend on our ability to act. That is precisely what defines the two recent initiatives launched by Crown Prince Mohammed bin Salman bin Abdulaziz, Deputy Prime Minister of the Kingdom of Saudi Arabia, to combat the threat of climate change — the 'Saudi Green Initiative' and the 'Middle East Green Initiative'. In fact, one of the main pillars of the Saudi G20 presidency was to "safeguard the planet". The Saudi leadership of the summit highlighted how climate change had negatively impacted the planet, people's lives and their well-being. The G20 introduced initiatives like establishing a Global Coral Reef Research and Development Accelerator Platform to accelerate scientific knowledge and technology development in support of coral reef survival, conservation, resilience, adaptation and restoration. G20 leaders also acknowledged the Circular Carbon Economy (CCE) Platform as a tool towards affordable, reliable, and secure energy and economic growth. Saudi Arabia is committed to lead regional efforts to address climate change and has been making steady progress in this direction. The Saudi Green Initiative aims to raise the vegetation cover, reduce carbon emissions, combat pollution and land degradation, and preserve marine life. As part of the initiative, 10 billion trees will be planted in the





www.youtube.com/c/DreamIAS

Kingdom. It aims to reduce carbon emissions by more than 4% of global contributions, through a renewable energy programme that will generate 50% of Saudi's energy from renewables by 2030. With the understanding that the need of the hour is to do more than enough, Saudi Arabia is working towards raising the percentage of its protected areas to more than 30% of its total land area, representing roughly 6,00,000 sq km, exceeding the global target of 17%. As part of the Middle East Green initiative, Saudi Arabia will work with the Gulf Cooperation Council countries and regional partners to plant an additional 40 billion trees in the West Asian region. It represents 5% of the global target of planting one trillion trees and reducing 2.5% of global carbon levels. Saudi Arabia has been sharing its expertise and know-how with its neighbouring countries to reduce carbon emissions resulting from hydrocarbon production in the region by 60% and globally by 10%. Saudi Arabia currently operates the largest carbon capture and utilisation plant in the world, turning half a million tonnes of CO2 annually into products such as fertilizers and methanol. It also operates one of the region's most advanced CO2-enhanced oil recovery plants that captures and stores 8,00,000 tonnes of CO2 annually. Plans are afoot to deploy additional carbon capture, utilisation and storage infrastructure. Saudia Arabia believes that nature-based solutions will play an important role in removing carbon as part of the CCE. We have already joined hands in February 2019 with India when Saudi Arabia joined the International Solar Alliance during the Crown Prince's state visit to the country, hence promoting cooperation in the renewable energy sector. Later that year, when the Indian Prime Minister visited Saudi Arabia, several MoUs and agreements in key sectors including renewable energy were signed. To ensure momentum and continuity, Saudi Arabia will convene an annual summit called the Middle East Green Initiative which will host leaders from the government, scientists and environmentalists to discuss the details of implementation. The aim is start implementing the plan in the fourth quarter of this year and continue for the next two decades. Saudi Arabia also recognises the scarcity of financial resources to irrigate the terrain. Therefore, in partnership with participating countries, innovative methods will be researched to irrigate from treated water, cloud seeding and other purpose-driven solutions such as planting native trees which requires support for three years to grow and will then be able to survive on their own with natural irrigation.

Working towards Vision 2030

In 2016, the Crown Prince unveiled Vision 2030, a comprehensive road map to improve the quality of life of the citizens of the country. As part of this, Saudi Arabia carried out a comprehensive restructuring of the environmental sector and established the Environmental Special Forces in 2019. With NEOM and The Line, Saudi Arabia has already redefined the idea of sustainable habitats. NEOM's location also gives Saudi Arabia many advantages in the field of hydrogen production. According to the World Bank, for every dollar invested in resilient infrastructure, \$4 in benefits are generated. With the Public Investment Fund recently pumping in \$15 billion in the NEOM project and another \$10 billion in renewable and solar energy projects, it is clear that the pandemic has only strengthened Saudi Arabia's resolve to realise the goals of Vision 2030 and become one of the major producers of renewable energy with a capacity to generate 9.5 GW by 2023. Our close friend and strategic partner India has also made remarkable commitments to tackle climate change and is on track to achieve its Paris Agreement targets. India's renewable energy capacity is the fourth largest in the world. India has an ambitious target of achieving 450 gigawatts of renewable energy capacity by 2030. We admire India's endeavour to build a safe and clean environment for future generations. Saudi Arabia hopes that the launch of the Saudi Green Initiative and the Middle East





Green Initiative marks the beginning of a green era and that these initiatives provide momentum to other countries to unify their efforts to save our planet.

A GREEN PARTNERSHIP

The U.S.-India Climate and Clean Energy Agenda 2030 Partnership raises expectations that the coming decade will see sustained financial and technological cooperation between the two countries to cut greenhouse gas emissions. At the Leaders Summit on Climate organised by U.S. President Joe Biden, the world's attention was focused on countries responsible for the highest carbon emissions. India ranks third, behind the U.S. and China, although its per capita CO2 emissions are less than 60% of the global average, as Prime Minister Narendra Modi pointed out. There is little confidence in a pandemic-stricken world, however, that future growth pathways will be aligned away from fossil fuels. The International Energy Agency, in fact, expects a dramatic rise in emissions as countries race to shake off the impact of the coronavirus, as they did after the 2008 financial crisis. Yet, the years to 2030, as President Biden put it, are part of a "decisive decade", and action to scale up funding and innovation can help all countries move closer to keeping global warming well below 2°C or even 1.5°C, as the Paris Agreement envisages. There are many aspects to the bilateral pact that could be transformative for energy-intensive sectors in India, starting with renewable power expansion to 450 GW. With open source technologies, India could incorporate innovative materials and processes to decarbonise industry, transport and buildings, the biggest emitters, apart from power. Many developed countries tend to view India's reluctance to commit to a net zero emissions target as recalcitrance, but the climate change crisis originated not here but in the industrialised world, which has used up much of the world's carbon space. A forward-looking policy should, therefore, envision green development anew, providing funding and green technologies as compensation for the emissions space lost by poorer countries. This is a win-win game, since it would aid sustainable development, boost employment, clean up the environment and, crucially, help all countries emerge healthier from the pandemic. British Prime Minister Boris Johnson, who announced enhanced ambition at the summit for Britain to cut carbon emissions by 78% by 2035 over 1990 levels, advanced the agenda by calling for climate funding by rich nations to exceed the decade-old goal of \$100 billion. For the India-U.S. agreement to yield results, Mr. Biden would have to persuade industry and research institutions at home to share knowledge and subsidise transfer of technologies. He has won commendations for steering America around from the science-deprived Trump years and announcing enhanced ambition: cuts in emissions by 50% to 52% by 2030 over 2005 levels. But much of his climate effort will rely on executive authority, rather than bipartisan support. With political will on both sides, the engagement with India can become a model.

PROMISES TO KEEP

In his first address to a joint session of Congress, U.S. President Joe Biden made clear that his administration would continue pressing forward with promises made during his election campaign last year, including vigorously meeting the health challenges of the ongoing COVID-19 pandemic, kick-starting the engines of the U.S. economy to provide sustainable job opportunities in the digital era, and reasserting the position of his country as a driving force for democracy worldwide including pushing back on China's aspiration to be a regional hegemon in Asia. Mr. Biden's first 100 days in office have been coterminous with arguably the most fraught times in recent U.S. history, given the devastation wreaked by the coronavirus on life and economic activity — making the U.S. the worst





www.youtube.com/c/DreamIAS

performer worldwide until recently surpassed on this grim scale by India. However, the Democrat has risen to the challenge posed by the virus, when compared to his predecessor Donald Trump's response, in terms of signing into law a \$1.9 trillion pandemic relief bill and funnelling direct payments of \$1,400 per person to more than 160 million households. Reports suggest that this shot in the arm could boost economic growth this year to 6% or higher, and revive the nearly 8.4 million jobs lost to COVID-19 by 2022. Whether this will be enough to mollify the likely anger of wealthy Americans for the tax hikes he proposes to slap them with is unclear. Yet, it is not the economy but the wounds of racist hatred that he will have to work even harder to heal. The recent conviction of the police officer responsible for the death of African-American George Floyd represents but the first step toward bridging the chasm between prejudiced, overzealous law enforcement and racial minorities. Notwithstanding the considerable progress made by the Biden administration in domestic politics, it is in the international arena that much work remains unfinished to repair the damage wrought by his predecessor, an isolationist who prioritised transactionalism and bilateral quid pro quo over strengthening the U.S. as a global voice for plurilateral cooperation and regional engagement. Mr. Biden, contrarily, has thrown down the gauntlet to China, assuring its President Xi Jinping that Washington would continue to maintain a strong military presence in the Indo-Pacific "not to start conflict, but to prevent one". Recognising the multi-dimensional character of Beijing's challenge to the rules-based international order, Mr. Biden has also vowed to stand up to "unfair" trade practices, including disallowed subsidies for Chinese state-owned enterprises and industrial espionage, as well as speak out on perceived violations of fundamental freedoms and rights relating to, for example, Beijing's aggression in the South China Sea and in Hong Kong and the Xinjiang region, respectively. Whether facing conservative opposition to domestic policies or hostile pushback on the global stage from geopolitical rivals, Mr. Biden must hold fast to the values that saw him elevated to the White House.

WHAT HAPPENED TO ARMENIANS IN 1915?

U.S. President Joe Biden on Saturday officially recognised the mass killings of Armenians by Ottoman Turks in 1915-16 as "an act of genocide". Mr. Biden's announcement on the Armenian Genocide Remembrance Day could infuriate Turkey, America's NATO ally. *Up to 1.5 million Armenians are estimated to have been killed in the early stage of the First World War within the territories of the Ottoman Empire. In 2019, the U.S. Congress passed resolutions calling the slaughter a genocide, but the Donald Trump administration stopped short of officially calling it so.*

Was it a genocide?

According to Article II of the UN Convention on Genocide of December 1948, genocide has been described as carrying out acts intended "to destroy, in whole or in part, a national, ethnic, racial or religious group". Raphael Lemkin, the Polish lawyer who coined the term "genocide" in 1943, had written that he had been influenced by atrocities against Armenians as well as the Nazi killings of Jews. Before the First World War broke out in 1914, there were 2 million Armenians in the Ottoman Empire. According to a study by the University of Minnesota's Centre for Holocaust and Genocide Studies, in 1922, four years after the War, the Armenian population in the region was about 387,800. This has led historians to believe that up to 1.5 million Armenians were killed during the course of the War. Armenians were largely living in the eastern fringes of the Empire. The Ottoman Turks unleashed Turkish and Kurdish militias upon them, killing and pillaging tens of





thousands. Hundreds of thousands of Armenians were deported from eastern Anatolia (today's Turkey) to concentration camps in the Syrian steppe. Most of the deaths occurred during this flight. "Rape and beating were commonplace. Those who were not killed at once were driven through mountains and deserts without food, drink or shelter. Hundreds of thousands of Armenians eventually succumbed or were killed," writes historian David Fromkin in A Peace to End All Peace.

Victims of power contest

In a way, the Armenians were victims of the great power contests of the late 19th and early 20th centuries. When the Ottoman Empire was in decline on its fringes by the last quarter of the 19th century, Armenians were seen by the rulers in Constantinople as a fifth column. The resentment started building up after the Russo-Turkish war of 1877-78 in which the Turks lost territories. In the Treaty of Berlin, big powers dictated terms to the Ottomans, including putting pressure on Sultan Abdülhamid II to initiate reforms "in the provinces inhabited by Armenians, and to guarantee their security against the Circassians and Kurds." The Sultan saw this as a sign of strengthening ties between the Armenians and other rival countries, especially Russia. Post the treaty, there were a series of attacks on Armenians by Turkish and Kurdish militias. In 1908, the Young Turks wrested control from the Sultan and promised to restore imperial glory. Under the Turks when the administration was run by the famous "Three Pashas" (Mehmed Talaat Pasha, the Grand Vizier or Prime Minister; Ismail Enver Pasha, the Minister of War; and Ahmed Cemal Pasha, the Minister of the Navy), the empire became more "Turkik" and persecution against the ethnic minorities picked up. In October 1914, Turkey joined the First World War on the side of Germany. In the Caucasus, they fought the Russians, their primary geopolitical rival. But the Ottomans suffered a catastrophic defeat in the Battle of Sarikamish by the Russians in January 1915. The Turks blamed the defeat on Armenian "treachery". First, Armenians in the Ottoman Army were executed. On April 24, the Ottoman government arrested about 250 Armenian intellectuals and community leaders. Most of them were later executed. (April 24 is the Remembrance Day). As the War was still waging, the Ottomans feared that Armenians in eastern Anatolia would join the Russians if they advanced into Ottoman territories. The Ottoman government passed legislation to deport anyone who is a security risk. Then they moved Armenians, including children, en masse to the Syrian Desert. That was a march of death. After the fall of the empire, many Ottoman officials, including a governor in Anatolia, were tried and executed for the atrocities committed against Armenians. But the Three Pashas fled the country and took refuge in Germany. They were sentenced to death in absentia. But Armenian resistance fighters under the banner of Operation Nemesis continued to hunt down Ottoman officials. On March 15, 1921, Talat Pasha, the Grand Vizier and the key architect of the atrocities, was assassinated on the street of Berlin by Armenian student Soghomon Tehlirian.

Turkey's response

Turkey has acknowledged that atrocities were committed against Armenians, but denies it was a genocide (which comes with legal implications) and challenges the estimates that 1.5 million were killed. The Turkish Foreign Ministry has issued a strong statement to Mr. Biden's announcement saying it doesn't not have "a scholarly and legal basis, nor is it supported by any evidence". "This statement ...will open a deep wound that undermines our mutual trust and friendship. We call on the U.S. President to correct this grave mistake," it read.





www.youtube.com/c/DreamIAS

Mr. Biden's move comes at a time when the relationship between the U.S. and Turkey has been in steady decline. In 2016, Ankara accused the U.S.-based Turkish Islamic preacher *Fethullah Gülen* of being the mastermind of a failed coup, and asked the U.S. government to extradite him, a demand Washington paid no attention to. Turkey's decision to buy the *S-400 missile defence* system from Russia, despite strong opposition from the U.S., prompted American leaders to oust Turkey from the F-35 fighter jet training programme and impose sanctions on their ally. When Mr. Biden assumed office, Turkish President Reccep Tayyip Erdogan had sent feelers for a reset, saying Turkey needed help from the West to resolve the Syrian crisis. But Mr. Biden's move on the Armenian killings appears to have widened the cracks. For Turkey, this overreaction to anyone calling the Armenian massacre a genocide is not doing any good in foreign policy. Instead of being defensive about the crimes of the Ottoman empire, *the modern Turkish republic should demonstrate the moral courage to disown the atrocities. It shouldn't allow the past to ruin its present interests.*

Starting with Uruguay in 1965, France, Germany, Russia and many others have recognised the genocide.

NAVALNY NETWORK ADDED TO EXTREMIST LIST, LAWYER HELD

Russia on Friday added Alexei Navalny's political network to its database of terrorist and extremist organisations, as Moscow moves closer to shutting down the jailed opposition politician's movement against President Vladimir Putin. The network appeared on a list maintained by Russia's financial monitoring service after Rosfinmonitoring said Friday it had updated the list. The network of Mr. Navalny's regional offices had disbanded on Thursday in anticipation of the move. Organisations on the list include the Islamic State group and al-Qaeda, and bans them in Russia, with members and supporters facing lengthy jail terms. It was not immediately clear whether the move was related to a request by prosecutors earlier this month to designate Mr,. Navalny's regional network and his Anti-Corruption Foundation (FBK) as extremist organisations. But the former coordinator of Mr. Navalny's offices in Moscow, Oleg Stepanov, indicated on Telegram that the move was connected to the ongoing court case. "Well of course, why wait? After all, the decision of the 'court' is already known in advance: fighting corruption in Putin's Russia is 'extremism,'" he wrote. "They don't even try to create the appearance of legality." The FBK did not appear on the list. The court hearings in the case are expected to resume on May 17. Meanwhile, Russian police on Friday detained prominent rights lawyer Ivan Pavlov — who is representing jailed Kremlin critic Alexei Navalny — on criminal charges, his organisation said. Team 29 said on its website that Mr. Paylov is facing charges of disclosing information about a preliminary investigation in the case of former journalist Ivan Safronov. The offence is punishable by up to three months in jail.

WHY BORIS JOHNSON'S FLAT IS UNDER PROBE

The UK's Electoral Commission has launched an inquiry into how Prime Minister Boris Johnson's flat on Downing Street is being funded. Simultaneously, No. 10 has begun its own investigation.

Why is it being probed?

Johnson and his fiancée Carrier Symonds moved into the flat above 11 Downing Street in July 2019. Tony Blair was the first Prime Minister to live in this flat, and, according to the BBC, it was the 3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR

Telegram: http://t.me/DreamIAS Jamshedpur





www.youtube.com/c/DreamIAS

preferred choice for Johnson and Symonds because it is much larger than the one above number 10. According to media reports, there has been speculation that renovations worth £200,000 are being carried out on the flat, when the PM receives annual public grant of £30,000 that to spend on the flat.

What is the Commission probing?

The inquiry aims to find out who paid for the refurbishment and the amount of money spent. It is the party that is under investigation, not Johnson. According to an article in The Guardian, the Commission is examining claims that Conservative Party funds initially paid for the renovations, that the party may have loaned Johnson the money, and that cash was handed over by Tory donors to pay for the work and set up a trust through which money could be funnelled.

How did the row start?

Last week, Dominic Cummings, Johnson's former chief adviser, claimed that the Prime Minister planned to illegally get donors to pay for his flat. In a blog, Cummings wrote, "The PM stopped speaking to me about this matter in 2020 as I told him I thought his plans to have donors secretly pay for the renovation were unethical, foolish, possibly illegal and almost certainly broke the rules on proper disclosure of political donations if conducted in the way he intended. I refused to help him organise these payments."

Has Johnson responded to the claims?

On Thursday, Johnson told reporters that the row was a "farrago of nonsense". The Prime Minister said he would cooperate fully with the investigation, after the Electoral Commission said there were "reasonable grounds" to suspect an offence had been committed in the funding of the flat. Earlier, minister Lord True had said no money from the public grant was spent in the financial year 2019-2020 and that "any costs of wider refurbishment in this year have been met by the Prime Minister personally".

What could be the implications of the Electoral Commission probe?

If it finds that the party failed to declare a donation, the Electoral Commission has the power to impose a fine of up to £20,000. And if it believes that the failure to declare the donation was intentional then the commission could refer its findings to the police, who could open a criminal investigation, The Guardian article said. "Labour says Johnson could be dragged into the inquiry personally because he is a 'regulated donee' and is obliged to provide details of any donation that could be considered for his personal benefit. The commission remains tight-lipped on this point," it said. The UK's Political Parties, Elections and Referendums Act, 2000 requires those who receive donations or loans to check that the donor is permitted and to report any donation to the Electoral Commission within a month.

What will the probe by the PM's office look at?

The BBC has reported that Johnson has appointed Cabinet Secretary Simon Case to review how the refurbishment of his flat has been paid for. No. 10 has said its own inquiry would not be published in full.





YEMEN REBELS ADVANCE ON MARIB

Yemen's Houthi rebels have made important gains in the battle for the government's last northern stronghold, advancing close to the centre of *Marib city* despite heavy casualties, military sources said on Sunday. The rebels have taken full control of the northwest Kassara battlefield and made progress on western frontlines despite airstrikes by the Saudi-led coalition which backs Yemen's government, the loyalist military sources said. Marib and its surrounding oil fields make up the last significant pocket of government-held territory in the north, the rest of which is under rebel control, including the capital Sanaa. Fierce fighting has left at least 65 dead over the past two days alone, including some 26 loyalists, among them four officers, the government sources said. The Iran-backed Houthis rarely disclose their own losses. With the Houthis taking control of the Kassara front, the battles have moved to the Al-Mil area, which is a mere 6 km from the centre of Marib and its population centres, they said. However, mountains around Al-Mil remain a formidable barrier to the rebels, who began their campaign for Marib in February. The government sources said the Houthis had poured in hundreds of reinforcements in recent days to achieve the gains, resorting to motorbikes after the coalition targeted their military vehicles. The loss of Marib would be a major blow for the Yemeni government and for Saudi Arabia which has supported its militarily since March 2015, after the rebels captured Sanaa.

Humanitarian crisis

Observers say the Houthis are intent on capturing the city in order to gain leverage before entering into any negotiations with the government, amid a U.S. push to revive peace talks. The city's fall could also lead to a humanitarian disaster, as vast numbers of civilians displaced from fighting elsewhere have sought refuge in the area. Around 140 camps have sprung up in the surrounding desert to provide basic shelter for up to two million displaced.

SOMALI OPPOSITION FIGHTERS CORDON OFF PARTS OF CAPITAL

Somali opposition fighters took up positions in parts of the tense capital on Monday, a day after clashes with government troops erupted over the President's bid to extend his mandate. Witnesses reported that armed men and vehicles mounted with machine guns were stationed in opposition strongholds, while key roads in Mogadishu were blocked. "Both the Somali security forces and the pro-opposition fighters have taken positions along some key roads," witness Abdullahi Mire told AFP. Somalia, already fragile after decades of civil war and an Islamist insurgency, is facing its worst political crisis in recent years after the failure to hold planned elections in February. President Mohamed Abdullahi Mohamed, best known by his nickname Farmajo, has faced harsh criticism from foreign allies after signing a law approved by parliament which extended his mandate by two years. On Sunday night, sporadic bursts of heavy gunfire rang out across the capital after fighting broke out between government forces and soldiers allied to the various opposition leaders. The clashes — mainly in the northern neighbourhoods of Sanca and Marinaya and the busy KM4 crossroads in the centre — began after dozens of opposition supporters marched in protest against Mr. Farmajo's term extension. There were no immediate reports of casualties.- 'Stop the fighting' - Tensions remained high on Monday, with some people trying to leave their homes in tense neighbourhoods. "People are starting to flee from Bermudo area where the pro-opposition fighters have taken positions last night, the situation is tense and there can be an armed confrontation anytime if the

3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR

Telegram: http://t.me/DreamIAS Jamshedpur





www.youtube.com/c/DreamIAS

situation remain the same," Fadumo Ali, a resident of one of the tense neighbourhoods told AFP. Mogadishu residents urged both sides to stop fighting, and complained that electricity and water had been cut. "We need both sides to stop the fighting, have sympathy with the children and elderly," said Farah Hassan. Witnesses elsewhere reported roads blocked by sand and logs.

WHAT ISRAEL WANTS IN SYRIA

Ten years since the outbreak of the crisis in Syria, the regime of President Bashar al-Assad seems to have won the civil war. If in 2015, before the Russian intervention, Mr. Assad's area of influence had shrunken to the largely Alawite-populated region stretching from Damascus to the Mediterranean coast, his troops now control most of Syria — except Idlib and the Kurdish territories. The Kurds enjoy autonomy in the border region with Turkey, but have bought a delicate peace with Damascus. In effect, Idlib, controlled by jihadists and rebels, and some towns on the border that are held by pro-Turkey militias are the only parts of the country that lie outside the sovereignty of the Syrian government. Mr. Assad's victory, however, seems to have locked Syria in a prolonged geopolitical contest. The Syrian army turned around the war with help from Russia, Iran and several Iran-backed Shia militias, including the Lebanese Hezbollah. They are all still in Syria, which shares a border with Israel. This means the civil war has intensified the Iran-Israel conflict.

Changing tactics

When the Syrian crisis unfolded in 2011-12, Israel took a 'wait and watch' approach, primarily because it preferred a stable regime in Damascus to the post-revolutionary chaos — despite the absence of a formal peace treaty, the Israeli-Syrian border has been largely uneventful since the 1970s. But when Iran deployed militias and military assets in Syria in defence of Mr. Assad, it changed Israel's calculus. Across Israel's northern border, the Hezbollah has already established a formidable presence. Both Israel's 1982-2000 occupation of southern Lebanon and the 2006 war on Lebanon were resisted by Hezbollah. Israel would not like to have more Iran-backed Shia militias across the Golan Heights, which it captured from Syria in the 1967 Six-Day War and which has been the de facto border between the two countries ever since. So, Israel changed its tactics. It first started helping anti-Assad rebels in the Golan region by reportedly providing cash and medical aid. The plan was to create a buffer between the Golan Heights and the rest of Syria so that the pro-Iran militias could be stopped from coming face-to-face with Israeli troops. Later, after the tides turned in the civil war and Iran deepened its presence in Syria, Israel started bombing Iranian positions inside Syria. Since September 2015, the Syrian air space has practically been controlled by the Russians. But Russia looked away when Israel stepped up its bombings and Israel has been careful not to hit Russian positions in the overcrowded Syrian battlefield.

Three goals

Israel had three key goals: disrupt Iranian supplies for Hezbollah and other Shia militias; stop the militias advancing towards the de facto border; and by continuously targeting them, weaken Iran's presence in Syria. In the last three years, Israel has carried out dozens of aerial attacks in Syria. In retaliation, Syria has often fired anti-aircraft missiles. In February 2018, Syria shot down an Israeli war plane. Last week, an anti-aircraft surface-to-air missile, purportedly fired by the Syrian army, landed near Israel's secretive nuclear facility in Dimona. In response, Israel carried out a round of bombing in Syria. For the Syrian government, support from Iran was a lifeline. While Russia provided





air power in the civil war, Iran supplied ground troops. So, Mr. Assad did nothing to prevent the sprawling Iranian influence in his country despite Israeli attacks. And Iran's response to Israeli attacks has been only to deepen its footprints. As a result, Syria has emerged as a new theatre in the Israel-Iran geopolitical contest in West Asia, which could outlive the Syrian civil war. Already, the conflict has spilled from Syria into the Mediterranean and Red Sea waters where both sides target each other's ships. With Israel determined to contain Iran's growing influence in the region, at a time when the U.S. and other Western powers are reaching out to Iran to revive the 2015 nuclear deal which could leave it more powerful economically, the Israel-Iran contest is set to intensify further.

45 DEAD IN ISRAEL PILGRIMAGE STAMPEDE

A massive stampede at a densely packed Jewish pilgrimage site killed at least 45 people in Israel on Friday, as Prime Minister Benjamin Netanyahu promised an investigation into one of the nation's "worst disasters". The nighttime carnage struck after pilgrims thronged to Meron at the site of the reputed tomb of Rabbi Shimon Bar Yochai, a second-century Talmudic sage, where mainly ultra-Orthodox Jews, or haredim, mark the Lag BaOmer holiday. The Health Ministry put the death toll at 45. The Magen David Adom rescue agency said an estimated 150 had been injured. Prime Minister Benjamin Netanyahu, who was helicoptered in to the scene in Israel's far north, said the "Mount Meron disaster" was "one of the worst to befall" the country since its foundation seven decades ago. "What happened here is heartbreaking. There were people crushed to death, including children," he said in a tweet. He promised a "thorough, serious and in-depth investigation in order to ensure that such a disaster does not recur." This year's pilgrimage drew tens of thousands of people who were seen packed together joyfully singing, dancing and lighting bonfires before the deadly crush. In a cruel irony, the BaOmer holiday celebrates the end of a plague that killed thousands of Talmudic students at the time of Rabbi Bar Yochai.

Police blamed

"This year, as we continue to inch closer to the end of a modern-day plague, I encourage everyone to find meaning and joy in celebrating the end of a different plague that occurred many years ago," a rabbi wrote in the Jerusalem Post before Friday's tragedy. Some witnesses blamed police for not allowing people to exit through a ramp that could have allowed them to escape the crush. The police "closed it (the ramp). Then, more people arrived, and more and more... and police wouldn't let them exit, so people started to fall on top of each other", Shmuel, 18, said. There were also indications that pilgrims sought to burst through iron sheet barricades as the choke-point formed. They "didn't open it (the passageway) until it crashed and all the crowd was blown away to the sides. Tens of people were crushed". Northern Israel's police chief Shimon Lavi told AFP his officers had done all they could to save lives on a "tragic night", helping to ferry those injured to hospital. The pilgrimage was the largest public gathering in Israel and possibly the world since the COVID-19 pandemic erupted early last year.

'Overcrowded' festival

Ten thousand people had been authorised to attend the tomb compound, but Israeli media outlets said 90,000 massed at the site, a figure that could not be immediately confirmed from official sources. With the launch of an inquiry into the disaster, the regional police chief told reporters: "I, Shimon Lavi... take upon myself the overall responsibility, for good and for bad, and I am ready for every





the European Union offered their condolences.

www.youtube.com/c/DreamIAS

inspection". The Army and emergency services deployed helicopters to evacuate the wounded. Scenes from Meron hours after the accident showed an ultra-Orthodox Jewish crowd in distress, the men in long black coats and wearing black hats, and debris scattered across the ground. Britain, France and

DON'T LOOK AWAY

The statement of the Myanmar Army chief and head of junta, General Min Aung Hlaing, that he would consider the ASEAN plan for an end to the crisis brought about by the coup he led on February 1, but only after "stability is restored", is ominous. By now, it is apparent what the junta means by restoring stability. Its soldiers have shot down more than 750 people, mostly peaceful protestors against the coup, some of them teenagers. In at least three border states, armed groups of ethnic minorities which were hoping to reach agreement with the newly elected civilian government on a federal Myanmar, have backed the pro-democracy protests. Determined to make an example of them, the Tatmadaw (the name for the Myanmar military) has taken to aerial bombardment in the Karen and Kachin states. This show of air power is a step up in the brutality that the Tatmadaw has shown itself capable of inflicting on the people of Myanmar. The danger is of a widening civil war-like situation if more ethnic armed organisations rise up against the army. That may affect states with which Myanmar shares porous borders, Thailand and India particularly. In the *Chin state*, members of a militia raised by the Chin people have clashed with soldiers, and many belonging to this ethnic group have taken refuge in adjoining Mizoram. There has been violence between pro-democracy protestors and security forces in Sagaing region, adjoining Manipur. The ASEAN plan is far from ideal. Hammered out by consensus between all members of the group, it speaks of a "constructive" dialogue" between all parties for a peaceful resolution, for mediation by an ASEAN special envoy and a visit by the envoy to Myanmar. It does not demand the release of Aung San Suu Kyi and other political prisoners and the word democracy is not mentioned in it. Still, the plan can help in getting the Myanmar military to stop violence against the people. ASEAN and its allies, including India, should be putting more pressure on the Myanmar junta to accept the plan. A new generation in Myanmar has come of age in the decade-long thaw in military rule, and it wants nothing less than full democracy. Younger pro-democracy protestors want to scrap the 2008 Constitution which was drafted and voted in by the military and its constituents that year, and has written in a hybrid military-civilian system. The world will be failing Myanmar if it stands by and allows a brutal military to crush this generation and its hopes and spirit.

MISSING SUBMARINE SANK, KILLING 53 ABOARD: INDONESIA

Indonesia's Navy on Saturday declared its missing submarine had sunk and cracked open after finding items from the vessel over the past two days, apparently ending hope of finding any of the 53 crew members alive. Military chief Hadi Tjahjanto said the presence of an oil slick as well as debris near the site where the submarine last dove Wednesday off the island of Bali were clear proof the KRI Nanggala 402 had sunk. Indonesian officials earlier considered the vessel to be only missing, but said the submarine's oxygen supply would have run out early Saturday. Navy Chief Yudo Margono told a press conference in Bali, "If it's an explosion, it will be in pieces. The cracks happened gradually in some parts when it went down from 300 m to 400 m to 500 m... If there was an explosion, it would be heard by the sonar." The Navy previously said it believes the





www.dreamias.co.in

submarine sank to a depth of 600-700 m, much deeper than its collapse depth of 200 m, at which point water pressure would be greater than the hull could withstand.

Findings to be evaluated

The cause of the disappearance was still uncertain. Adm. Margono said searchers found parts of a torpedo straightener, a grease bottle believed to be used to oil the periscope, debris from prayer rugs and a broken piece from a coolant pipe that was refitted on the submarine in 2012. "With the authentic evidence we found believed to be from the submarine, we have now moved from the 'sub miss' phase to 'sub sunk,'" Adm. Margono said. He said rescue teams from Indonesia and other countries will evaluate the findings. He said no bodies have been found so far. An American reconnaissance plane, a P-8 Poseidon, landed on Saturday and had been set to join the search, along with 20 Indonesian ships, a sonar-equipped Australian warship and four Indonesian aircraft. Singaporean rescue ships were also expected on Saturday, while Malaysian rescue vessels were due to arrive on Sunday, bolstering the underwater hunt, officials said earlier Saturday. The German-built KRI Nanggala 402 has been in service in Indonesia since 1981 and was carrying 49 crew members, three gunners and its commander.

HOW BHUTAN GOT ITS VACCINATION PLAN RIGHT AND CARRIED OUT THE WORLD'S FASTEST IMMUNISATION DRIVE

Around 1,200 vaccination centres inoculating over 64% of the country's adult population with the first shot of a Covid-19 vaccine: This is the secret behind Bhutan's success of controlling the spread of the virus while major countries are seen scrambling to get more shots into arms. Bhutan could have become one of the earliest to start a vaccination drive in the world. But the little Himalayan nation, which was given 1.5 lakh doses by India in January, chose to hold off the vaccination programme started till March 27 as Buddhist monks had advised the government that the time before that was not auspicious to start an inoculation drive. It used this delay to register all who needed to be vaccinated and planned a drive that would be fast and effected. In late March it set out one of the world's fastest immunisation drives, inoculating a world-beating 64% of Bhutan's adult population with the first dose. As of Friday (April 23), Bhutan, which has always emphasised its citizens' well-being over national prosperity, has administered a first vaccine dose to more than 479,000 people which is equivalent to 64% of its total adult population. Only Seychelles has vaccinated a slightly higher proportion of people at 69%, but it took months to do so.

So, what has the Himalayan Kingdom done to achieve such numbers?

The vast majority of Bhutan's first doses were administered at about 1,200 vaccination centers over a weeklong period in late March and early April. That rate was ahead of those of the United Kingdom and the United States, more than seven times that of neighboring India and nearly six times the global average. Bhutan is also ahead of several other geographically isolated countries with small populations, including Iceland and the Maldives. Although Bhutan's small population size is a major advantage over many other countries, credit to the extremely successful vaccination campaign must largely be given to the political leaders who understood the importance before things ran out of hand. Jigme Khesar Namgyel Wangchuck, the "Dragon King", formed the Guardians of Peace, an orange-jumpsuited national-service corps that has helped to set up and staff more than 1,200 vaccination stations across the country. The volunteers delivered





www.youtube.com/c/DreamIAS

vaccines to healthcare centres, ensured citizens reported for appointments and educated the Bhutanese on Covid-19 protocols, including social distancing and mask-wearing. In areas which were inaccessible by road, authorities even arranged for helicopters to transport the shots. "We're really grateful for the vaccine. If not for the helicopter service, we'd have had to travel for more than five days [to get vaccinated]," Dema, a resident of a mountainside village in the the northwestern district of Gasa where around 3,000 Bhutanese reside, told Kuensel Online (a local website). Moreover, the Prime Minister, Lotay Tshering, is himself a doctor and the Health Minister, Dechen Wangmo, holds degrees in cardiology and epidemiology from prestigious American universities. As such, quarantine measures in the country have also been strict: in March, the King himself spent a mandatory week in isolation after returning to Thimphu from a tour of southern provinces, and the Prime Minister locked himself away for 21 days following an official trip to Bangladesh. A low Covid-19 caseload has also helped the country fast-track its inoculation process. Bhutan has recorded only 934 cases and reported just one death, aided by two carefully managed lockdowns. It has kept its borders closed for over a year now, with a few exceptions, and anyone who wishes to enter the country has to first go into mandatory quarantine for 21 days. India has also played a crucial role in the rapid roll out of the vaccine in Bhutan. In an effort to counter growing Chinese influence in the region, the country had received 600,000 free doses of the Covishield vaccine manufactured by the Serum Institute of India. Bhutan had also received testing kits, personal protective equipment, N95 masks and essential medicines like paracetamol from New Delhi.

History of immunisation programmes in Bhutan

Health Minister Dechen Wangmo credited Bhutan's prized possession — its established "cold chain" vaccination programme — to the present success. The country had earlier achieved universal immunisation in the 1990s the current immunisation is riding on the existing programmes. The health minister had said that there were already a lot of systems in place and it made it very easy to introduce a new vaccine through a lot of advocacy and micro-level planning. Moreover, already-established systems meant people had very little hesitancy in taking the shots. The vaccine outreach also included health workers who had completed the Expanded Programme on Immunisation (EPI), which set the tone for a holistic public healthcare system in Bhutan and readied a cold-chain infrastructure for Covid-19 vaccines. Primary healthcare in Bhutan is free of cost. These healthcare workers were the ones who went around the country to administer the vaccines.





NATIONAL

INDIA RANKED 49TH IN CGGI

India has been ranked 49th in the Chandler Good Government Index (CGGI), which classifies 104 countries in terms of government capabilities and outcomes. Reuben Abraham, CEO of IDFC Foundation and IDFC Institute, and CGGI Advisory Panel Member, said: "Civil service innovation and capacity building is a key focus for the Indian government. The CGGI shows the importance of investing in governance capabilities." Finland topped the CGGI list. The index focuses on seven pillars: leadership and foresight; robust laws and policies; strong institutions; financial stewardship; attractive marketplace; global influence and reputation; and helping people rise.\

THE RISING SUN IN INDIA-JAPAN RELATIONS

Contrary to the expectations of many, Japanese Prime Minister Yoshihide Suga has turned out to be a true successor of his predecessor, Shinzo Abe, on the foreign policy front. His visit to the United States last month has set the agenda for the wider Indo-Pacific engagement of Tokyo and its evolving priorities.

Focus on China

Right at the outset, it was clear that the crux of the discussions during this first in-person meeting between the newly anointed President of the United States, Joe Biden, and Mr. Suga would revolve around China. To begin with, Tokyo and Washington drilled down to brass tacks on their joint security partnership given the need to address China's recent belligerence in territorial disputes in the South and East China Seas as well as in the Taiwan Strait. Both sides affirmed the centrality of their treaty alliance, for long a source of stability in East Asia, and pledged to stand up to China in key regional flashpoints such as the disputed Senkaku Islands and Taiwan. Reflecting the changed nature of conflict, both sides acknowledged the importance of extended deterrence vis-à-vis China through cooperation on cybersecurity and space technology. Discussions also touched upon Chinese ambitions to dominate the development of new age technologies such as 5G and quantum computing. Given China's recent pledge to invest a mammoth \$1.4 trillion in emerging technologies, Washington and Tokyo scrambled to close the gap by announcing a Competitiveness and Resilience Partnership, or CoRe (https://bit.ly/3eN6DlT). The two allies earmarked billions in funding for the deployment of secure 5G networks, committed to building digital infrastructure in developing countries and promised to collaborate on setting global digital standards. Both sides have also signalled their intent to continue the Trump-era policy of pressure on China to reform economic practices such as "violations of intellectual property rights, forced technology transfer, excess capacity issues, and the use of trade distorting industrial subsidies" (https://bit.ly/2Sbb81H). Tokyo and Washington also rallied around the standard of shared values. Both powers repeatedly emphasised their vision of a Free and Open Indo-Pacific that respects the rule of law, freedom of navigation, democratic norms and the use of peaceful means to settle disputes. In the aftermath of the successful Quad Summit (https://bit.ly/2Rfcp7n), both parties expressed their continued support for the four-nation grouping of the United States, India, Australia and Japan. China's human rights violations in Xinjiang, its heavy-handed suppression of protests in Hong Kong and military aggression towards Taiwan came in for heavy criticism. Given that the Japanese premier plans to visit India as soon as the







situation permits following the COVID-19 pandemic, his dealings with the U.S. are a preview of what New Delhi can expect from Tokyo.

A preview

First, one can expect a continuation of the balancing security policy against China that began with Prime Minister Narendra Modi and Shinzo Abe in 2014. During a phone call with the Indian Prime Minister, Mr. Suga expressed concern over China's "unilateral" actions in the East and South China Seas, Xinjiang and Hong Kong. Crucially, India's clashes with China in Galwan have turned public opinion in favour of a more confrontational China policy. *In just a decade, New Delhi and Tokyo* have expanded high-level ministerial and bureaucratic contacts, conducted joint military exercises and concluded military pacts such as the Acquisition and Cross-Servicing Agreement (ACSA) logistics agreement. Further, no meeting would be complete without an affirmation of New Delhi and Tokyo's support for a Free and Open Indo-Pacific and continued willingness to work with the Quad, which is fast emerging as a central pillar of the security strategies of both nations. A Modi-Suga meeting, accompanied by the planned 2+2 Ministerial meetings, will likely aim to take stock of the state of play in the security relationship while also pushing the envelope on the still nascent cooperation on defence technology and exports.

Technology partnership

Second, the two powers will look to expand cooperation in sectors such as cybersecurity and emerging technologies. During the Shinzo Abe years, New Delhi and Tokyo put together a digital research and innovation partnership that ran the gamut of technologies from AI and 5G to the *Internet of Things and space research.* As with the U.S.-Japan summit, Mr. Suga and Mr. Modi may look to deepen cooperation between research institutes and expand funding in light of China's aforementioned technology investment programme. It is yet unclear whether Mr. Suga will attempt to stir the pot and bring up the disagreements over India's insistence on data localisation and continued reluctance to accede to global cybersecurity agreements such as the Budapest Convention. Third, economic ties and infrastructure development are likely to be top drawer items on the agendas of New Delhi and Tokyo. While Japan has poured in around \$34 billion in investments into the Indian economy over the course of the last two decades, Japan is only India's 12th largest trading partner (https://bit.ly/3xENISD), and trade volumes between the two stand at just a fifth of the value of India-China bilateral trade. A Modi-Suga summit will likely reaffirm Japan's support for key manufacturing initiatives such as 'Make in India' and the Japan Industrial Townships. Further, India will be keen to secure continued infrastructure investments in the strategically vital connectivity projects currently under way in the Northeast and the Andaman and Nicobar Islands.

Third country outlook

Finally, a Suga-Modi Summit would undoubtedly devote much attention to evolving a joint strategy towards key third countries and multilateral bodies. In years past, New Delhi and Tokyo have collaborated to build infrastructure in Iran and Africa, provide vital aid to Myanmar and Sri Lanka and hammer out a common Association of Southeast Asian Nations outreach policy in an attempt to counter China's growing influence in these corners of the globe. However, unlike previous summits, the time has come for India and Japan to take a hard look at reports suggesting that joint infrastructure projects in Africa and Iran have stalled with substantial cost overruns. Tokyo will also





likely continue its charm offensive on the Regional Comprehensive Economic Partnership in an attempt to get New Delhi to reverse its decision not to join the massive trade compact. Writing in 2006, Shinzo Abe, in his book, Utsukushii Kuni E (Toward a Beautiful Country), expressed his hope that "it would not be a surprise if in another 10 years, Japan-India relations overtake Japan-U.S. and Japan-China relations". Thus far, New Delhi has every reason to believe that Japan's Yoshihide Suga is willing to make that dream a reality.

ENDEAVOUR, LEADERSHIP AND THE STORY OF A NATION

Bangladesh and India both celebrated the golden jubilee of Bangladesh's Independence recently, alongside the birth centenary of 'Banghabandu' Sheikh Mujibur Rahman. There was a predictable outburst of warm sentiments witnessed in Bangladesh on this occasion, but celebrations in India were on an extremely low key. The creation of Bangladesh — from the ashes of East Pakistan — is presumably India's finest foreign policy triumph till date, and it defies imagination why India has been so reticent in acknowledging this fact.

The architect, India's stand

A plausible reason put forward in certain quarters is that it possibly meant acknowledging the role of former Prime Minister Indira Gandhi in this seminal event, as she is widely acknowledged to be the real architect of this triumph, notwithstanding claims put forward by many a swashbuckling General and others in uniform. Hopefully this canard is not true, though she is currently being demonised for her so-called sins of commission and omission. It would amount to ignoring historical facts, for without Prime Minister Indira Gandhi, it is difficult to conceive of India pulling off such a triumph. This may sound like exaggerated praise, but anyone who had an opportunity to witness Mrs. Indira Gandhi's steely resolve during that period — as for instance when it was communicated to her during a meeting of the War Cabinet, that the U.S. Seventh Fleet (which included the nuclear powered aircraft carrier, Enterprise) was steaming up the Bay of Bengal, will hardly dispute this fact. Displaying no signs of diffidence, she made it clear that it made little difference to the cause that they had embarked upon. Few nations across the world can possibly boast of an achievement of this nature. What is even more noteworthy is that while accomplishing this task, India did not claim any 'spoils of victory'. After Pakistan's defeat in East Pakistan, India voluntarily and unconditionally, handed over power to the elected representatives of the newly established nation. Such magnanimity is seldom seen in the annals of world politics.

A year of significance

Not too many among the current generation would remember that 1971 was a signal year for India. It was in 1971 that India had extended all out support to the Government in Sri Lanka to defeat the group, the Janatha Vimukthi Peramuna in that country. And, 1971 was again the year in which India contributed to the establishment of a new nation, Bangladesh, which was carved out of East Pakistan following a pogrom launched by the military rulers in Islamabad, that was unmatched in modern times. Half-a-century later, India would have done well to highlight and remind the world of these two events, to further embellish its democratic credentials. While India was busy scripting a new destiny for the people of East Pakistan, millions of refugees from East Pakistan were streaming into India. What was especially striking was that despite such a calamitous situation, and the strain on its resources, the Government of the day acted with extreme circumspection and did not give in to





the rising clamour for any kind of premature military intervention in East Pakistan. It was to adhere to this position till Pakistan declared war on India in December 1971. Meantime, Sheikh Mujibur Rahman had been arrested and flown to West Pakistan. Tajuddin Ahmad had been secretly sworn in as the Prime Minister of an independent Bangladesh and installed in Mujibnagar, from where the new government-in-exile operated till the liberation of East Pakistan. India well recognised that before India could legitimately intervene in East Pakistan, the new government-in-exile had to acquire legitimacy, both within East Pakistan and also internationally. All this demonstrated political finesse of the highest order. It was not easy with over five million refugees coming into the country, conveying gruesome tales of untold atrocities.

Coordination and the goal

At the diplomatic level, India did not act entirely alone. Prime Minister Indira Gandhi's carefully crafted diplomatic dispatches to world leaders had helped create a groundswell of support for the persecuted Bengalis of East Pakistan. The signing of the Indo-Soviet Treaty in August 1971 came as a shot-in-the-arm for India, encouraging it to stay the course. Russia's action was in marked contrast to the stand of western nations such as the United States which displayed hostility to India's efforts, viewing it as an encouragement to the forces seeking to dismember the state of Pakistan. Within the country, regular meetings and the constant dialogue with Opposition leaders ensured that India acted in a united manner, notwithstanding the public clamour for immediate action. India sought to intervene in East Pakistan, only after Pakistan attacked India on December 3, 1971. Three days later on December 6, India made the formal announcement of recognising the new state of Bangladesh, almost nine months after the Peoples' Republic of Bangladesh had been proclaimed by Sheik Mujibur Rahman. Still later in March 1972, India and Bangladesh signed a Treaty of Peace and Friendship (https://bit.ly/3aCCNPr). The events spread over several months that culminated in the emergence of a new nation, became possible only because of close coordination among the various limbs of the Government, which acted in concert to achieve the cardinal objective, viz., that the struggle of the people of East Pakistan should not go in vain. The West, however, erroneously believed the humanitarian disaster notwithstanding, that it could not let down its ally Pakistan, which was a member of several western-led military alliances. Quite a few other nations, while sympathetic to the plight of the beleaguered population of East Pakistan, were unwilling to extend support fearing the wrath of the U.S.

Operating from the shadows

A great deal has been written about the military exploits in connection with the formation of Bangladesh — of the IndianArmy, the Indian Navy and the Indian Air Force. Very little has, however, been mentioned about the role of the intelligence agencies. Understandably so, since the intelligence agencies do not publicise their exploits and operate behind an iron curtain. Fifty years after Bangladesh gained Independence, it may, however, be time to give a pat on the back of the two principal intelligence agencies at the time — the Intelligence Bureau (IB) and the Research & Analysis Wing (R&AW/RAW). A vast network of agents had been created by the IB well before the organisation was bifurcated in 1968 into the IB and the R&AW, and the latter built on these assets. These agents played a critical role behind the scenes, preparing the ground for the eventual collapse of Pakistani Army resistance in East Bengal. At the risk of violating a cardinal rule of intelligence, it might also be the opportune moment to pay a silent tribute to one of the most outstanding secret agents of recent times, whose name and pseudonym will, however, have to





remain a secret, but whose exploits were no less than that of the most celebrated spy of World War II, Richard Sorge. The time has also come to acknowledge the role of the Mukti Bahini — the Army of Bangladeshi irregulars — fashioned by the intelligence agencies which played a key role during the conflict. This seldom happens, but is worth a mention, at least in a newspaper article. The ultimate accolade for India's role in creating a new nation is that Bangladesh is today a relatively prosperous country, having made steady progress from the category of a Least Developed Country to a Developing country. Bangladesh "will get time up to 2026 to prepare for the transition to the status of a developing country" (https://bit.ly/3xp8tSc). Few countries across the world expected the new nation to survive, let alone thrive, given that the nascent Bangladesh Government was functioning under an untested leader, Sheikh Mujibur Rahman; the country had been born amidst widespread and unprecedented violence and upheaval, possessed scarce resources, and was riven with internecine differences.

Bangladesh today

Today, Bangladesh is a shining example of what is possible through human endeavour and a wise leadership. It has not allowed itself to be drawn into the vortex of foreign influences, and maintains an independent foreign policy. Relations with India are excellent today, though there have been periods when relations were not all that cordial. Currently, Bangladesh's annual GDP growth exceeds that of its erstwhile parent, Pakistan. Women empowerment has been a major catalyst in Bangladesh's progress, and this is largely responsible for transforming the country. India's achievement in enabling the people of East Pakistan to carve out a separate destiny for themselves and achieve full freedom from Islamabad, well mirrors what can be achieved when the political, diplomatic, military, intelligence and civil segments act in a coordinated manner under a firm and far-sighted political leadership. This is the acid test for any future eventuality of this nature.

HC ORDERS CENTRE TO INCLUDE REMDESIVIR IN SCHEDULED DRUGS' LIST, REGULATE **PRICING**

The Nagpur Bench of the Bombay High Court on Friday asked the Centre to include Remdesivir in the list of scheduled drugs and to regulate its pricing. The direction came while the Bench was hearing a suo motu public interest litigation (PIL) petition on the shortage of oxygen, non-availablity of Remdesivir, Tocilizumab injections, and hospital beds in Nagpur district. When Ulhas Aurangabadkar, assistant solicitor general of India, told a Bench of Justice Sunil Shukre and Justice Avinash Gharote that it would be difficult to include Remdesivir in the scheduled drugs, the Bench said, "Prima facie, we are of the view that it is possible to regulate the pricing if a liberal interpretation is given to the provisions of Drugs and Cosmetics Act (DCA)." The Bench went to state that the provisions of the DCA did allow restriction or regulation of prices of a drug that was essential during a natural calamity or epidemic. "The laws empower the Union government to take such steps," said the Bench and noted that even the Drugs Control Act provides for fixing rates of essential drugs. Both the Drugs Control Act and DCA enable the central government to issue a notification to fix rates of essential drugs during an epidemic, noted the Bench. Till now, not a single drug has been added to the scheduled drugs, and "the Central government can now do so and fix the rates of Remdesivir" it noted. "If the powers conferred on the Central government are exercised, it will go a long way. It will stop extortion of money from families of COVID-19 patients, and will also put a full stop to the black-marketing of the drug. The Centre should perform its







fundamental duty by fixing the prices," the Bench said. The court also came down heavily on Maharashtra for not having a proper mechanism to procure and distribute Remdesivir vials.

JUSTICE FOR ALL

Justice Nuthalapati Venkata Ramana was sworn in as the 48th Chief Justice of India by the President in the Ashoka Hall of the Rashtrapati Bhavan in a short ceremony on Saturday. He took his oath, signed his name, and then rose and held his folded hands high in one sweeping motion at the people assembled, including his predecessor Justice S.A. Bobde, Prime Minister Narendra Modi, and other Supreme Court judges, before retiring to his seat. Born to agriculturists Ganapthi Rao and Sarojni Devi in Ponnavaram village of Krishna district of Andhra Pradesh, the 63-yearold new Chief Justice's life has, in a way, been a quiet revolution. He turned to books at an early age. His other passion was Carnatic music. But what moved the young Ramana most was the lack of civil liberties in the pre-Emergency era. The incidents of his youth, especially during the Emergency period, spurred Chief Justice Ramana, who was already working as a journalist with a Telegu newspaper, to become a lawyer. "I became a lawyer by coincidence," he had said once. He was called to the Bar on February 10, 1983 — a first-generation lawyer. He was a counsel for various government organisations and the Additional Standing Counsel for Railways in the Central Administrative Tribunal in Hyderabad before his appointment as the Additional Advocate General of Andhra Pradesh. He was appointed to the Andhra High Court in June 2000 as a permanent judge. He would go on to function as Andhra HC's Acting Chief Justice 13 years later, before he was elevated as the Delhi High Court Chief Justice. He was appointed as a Supreme Court judge in February 2014. He is scheduled to retire as the CJI on August 26, 2022.

Equal access

Chief Justice Ramana, in his recent speeches, has focussed on three aspects: ensuring equal access to justice, upholding of civil liberties against human rights violations by the State and the setting up of a National Judicial Infrastructure Corporation to bring the much-needed "uniformity and standardisation" into the court infrastructure. His judgments in the Supreme Court has questioned, and often challenged, the status quo brought about by the government as far as civil liberties are concerned. "The most vulnerable are often the victims of human rights atrocities, by either the State or by anti-social elements," he said recently. In January last year, Justice (as he was then) Ramana made it mandatory for the Jammu and Kashmir authorities to publish each and every one of their orders, which crippled the fundamental freedoms of over 7 million Kashmiri people following the abrogation of Article 370. His Bench had held that a right cannot be used against itself. The extensive reach of the Internet cannot be cited as a reason to restrict the right. "Freedom of speech and expression includes the right to disseminate information to as wide a section of the population as possible," he had observed in his judgment. In his years as Supreme Court judge, he was part of various decisions ranging from electoral issues to rights of women to bringing the Chief Justice of India's office under the ambit of the Right to Information (RTI). He was part of a Constitution Bench in 2019, which held that the the CJI's office was a 'public authority' accountable under RTI to provide information sought in public interest. However, in a separate opinion, he said "RTI should not be used as a tool of surveillance". His judgment in the Karnataka MLAs' disqualification case had said it was time to "reconsider strengthening certain aspects of the Tenth Schedule". Chief Justice Ramana had remained stoic in the face of a recent storm whipped up by a complaint filed by Andhra Chief Minister





www.youtube.com/c/DreamIAS

Y.S. Jaganmohan Reddy naming him. It was timed shortly after a Bench led by Justice Ramana started hearing hundreds of criminal cases against Ministers, legislators and politicians, pending in trial courts across the country. Mr. Reddy himself is involved in several such cases. An in-house Procedure of the Supreme Court dismissed the complaint. "It is an important quality for a judge to withstand all pressures and odds and to stand up bravely against all obstacles," Chief Justice Ramana had said in an address to the Madras Bar Association in October last year.

PUNISHING PROCESS

Eleven MPs from Kerala have petitioned the Chief Justice of India to expedite hearing in the case against Siddique Kappan, a Delhi-based journalist, who is currently admitted in a hospital in Mathura after contracting COVID-19 in prison. Kappan was arrested by UP police in October last year, when he travelled to Hathras to report on the rape of a Dalit woman and later charged under UAPA for his alleged association with the Popular Front of India, an Islamist outfit. Kerala Chief Minister Pinarayi Vijayan has also written to his UP counterpart requesting better medical care for Kappan, who suffers from co-morbidities. The disquieting reality is that Kappan's case, wherein an individual is charged under the UAPA and denied bail for an extended period, is not exceptional. A large number of people, particularly political workers and civil rights activists and a number of them young women, have been booked by central and state agencies under the UAPA in recent years and left to spend time in prisons without bail, pending closure in the cases for months and years. A 1967 law, the UAPA has been repeatedly amended to include stringent provisions in the name of fighting terrorism. A 2019 Supreme Court ruling has made it near impossible for UAPA accused to get bail, shifting the onus of disproving charges on the accused. There is reason to fear that the State now uses the Act to silence dissent and imprison its critics. Among those booked in recent years under UAPA and denied bail include rights activists, lawyers and academicians imprisoned in the 2018 Bhima Koregaon-Elgar Parishad case, students and youth arrested in anti-CAA protests, human rights defenders, RTI activists. According to the National Crime Records Bureau, 1,948 people were arrested in 2019 under the UAPA, up from 999 in 2016, while convictions have been very low in 2019, 34 persons were convicted, 16 people discharged, and 92 acquitted. Hopefully, Justice N V Ramana, the new CJI who has an illustrious record of speaking up for civil liberties, will look closely at such cases. Cases such as that of Kappan, or of the 84-year old Jesuit priest Stan Swamy detained in the Elgar Parishad case since October 2020, need to be fast-tracked so that due process itself does not become the punishment.

SUPREME COURT ISSUES NOTICE TO CENTRE ON PLEA CHALLENGING SEDITION LAW

The Supreme Court Friday issued notice to the Centre on a plea challenging the Constitutional validity of Section 124-A of the IPC that penalises sedition. A bench of Justices U U Lalit, Indira Banerjee and K M Joseph sought the Centre's response on a plea by two journalists—Kishorechandra Wangkhemcha from Manipur and Kanhaiya Lal Shukla from Chhattisgarh. The petitioners said they were charged with sedition for questioning the state governments and the Centre, and for comments and cartoons shared on social media platforms. They contended that the provision infringes upon the fundamental right of freedom of speech and expression, guaranteed under Article 19(1)(a) of the Constitution. Alleging frequent misuse and misapplication of the law since 1962, they said that its "abuse" points to its vagueness and uncertainty, which, in turn, exerts a "chilling effect" on the democratic freedoms of individuals. The plea said that sections of sedition have been repealed in





www.youtube.com/c/DreamIAS

comparative post-colonial democratic jurisdictions around the world where the offence has been condemned as undemocratic, undesirable and unnecessary. Referring to the Supreme Court decision upholding its validity in the 1962 case of Kedar Nath Singh v. State of Bihar, the duo said that while the court may have been correct in its finding nearly sixty decades ago, the law no longer passes constitutional muster today. In February, the top court had rejected a plea urging it to re-examine the constitutional validity of the sedition law. A bench headed by the then Chief Justice S A Bobde rejected the plea by a group of lawyers pointing out that the Supreme Court had in the past laid down that there should be an appropriate cause of action (materials to sue) to challenge a law, which the petition lacked. The court said the petitioners were not the affected parties in any case.

A CASE FOR JUDICIAL FEDERALISM (KALEESWARAM RAJ AND THULASI K. RAJ - LAWYERS AT THE SUPREME COURT OF INDIA)

In comparison to the legislature and the executive, what the judiciary can deliver in the realm of socio-economic rights is limited. Courts cannot build better health infrastructure or directly supply oxygen; neither are they functionally bound to. Courts often lack the expertise and resources to decide social rights issues. What they can do is to ask tough questions to the executive, implement existing laws and regulations, and hold the executive accountable in various aspects of healthcare allocation. In Parmanand Katara v. Union of India (1989), the Supreme Court underlined the value of human lives and said that the right to emergency medical treatment is part of the citizen's fundamental rights. As such, constitutional courts owe a duty to protect this right. In the face of a de facto COVID-19 health emergency, the High Courts of Delhi, Gujarat, Madras and Bombay, among others, have done exactly that. They considered the pleas of various hospitals for oxygen supply. The Gujarat High Court issued a series of directions, including for laboratory testing and procurement of oxygen. The Nagpur Bench of the Bombay High Court was constrained to hold night sittings to consider the issue of oxygen supply. It directed immediate restoration of oxygen supply that had been reduced from the Bhilai steel plant in Chhattisgarh. The Delhi High Court directed the Central government to ensure adequate measures for the supply of oxygen. It cautioned that we might lose thousands of lives due to lack of oxygen.

Transfer of cases

On April 22, the Supreme Court took suo motu cognisance of the issue in 'Re: Distribution of Essential Supplies and Services During Pandemic'. It said, "Prima facie, we are inclined to take the view that the distribution of these essential services and supplies must be done in an even-handed manner according to the advice of the health authorities" and asked the Central government to present a national plan. In addition, it issued an order asking the State governments and the Union Territories to "show cause why uniform orders" should not be passed by the Supreme Court. The court thus indicated the possibility of transfer of cases to the Supreme Court, which it has done on various occasions before. Under Article 139A of the Constitution, the Supreme Court does have the power to transfer cases from the High Courts to itself if cases involve the same questions of law. However, what make the court's usurpation disturbing are two well-founded observations regarding its contemporary conduct. One, the court has been indifferent to the actions and inactions of the executive even in cases where interference was warranted, such as the Internet ban in Kashmir. Two, where effective remedies were sought, when activists and journalists were arrested and detained, the





www.youtube.com/c/DreamIAS

court categorically stayed aloof. It acted as if its hands were tied. Lawyers will find it difficult to recall a significant recent case of civil liberty from the court where tangible relief was granted against the executive, except for rhetorical statements on personal liberty. These features, coupled with the unhealthy characteristics of an executive judiciary, makes the court's indication for a takeover disturbing. On April 23, presumably due to widespread criticism of the court's move, especially from a section of the legal fraternity, the court backtracked and simply adjourned the case. The matter might be heard by the Supreme Court in the coming days. Significantly, the developments so far offer some crucial lessons for judicial federalism in India. The very fact that many from different High Court Bar Associations spoke up against the move to transfer the cases from the High Courts to the Supreme Court is a positive signal that underlines re-emergence of internal democracy within the Bar. Navroz Seervai, a noted lawyer from the Bombay High Court, critiqued the views of the top court saying that they reflected "arrogance of power" and "rank contempt for and disregard of the High Courts in the country, and the extremely important and vital role they play in the constitutional scheme". In the Supreme Court, the judges sit in Benches of two or more. The purpose of this practice is to encourage deliberation on the Bench to have a higher level of deliberative justice. This necessarily presupposes dissent. *A characteristic feature of the apex court in the recent years* is general lack of dissent in issues that have serious political ramifications. This deficit occurs not only in the formally pronounced judgments and orders; dissenting judges on the Bench are rare, and the hearing on the COVID-19 case was no exception. According to the Seventh Schedule of the Constitution, public health and hospitals come under the State List as Item No. 6. There could be related subjects coming under the Union List or Concurrent List. Also, there may be areas of inter-State conflicts. But as of now, the respective High Courts have been dealing with specific challenges at the regional level, the resolution of which does not warrant the top court's interference. In addition to the geographical reasons, the constitutional scheme of the Indian judiciary is pertinent. In L. Chandra Kumar v. Union of India (1997), the Supreme Court itself said that the High Courts are "institutions endowed with glorious judicial traditions" since they "had been in existence since the 19th century and were possessed of a hoary past enabling them to win the confidence of the people". Even otherwise, in a way, the power of the High Court under Article 226 is wider than the Supreme Court's under Article 32, for in the former, a writ can be issued not only in cases of violation of fundamental rights but also "for any other purpose". This position was reiterated by the court soon after its inception in State of Orissa v. Madan Gopal Rungta (1951).

Autonomy is the rule

Judicial federalism has intrinsic and instrumental benefits which are essentially political. The United States is an illustrative case. Scholar G. Alan Tarr of Rutgers University hinted, "Despite the existence of some endemic and periodical problems, the American system of judicial federalism has largely succeeded in promoting national uniformity and subnational diversity in the administration of justice". Justice Sandra Day O'Connor rightly said in a 1984 paper that the U.S. Supreme Court reviews "only a relative handful of cases from state courts" which ensures "a large measure of autonomy in the application of federal law" for the State courts. This basic tenet of judicial democracy is well accepted across the courts in the modern federal systems. The need for a uniform judicial order across India is warranted only when it is unavoidable — for example, in cases of an apparent conflict of laws or judgments on legal interpretation. Otherwise, autonomy, not uniformity, is the rule. Decentralisation, not centrism, is the principle. In the COVID-19-related cases, High Courts





across the country have acted with an immense sense of judicial responsibility. This is a legal landscape that deserves to be encouraged. To do this, the Supreme Court must simply stay away.

A TIMELY WARNING

The Supreme Court has issued a timely warning to the States against any attempt to clamp down on the dissemination of information about the serious health crisis besetting the country, or calls for help through social media from citizens affected by COVID-19. The comment, obviously in response to the utterly despotic threat issued by U.P. Chief Minister Yogi Adityanath that those "spreading misinformation" or "rumour" would be detained under the National Security Act (NSA) and their property seized, will surely help prevent ill-advised action by the police and the administration to treat appeals concerning shortage of hospital beds, medical oxygen and vital drugs as attempts to bring the government into disrepute. The police in Amethi registered an FIR against a man who appealed on Twitter for an oxygen cylinder for a family member for allegedly circulating a rumour and seeking to cause fear and alarm. Mr. Adityanath appears quite convinced that complaints about oxygen shortage in his State are either imaginary or, worse, malicious, and wants to treat them as attempts to "spoil the atmosphere". While it is entirely in order that the government has directed the police to crack down on the profiteering on medicines in the black market, it is quite a different matter if the administration starts seeing all appeals for help in a grave crisis as nothing more than activities aimed at tarnishing the government's image. Given the propensity of such leaders to treat the voicing of grievances by citizens as a personal affront to their administrative capabilities, the Court's warning that any attempt to stifle the people's voices would attract action for contempt of court is quite timely and necessary. As Justice D.Y. Chandrachud, who heads the Bench, remarked, any clampdown on information is contrary to basic precepts. He underscored the significance and necessity for the free flow of information during a grave crisis by recalling the role it played in containing a famine in 1970. The Court was apparently drawing inspiration from the theory, articulated by economist Amartya Sen, that the fundamental attributes of democracy — such as a free press and the need to face the people at elections and respond to political criticism — help prevent famines. However, how far the present regime feels itself accountable to the people at large is now unclear. It faces criticism both within the country and from the international media that a major cause of the crisis is its reluctance to acknowledge its own failure to prepare for a calamitous second wave. Questions fired at it by High Courts are also on these lines. Any move to stifle such criticism or believe that this is a problem of managing perceptions will be of no avail if the infections and body count keep rising alarmingly and the health system draws close to a collapse.

TO BEND THE WAVE

The Allahabad High Court's reprimand that the Uttar Pradesh government must discard its "my way or no way" attitude while dealing with the mounting distress caused by the pandemic's second surge is a necessary reminder of what governance must be in a crisis. For over two weeks now, UP has contributed the second-highest daily cases of coronavirus infections to India's galloping toll, second only to Maharashtra. For the state, as for the nation, an enormous challenge lies ahead. As it is elsewhere, the health infrastructure in Lucknow, Allahabad, Varanasi and Kanpur is under severe strain. A report in this paper has recorded the chaos around oxygen supply stations in Kanpur, and the frantic search for hospital beds. And yet, the Uttar Pradesh government insists there is no





shortage of beds, oxygen or life-saving drugs in the state. It has also threatened action against private hospitals that "falsely" complain of oxygen shortage. Whether it is protests or pandemic distress, the UP government's reflex reaction, unfortunately, is the heavy hand, the "tough" crackdown. But when all is not well, the state must, the court has advised, "welcome suggestions from all" instead of taking harder positions. In daily governance, and especially in a pandemic, the complaints, criticism, anguish and anger of the people are valuable feedback that can help the state to urgently plug the holes, fix accountability. To waste precious administrative energy on penal action against hospitals, the state's ally in this battle to save lives, is a grave error. Indeed, the ability to face up to dire news — and then, to take corrective action — is essential to defusing a crisis. The Allahabad High Court has said it "would not tolerate any paperwork or public announcements to show account of the steps taken ... as it is now an open secret" that the government had dropped the ball in its Covid preparedness. The court has stepped in to oversee the pandemic response, from death counts to denial of admission to patients on the basis of a negative antigen report. The court also issued a notice to the Election Commission on the reported deaths due to COVID-19 of 135 people on election duty for the recent panchayat polls in the state. "The ghost of Corona is marching on the roads and streets of the major cities of the state," the court said, and warned that only the privileged will have the resources to survive, in the absence of government action. The UP government must recognise that while strongman politics is good for headlines, it will need humanity and humility to bend the second wave.

FORMER ATTORNEY GENERAL SOLI SORABJEE PASSES AWAY

Eminent jurist and former Attorney General of India Soli Sorabjee passed away on Friday due to COVID-19 complications. Mr. Sorabjee was born on March 9, 1930, in erstwhile Bombay to a Parsi family. He was a product of St. Xavier's and the Government Law College. He was admitted to the Bar in 1953. He appeared in several historic cases, including the Kesavananda Bharati case or the Basic Structure Doctrine case. He received the Padma Vibhushan for championing free speech and human rights. Even recently, he raised his voice against students of Jawaharlal Nehru University being charged with sedition for expressing their dissent. He worked for the Sikh community pro bono after the 1984 riots. He was appointed an Honorary Member of the Order of Australia. He was twice appointed Attorney General of India. In his autobiography Before Memory Fades, senior advocate Fali S. Nariman, remembers Mr. Sorbajee's entry into the chambers of the then doyen of the Bombay Bar, Sir Jamshedji Kanga, as a young lawyer. "For a long while we were rivals, later un-friendly rivals, but now, in the evening of our lives, we are friends," Mr. Nariman wrote. The book referred to Mr. Sorabjee's distinguished career, going on to become India's Attorney General (first in 1989 for a year and again in 1998 for five years).

Jazz aficionado

But Mr. Sorabjee was much more than a lawyer. He wore many hats. He was a jazz aficionado: his Neeti Bagh residence has rows and rows of vinyl records of jazz. "Do you like jazz? Do you want me to play you one?" he had asked after an interview. Mr. Sorabjee was an avid reader of the essays. He said it suited his style. Short and crisp. The novel took too much patience. "The soul of a journey is liberty, perfect liberty, to think, feel, do just as one pleases... We go a journey chiefly to be free of all impediments and of all inconveniences," one of his favourite essayists, William Hazlitt wrote On Going a Journey.





LISTENING & LEARNING

In a welcome subversion of the Uncle Knows Best attitude of most Indians, Justice N Anand Venkatesh of the Madras High Court declared his intention of undergoing a "psycho-education session" with an expert on LGBTQI+ matters so that he may deliver a better judgement in the case of a same-sex couple seeking protection from their parents. The judge said that he was not sufficiently "woke" on queer issues, so the session would lead to his "evolution". When was the last time an authority figure decided to listen and learn, instead of preaching their often ill-founded assumptions, especially on questions that challenged the heteronormative status quo? As recently as February, the Centre had cited "societal morality" before the Delhi HC, while seeking dismissal of a clutch of petitions praying for recognition of same-sex marriage. Never mind that queerness has an ancient, socially-sanctioned presence in India and that the "morality" being invoked is of more recent, Victorian vintage. It can't be denied that there has been some progress on queer issues, but it has been painfully slow and often misguided. Take the Transgender Persons' (Protection of Rights) Act, 2019, which dilutes the very thing it seeks to protect. Apparently, it's not enough that transgender persons self-identify as such; they must have a certificate from the district magistrate to prove it. It is against this discouraging background of top-down actions and empty gestures that Justice Venkatesh accepted his limitations and expressed a desire to outgrow them. Other judges and lawmakers should pay attention. Because his words are a gentle reminder that everyone, even the powers that be, can and must listen and learn, and evolve.

STATE REPRESSION THAT BREACHES PUBLIC PEACE (KALPANA KANNABIRAN - SOCIOLOGIST AND LAWYER BASED IN HYDERABAD)

The Government of Telangana, on March 30, 2021, issued a notification (G.O. Ms.73) banning 16 organisations under the Telangana Public Security Act, 1992 (TPSA), declaring them as 'unlawful associations' and 'new front organisations of the proscribed Communist Party of India (Maoist)', which was made public three weeks later on April 24, 2021. The belated public announcement was made at a time when citizens organisations and collectives in the State and country were trapped in the coils of the pandemic and largely left by an abdicating state to fend for themselves in life and death.

Health crisis, faltering steps

The ban comes during a surging second wave of COVID-19, in which Telangana has fared poorly. On April 19, the High Court of Telangana described the State government's affidavit in response to PILs urging for greater transparency in control, containment and care as 'wishy washy' and 'disappointing' and wondered whether the State was competing for the first place in the COVID-19 surge — and we might add, the failure in governance reflected therein. Logically therefore, the attention of the government should be directed at managing the public health crisis and the distress caused to the people at large, demonstrating due diligence in fulfilling its constitutional obligations under Part IV of the Constitution. This is one part of the tragic story unfolding before us.

Omnibus labelling

The second part is of older vintage (Article 21 rights) and stretches seamlessly over three decades from pre-COVID-19 to COVID-19 times — today ironically from the Bharatiya Janata Party-ruled 3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR

Telegram: http://t.me/DreamIAS Jamshedpur





www.youtube.com/c/DreamIAS

Centre to the Telangana Rashtra Samithi-ruled State: the banning of the 'unlawful organisations — Telangana Praja Front (TPF), the Telangana Asanghatitha Karmika Samakhya (TAKS), Telangana Vidyarthi Vedika (TVV), Democratic Students Organisation (DSU), Telangana Vidyarthi Sangham (TVS), Adivasi Students Union (ASU), Committee for the Release of Political Prisoners (CRPP), Telangana Raithanga Samithi (TRS; not to be confused with the ruling party), Tudum Debba (TD), Praja Kala Mandali (PKM), Telangana Democratic Front (TDF), Forum Against Hindu Fascism Offensive (FAHFO), Civil Liberties Committee (CLC), Amarula Bandhu Mitrula Sangham (ABMS), Chaitanya Mahila Sangham (CMS), and Revolutionary Writers Association. From workers' collectives, to women's groups, students' groups, Adivasi collectives and civil liberties groups this list trawls in anyone who is likely to resist or protest on any count by merely dubbing organisations as a 'front' or 'new front', or as 'urban guerillas'. We cannot forget that less than seven years ago, the Telangana Rashtra Samithi rode to power on the strength of these movements. The reason for the proposed ban is the fact that these activists are 'moving in urban area by adopting various querilla tactics... to wage war against the state'. Interestingly, the rationale is strengthened by the fact that they have 'joined hands with several organisations and [are] alluring the members into their folds [sic] inciting inflammatory statements, meetings and rallies highlighting various issues against the State and Central Governments'. The G.O. goes on to state that these organisations are organising protests in the 'barren lands' of Chhattisgarh besides demanding the release of G.N. Saibaba, Varavara Rao, Rona Wilson and other leaders of various front organisations who were arrested in the Bhima Koregaon case, and 'repealing of UAPA Act, Farm Laws, CAA/NRC etc'. Even the reasons for the ban are a medley that stretches from 'waging war' to protesting against the Citizenship (Amendment) Act, or the CAA. This omnibus labelling of organisations and so-called crimes in themselves are ground for challenging the ban. The Bhima Koregaon case is ongoing. Even the investigation is as yet indeterminate. Construing support for the Bhima Koregaon accused as a crime under the TPSA is a criminal mis-reading and deliberate misapplication of an already draconian law.

Challenging UAPA

The Unlawful Activities (Prevention) Act, or UAPA, is widely challenged by everyone with a rudimentary understanding of the Constitution as being against every constitutional guarantee. As Indian citizens, it is our right to seek its repeal on clearly reasoned grounds which must be heard by courts. Pending repeal, it is our constitutional right to challenge its application in every case in which we believe its application is a travesty of the Constitution. Protesting against the UAPA or seeking its repeal cannot in itself be construed as an unlawful activity, as this notification by the Telangana government seems to suggest. Can we forget the numbers of protesters against the CAA or diligent journalists indefinitely held in custody on manifestly unjust grounds under the UAPA? This brings us to protests against the CAA and Farm Laws which the G.O. 73 expressly mentions. There has been widespread protest against the farm laws in the State as well as against the CAA. While Telangana Chief Minister, K. Chandrashekar Rao, refused to take a definite stand on the Farm Laws in the legislative debates on this issue, his stand on the CAA is clear and unequivocal. The Telangana Assembly passed a resolution (https://bit.ly/3g07TYr) against the CAA, the National Register of Citizens (NRC) and the National Population Register on March 15, 2020, stating that the CAA violated the constitutional guarantees of equality, non-discrimination and secularism, and will 'endanger the lives of vulnerable groups who do not possess adequate documentary proof of citizenship' — and went on to state that, 'there are serious questions as to the legality and constitutionality of the CAA,





www.youtube.com/c/DreamIAS

NPR and NRC'. There is no indication that the State Legislature has reversed its stand on this question. On what grounds then, has the Chief Secretary of the State issued a notification that directly contravenes the resolution of the State legislature? Have we forgotten that Telangana is not a State where the BJP is in power?

Issue of timing

The timing of this notification merits close scrutiny. In paragraph 2, G.O. 73 states that these 16 organisations 'have as their objective interference with the public administration or the maintenance of supplies and services essential to the life of the community... thereby constituting the danger to public peace...' At a time when the government is facing the heat for mismanaging public health and safety, and therefore endangering public security, the response is to blow out a smokescreen invoking draconian legislation to declare the demand for governmental accountability as an unlawful activity that is evidence of participation in an unlawful association. This amounts to the criminalisation of citizenship, no less. It is state repression that breaches public peace. Not the demand by citizens for state accountability.

COUNTER 'ONE-SIDED' WORLD MEDIA NARRATIVE ON GOVT'S PANDEMIC 'FAILURE', JAISHANKAR TELLS INDIAN DIPLOMATS

In a virtual meeting with Indian ambassadors and high commissioners posted across the world, External Affairs Minister S Jaishankar on Thursday conveyed the message that the "one-sided" narrative in international media — that Prime Minister Narendra Modi and his government had failed the country by their "incompetent" handling of the second Covid-19 wave — must be countered. The meeting came in the wake of strong editorials, commentary and reports in leading international newspapers such as the New York Times, Guardian, Le Monde, and Straits Times, and on TV channels, blaming the Modi government for ignoring warning signs, holding an extended election in West Bengal, and for not cancelling the Kumbh Mela. International TV channels have run visuals of waiting ambulances and patients outside hospitals, and cremations in Delhi and elsewhere, to underline India's lack of preparedness. The official "context" for Thursday's meeting was India's efforts to mobilise resources, including oxygen container, concentrators, ventilators, drugs and vaccines, from countries that have offered help as the government struggles with the surge of cases, according to officials present in the meeting. Besides the envoys, Minister of State V Muraleedharan, Foreign Secretary Harsh Shringla and officials dealing with the Covid-19 crisis also attended the hour-long meeting. Officials present said two big themes were discussed. One was about efforts being made to procure all the material that India needs to overcome the surge. The envoys had several questions on how to send this, to destinations in India where such material should be sent, customs formalities, and related matters of logistics. Taking control of the international media narrative was the other predominant theme. On this, participants said the message from Jaishankar was not to get overpowered by the "negative" media reports but to take charge and project the government's side of the story. Accordingly, the participants were told that the ferocity of the second surge was something no public health expert in the world had predicted, and that health infrastructure even in the most advanced countries had crumbled in the first wave last year, so this was not a disaster that was uniquely Indian. The envoys were told that oxygen shortage was not due to a shortfall in production but due to restricted geographies of production, entailing transport across vast distances. The participants were also told





to disseminate that there could be no connection between the elections, campaign rallies and the spike in numbers. Jaishankar presented the argument that the numbers were highest in Maharashtra and Delhi, two states that did not go to the polls. He did not touch upon the subject of Kumbh Mela, which has been described in every international report as a "super spreader" event. Although the participating diplomats had questions, no one asked about the consequences of holding the Kumbh. Nor were there any questions about the messaging from crowded election rallies addressed by the Prime Minister and Home Minister Amit Shah, in violation of social distancing norms, or any of the institutional failures pointed out by the international media. Jaishankar also did not touch upon Vaccine Maitri, under which India shipped 66 million vaccines to other nations. None of the participants asked about this either. Among suggestions made by envoys was that there was no need to counter every media criticism with a rebuttal of the kind written by the deputy high commissioner to Australia in response to 'The Australian' report headlined "Modi Leads India out of lockdown...and into Covid apocalypse".

THE PRICKLY STATE

Whether the apocalypse comes with a bang or a whimper, one thing is certain: There are those in power who will deny the very existence of the apocalypse and write letters of complaint, hoping to control the narrative. The mighty Government of India appears to have begun its perception management drive with far greater zeal than it showed in its mission to augment health infrastructure during the pandemic lull, or to ensure universal vaccination before the second surge hit. First, it reportedly asked Twitter to remove tweets that were critical of its handling of the current devastating wave of COVID-19. Now, the aggressive PR campaign has gone international. On April 26, a letter signed by India's Deputy High Commissioner to Australia addressed to the editor-in-chief of 'The Australian' demanded that the newspaper publish a rejoinder to the article titled 'Modi leads India to viral apocalypse'. The letter lists, as government notes often do, the various schemes and programmes New Delhi has initiated to deal with the pandemic. It does not mention the mask-less election rallies or lakhs attending the Kumbh Mela. It attempts to counter a report high on rhetoric and somewhat opinionated with prickliness and petulance. The government has a PR problem at the moment because it has a real problem on the ground. And its reaction is reminiscent of Pyongyang when the Supreme Leader is attacked, or the letters to the editor from agitated Chinese envoys. What those countries do not have is a robust and critical media at home. India's government, with its experience of a noisy public discourse, should have known that complaining about a news story will rebound, and only circulate the article wider. Turns out, there is such a thing as bad PR, and the government seems to be excelling at it.

It is unclear why the government chose to respond to the article in Canberra, given that it had been reproduced from the original article in The Sunday Times, in the U.K. previously, and is one of the several scathing columns written internationally about the government's response. On Monday, The Sydney Morning Herald also published a piece, written by the former High Commissioner to India and board member of the Australia India Institute John McCarthy that said that Mr. Modi's government "has not distinguished itself" by allowing the Kumbh Mela and going ahead with massive rallies as the coronavirus pandemic spread. "Demonstrating both the government's desperation and its regrettable inclination towards autocracy, over the weekend it banned on Facebook, Twitter and Instagram, social media posts critical of its handling of the pandemic," he added, referring to the Ministry of Information Technology's reported requests for social media





posts to be taken down. *Other major dailies including The New York Times, The Washington Post, The Economist, and Financial Times have also carried similar pieces.*

AFTER GOVT. ORDER, TWITTER REMOVES POSTS

Twitter has removed over 50 posts from its platform following orders from the government. The majority of these tweets were critical of the Centre's handling of the pandemic as India grapples with a record number of cases amid a shortage of beds and medical oxygen. Many of the removed tweets had content related to the shortage of medicine, beds, mass cremations and the gathering of crowds at Kumbh Mela amid the pandemic. While blocked for viewing in India, these tweets will continue to remain visible outside the country. Some of the verified accounts from which the tweets have been removed include from Congress spokesperson Pawan Khera, Member of Parliament Revanth Reddy, Minister from West Bengal Moloy Ghatak, ABP News editor Pankaj Jha, Actor Vineet Kumar Singh, film-maker Avinash Das, and film-maker and former journalist Vinod Kapri. The details of the order received by Twitter have been put up on the Lumen database, a project of the Berkman Klein Center for Internet & Society at Harvard University. This story was first reported by technology news website Medianama.

MADRAS HIGH COURT RAPS ELECTION COMMISSION OF INDIA, REFUSES TO GAG MEDIA ON ORAL OBSERVATIONS

A day after questioning the Centre on its preparations over the last 10-15 months for tackling the second wave of Covid-19, the Madras High Court Friday refused to entertain a petition by the Election Commission of India (ECI) on Friday seeking to restrain media from publishing the court's oral observations blaming the poll body for the rise in Covid-19 cases. Earlier on Monday, the first bench of Chief Justice Sanjib Banerjee and Justice Senthilkumar Ramamoorthy came down heavily on the ECI for "not stopping political parties from violating the Covid protocol" in their rallies for Assembly elections. It was hearing a petition by AIADMK leader and Tamil Nadu Transport Minister MR Vijayabhaskar which sought directions for the ECI to follow specific measures during counting on May 2 in his constituency Karur. As many as 77 candidates contested are in the fray for the Karur seat. The court had told ECI on Monday that "you should be put on murder charges probably", that "you are the most irresponsible over the last few months in not stopping political parties from wanton abuse of the Covid-19 protocol" and that "you are the only institution responsible for the situation that we are in today." On Friday, the ECI said these oral observations had caused it grave prejudice and that police complaints were being filed against it seeking action for criminal offence. Rejecting requests by senior advocate Rakesh Dwivedi, representing ECI, to direct media houses to confine their reports to written orders and to refrain from reporting oral observations of judges during the court proceedings, the court said the Commission can anyway approach the courts "if any frivolous complaints are made". A day before, on Thursday, the Madras High Court was irked at the poor preparedness of the Central government in handling the second wave of pandemic. On a suo motu public interest writ proceeding initiated to check the preparedness of the state to tackle the second wave besides assessing the availability of oxygen, beds, drugs and ventilators to treat Covid patients, the first bench of CJ Banerjee and Ramamoorthy asked the Centre what they were doing for the past 10 to 15 months. "Why are we acting only now in April, this will help only in July. Despite having almost a year-long lockdown, see the situation we are in," the court said. When the Additional Solicitor-General R 3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR

Telegram: http://t.me/DreamIAS Jamshedpur





www.youtube.com/c/DreamIAS

Shankaranarayanan representing the Centre said the government did not expect a second wave in the country, the court said: "Do you even consult experts on such issues? We did not mean to disrespect anyone..." CJ Banerjee said he was yet to meet "a respectable doctor who advised" him "to drop the guard" and reminded that there cannot be ad-hocism in dealing with a pandemic. "The Centre should have acted in a planned and informed manner with expert advice," the court said. In its order posted on Friday, the court said post-mortem on both the Centre's "endeavour to indicate that the surge in numbers may have been unexpected and that preparatory measures had been taken for quite some time" and EC's concern at sensationalism "may have to wait particularly in the light of the immediate measures that may be put in place." Referring to the proceedings, the order said it was to "ensure that the authorities tasked with such obligation devote their complete attention in such regard, so that the measures may be monitored in some degree."

SALUTARY STEPS

Amid criticism that it did not enforce steps to curb the spread of COVID-19 during the protracted campaign for Assembly elections in four States and one Union Territory with sufficient vigour, the Election Commission of India has now banned victory processions after the results are declared on May 2. It has also restricted to two the number of persons who can accompany the winning candidate to meet the Returning Officer and collect the election certificate. These are significant steps to prevent any escalation in the already alarming infection rate. Further, the ECI has come up with measures at counting centres, including a stipulation that agents cannot enter the counting hall without producing either a negative test report for COVID-19 or final vaccination reports. While such stringent norms are welcome, it is regrettable that the enforcement of earlier norms for COVIDappropriate behaviour by political parties, candidates and their supporters was often quite lax during the long campaign. The Madras High Court's remark to the effect that ECI officials should bear a great responsibility for the horrific spike in infections, illness, hospitalisation and deaths will resonate with the public. While it was quite in order that the court voiced its displeasure with the ECI for failing to make all parties adhere to its norms, the suggestion by the Bench that ECI officials should bear sole responsibility for the situation was avoidable, bordering on the intemperate. However, the court's caution that the counting process should not become a catalyst for a new surge has undoubtedly helped and led to new norms for counting day activities. As the election draws to a close, the time may have come for the ECI to reconsider its resort to multiphase polling as a permanent practice. Granted, some States are prone to violence, but should it not reconsider the practice, taking into account the strides made in communications and logistics? Multi-phase voting has been defended for the last three decades as something necessary because of the time needed to move central forces to different parts of the country; security and sensitivity in select constituencies are also considerations. However, in the present round, the first three phases of the West Bengal elections were held alongside those of Assam, and polling in the three other States and Puducherry was completed on April 6. With only one State left, there was a good case for fulfilling logistical requirements within a week or so and getting the remaining polling work done in one or two phases by April 15. A prolonged campaign contributes to build-up of tension. Covering an entire State in as few phases as possible will help localise the potential for violence, prevent the spread of tension due to the virulence of the campaign, besides reducing the fatigue of forces deployed throughout the campaign, up to the day of counting. A shorter election may be a safer one too.





PARTIES GET BONDS WORTH RS 695 CRORE FOR STATE POLLS

When the election process in four states and one Union Territory was in full swing earlier this month, State Bank of India sold electoral bonds worth Rs 695.34 crore to donors of political parties for funding of elections. SBI sold the bonds in the 16th series from April 1 to April 10 this year. Of the total sales, as much as Rs 671 crore came through bonds with a face value of Rs one crore, Rs 23.70 crore bonds with a face value of Rs 10 lakh, and Rs 64 lakh bonds with a face value of Rs one lakh, SBI said in reply to the RTI application filed by Commodore Lokesh K Batra (Retd).

The Supreme Court had recently refused to stay the sales of electoral bonds ahead of the Assembly elections on a PIL filed by the NGO pertaining to funding of political parties and alleged lack of transparency. Electoral bonds are purchased anonymously by donors, and are valid for 15 days from the date of issue. A debt instrument, these can be bought by donors from a bank, and the political party can then encash the bonds. These can be redeemed only by an eligible political party by depositing the same in its designated bank account maintained with an authorised bank. The bonds are issued by the SBI in denominations of Rs 1,000, Rs 10,000, Rs 1 lakh, Rs 10 lakh and Rs 1 crore. Political parties registered under Section 29A of the Representation of the People Act, 1951, which have secured not less than 1 per cent of the votes in the last general election to an Assembly or Parliament, are eligible to open current accounts for redemption of electoral bonds. "The information furnished by the purchaser shall be treated confidential by State Bank of India" and shall not be disclosed to any authority for any purposes, except when demanded by a competent court or upon registration of criminal case by any law enforcement agency," operating guidelines by the SBI state. The SBI sold electoral bonds worth Rs 42.10 crore in the 15th phase of sale from January 1 to 10, 2021. Bonds worth Rs 282 crore were sold by it in October ahead of the Bihar Assembly elections. Donors, mainly corporate houses and industrialists, gave Rs 1,056.73 crore in 2018, Rs 5,071.99 crore in 2019 and Rs 363.96 crore in 2020, the SBI had said in a previous RTI reply to The Indian Express. The total donations through electoral bonds have touched Rs 7,230 crore.

NEW DELHI

In the midst of a public health emergency in which the administration is visibly struggling to provide basic medical care to those who need it, the Union Ministry of Home Affairs (MHA) has effected a transfer of power in Delhi. With the Ministry of Home Affairs notifying the Government of NCT of Delhi (Amendment) Act 2021 on Tuesday night, the office of the Lieutenant Governor has assumed the authority of "government" in the national capital. Chief Minister Arvind Kejriwal and his cabinet will, going forward, need to seek the LG's approval before executing policies and Delhi has, effectively, been reduced to a Union Territory. The Vajpayee government brought in the statehood Bill in Parliament in 2003. Another BJP-led NDA government now has used its parliamentary majority to crush Delhi's statehood ambitions and wrest power from its elected representatives, which it will exercise through its unelected nominee. Ironically, this centralisation is being implemented at a time when it is becoming increasingly clear that better governance lies in decentralising administration. The pandemic has highlighted the need for agile responses that are more sensitive to local variables and needs. At a time like this, the Centre needs to push and coordinate, while enabling and supporting states in framing their specific response. So far, the nation's response to the pandemic has missed this judicious balance — it has reflected neither the





level of autonomy nor the amount of synergy needed between Centre and state for a federal polity to meet such a formidable challenge. Though Delhi too has seemed inadequate so far in stepping up to the public health emergency, its government has had some success earlier in designing policies that are more locally attuned — in involving civil society bodies, like RWAs and parent-teacher bodies, for instance, in improving the functioning of public facilities, especially schools. The BJP-led Centre in the Modi regime, on the other hand, has made fetching promises of cooperative federalism, while, all too often, seeking to subdue the federal impulses in the polity. The Centre's takeover in Delhi takes place close on the heels of the Delhi High Court rightly chiding the state government for its failure to check black-marketing of oxygen in the wake of the pandemic and threatening to ask the central government to take over the state if it cannot handle the situation. Certainly, the Delhi government has stumbled in its Covid response. But does that mean that, henceforth, the Centre will accept full responsibility of the Covid fight in Delhi? And how does this square with the Centre's vaccination strategy, which has conveniently put the responsibility of procuring vaccines, after letting manufacturers set the factory gate price, on the state governments? And its general attempt to pass the burden of combating the pandemic on the states? Federalism can't be an idea held hostage to ambition or convenience. It must be a commitment guided by constitutional principles. This is sorely missing in the Centre's action plan for Delhi.

CENTRE NOTIFIES ACT GIVING MORE POWERS TO DELHI L-G

The Ministry of Home Affairs on Wednesday issued a gazette notification stating that the provisions of the Government of National Capital Territory of Delhi (Amendment) Act, 2021, would be deemed to have come into effect from April 27. The Act, which gives the Lieutenant-Governor of Delhi more teeth and significantly waters down the powers of both the elected government and the Legislative Assembly, will clarify the expression "Government" and address "ambiguities" in the legislative provisions to promote "harmonious relations between the legislature and the executive".

In middle of pandemic

The move comes a day after the Delhi High Court cautioned the Delhi government to put its "house in order" over the issue of inadequate oxygen supply in the city, adding that the Centre would be asked to take over if it could not manage the situation. Coming as the development does in the middle of the COVID-19 pandemic, the Act is expected to trigger another round of confrontation between the L-G and the Delhi government under AAP. The Act defines the responsibilities of the elected government and the L-G along with the "constitutional scheme of governance of the NCT" interpreted by the Supreme Court in recent judgments regarding the division of powers between the two entities. It will also seek to ensure that the L-G is "necessarily granted an opportunity" to exercise powers entrusted to him under proviso to clause (4) of Article 239AA of the Constitution. This particular clause provides for a Council of Ministers headed by a Chief Minister for the NCT to "aid and advise the Lieutenant-Governor" in the exercise of his functions for matters in which the Legislative Assembly has the power to make laws.





www.youtube.com/c/DreamIAS

TRIPURA DM APOLOGISES FOR DISRUPTING WEDDING CEREMONY THAT CONTINUED INTO CURFEW HOURS

West Tripura District Magistrate Sailesh Kumar Yadav Tuesday apologised for disrupting a marriage at Manikya Court in Tripura, saying he didn't intend to "hurt anyone's sentiments". Chief Minister Biplab Kumar Deb has asked Chief Secretary Manoj Kumar to submit a report on the events that transpired. In a video that went viral on social media, the District Magistrate was seen stopping a wedding ceremony at Manikya Court, a marriage hall at North Gate of the Palace Compound, supposedly after the 10 pm cutoff time for Covid-19 night curfew to come into force in the Agartala Municipal Council (AMC) areas. The video showed him shoving out the bridegroom, arresting everyone present including the bride and groom's family and tearing up a written permission for the wedding signed by himself. Yadav said everyone who gathered at the site were in direct violation of prohibitory orders under Section 144 of thr CrPC and would be prosecuted. Over 30 people were arrested and released later. Opposition leader Manik Sarkar and the CPIM termed the incident as 'undesired' and unbecoming of the District Magistrate. It sought proper action against the DM for his behavior. West Tripura MP and BJP leader Pratima Bhowmik said she would visit the bride's relatives and speak to them over the incident. "The administration is doing what's needed to break the chain of transmission of coronavirus. But what happened last night is most undesired. It should not have happened," the MP said. Tripura royal scion Pradyot Kishore Manikya Debbarma and chief of TIPRA Motha, which recently won the tribal council elections here, is also the owner of Manikya Court, where the incident happened. In a Facebook post, he called for a complete investigation of the incident and said he will close down the marriage hall "as per the VERBAL direction of Honourable DM Sahib". Ruling BJP MLAs including Sudip Roy Barman, Ashish Kumar Saha and Sushanta Choudhury have written to Chief Secretary Manoj Kumar seeking removal of the DM. After a day of severe criticism on social media, the DM apologised for what happened on Monday night. "All I did was done during the night curfew period last night and was for the benefit and wellbeing of the people. My intention was not to hurt or humiliate the sentiments of anyone," Yadav told reporters. Tripura imposed night curfew in Agartala municipal areas on April 22 with a new surge in Covid-19 cases. The state now has 793 active coronavirus patients and two deaths in the last 24 hours.

THE CASTE-FREE COLLECTIVE (DIPANJAN SINHA - INDEPENDENT JOURNALIST BASED IN KOLKATA)

On a sultry April day, Thakurnagar, the holy site of Matuas in the Bongaon sub-division of West Bengal's North 24 Parganas district bordering Bangladesh, sizzles with banners of rival political parties asking for votes. As if indifferent to the ongoing political tension and the pandemic threat, a boisterous religious rally makes its way through the town, with men jumping as high as they can and women rolling on the roads. The sound of drums gets deafening. Every participant seems to be in ecstasy. The procession is part of the Baruni fair or Thakurnagar Matua mela, the week-long annual festival observing the birth anniversary of Harichand Thakur (1812-1878), the founder of the Matua sect. Religious ecstasy is essential to the Matuas. The word Matua probably comes from the term, matta (drunken) — to be Matua is to be drunk on faith, absolute faith, uninhibited by caste considerations.





Freedom from hierarchy

While the fair takes place in different parts of Bengal on a smaller scale, its centre is Thakurnagar, where lakhs of Matuas come over to pay their respects to their leader at Thakurbari (House of the Thakurs). There they recite and listen to words from Hari Lilamrita, a collection of Harichand's sayings. In the stalls selling sweets and samosas, images of Harichand and his son Guruchand are sold alongside those of Hindu deities. Some Matuas consider Harichand to be an incarnation of Vishnu. The Matua sect is the result of a reformist, anti-caste movement started by Harichand in Bangladesh in the late 19th century. "The core ideology of this movement was freedom from the hierarchy of Brahminical caste practices," says Rajat Roy, assistant professor of political science at Presidency University, Kolkata. Roy adds that while social reform movements, headed by the likes of Vidyasagar, Ramakrishna or Swami Vivekananda, were widespread in Bengal at the time, they rarely breached caste boundaries. This is where the appeal of Harichand's teachings, with their anti-discriminatory message, lay.

Equality for all

Born into a family of peasants in Orakandi village, in present-day Bangladesh, Harichand founded the Matua sect to bring emancipation to the Namasudras, who were pejoratively called Chandals and considered untouchable. After Harichand's death in 1878, his son Guruchand Thakur (1846-1937) expanded the scope of the movement to include people from other downtrodden communities and religions. The book, The Politics of Caste in West Bengal (edited By Uday Chandra, Geir Heierstad and Kenneth Bo Nielsen), quotes Dalit author Manoranjan Byapari as saying that the Matua movement "needs to be recognised as the first organised Dalit movement in Bengal." Guruchand campaigned successfully to have the Chandal people recategorised as Namasudra in the 1891 census. He also managed to ensure reservation for the community in 1907. Emancipation through education was the cornerstone of the movement as shaped by Guruchand, who established a number of schools in undivided Bengal for the Dalit community. Even today, Thakurnagar, created post-Partition in the image of Orakandi, is remarkable for the number of schools it has — there are at least 16 in this small town. Women's education also came early. Binapani Devi Thakur (1920-2019), wife of Pramatha Ranjan Thakur (Guruchand's grandson), worked alongside her husband to establish Thakurnagar. Still revered as the matriarch, Binapani Devi spread the teachings of Harichand across the country and campaigned for the Matuas' right to permanent citizenship. "Equality for all whether in terms of gender, caste or religion — is one of our primary tenets," says Soma Thakur, leader of Matri Sena, the women's wing of the Matua Mahasangha, the central Matua organisation.

Articulate community

The zeal for education has differentiated the Namasudras from other lower castes of Bengal. As Roy says, "While the Namasudras are aware of reservations and are ambitious about their career, many other Scheduled Caste (SC) communities like the Rajbongshis are more intent on political representation, specifically territorial autonomy." However, as the Matuas became economically successful, they sometimes ended up replicating the very caste practices they had rebelled against. The view that Harichand is a Vishnu incarnation can be cited as an instance of this tendency. Matua activists have countered this trend through literature connecting Matua tenets to the teachings of Ambedkar and secular organisations meant to create caste consciousness. But even now, Ambedkar is not a big presence in their daily lives. Namasudra author Manindranath Biswas's book, Harichand







Tattwamrita, seeks to reinterpret Harichand's teachings by separating it from Hindu beliefs. The Matuas, who began migrating from Bangladesh in 1947 and continued to arrive until the 1970s, are now settled as far as *Uttarakhand*, the *Dandakaranya area*, and the *Andaman & Nicobar Islands*. In West Bengal, they have a considerable presence in border districts such as the 24 Parganas, Nadia, Howrah, Cooch Behar and Malda, and are the State's second largest SC community. While always an articulate community with a sizeable body of literary works to its credit, the Matuas became a significant political entity after the Citizenship (Amendment) Act, 2003, and the introduction of the term "illegal migrant," which cast their credentials into doubt. In 2019, the NRC furthered this anxiety, which the CAA 2019 sought to assuage.

Dilution of tradition

Thakurnagar resident Kamalkanti Biswas, 73, the present in-charge of the Matua Mahasangha of North Bengal, traces his origins to Orakandi. He came to India in 1975. "I quit my job in the agriculture department of Bangladesh to come here. For years, I worked in other people's homes and farms. I sat for the Madhyamik (West Bengal Board) exams, and eventually got a job in the State education department. I retired as a lower-division clerk this year," he says. Prime Minister Narendra Modi's visit to Orakandi on March 27 and its significance have been enthusiastically discussed in the media, but Biswas downplays it. He would rather emphasise the importance of his faith, divorced from electoral politics: "It is our road to liberation. It allowed us to pray, to live with dignity and to educate ourselves. I have worked all my life to spread the ideals of Harichand and Guruchand Thakur. My grandchildren are also working with the Matua Mahasangha," he says. These sentiments are echoed by a local shopkeeper, who refuses to be named. He looks up to the Thakurbari for instructions on life and living, but doesn't like the way family members have politicised themselves. But the Matuas have a long tradition of political involvement. Pramatha Ranjan was a member of the Congress party. Another Namasudra leader, Jogendranath Mandal (1904-1968), established the Bengal branch of the Scheduled Castes Federation with Ambedkar in the 1940s to fight for Dalit rights. The dilution of the rationalistic, reformist traditions of the Matua movement is one of the reasons why some Namasudras of Bengal are unwilling to see themselves as Matua today. Byapari, who wrote Matua Ek Mukti Senar Naam ('Matua, the Name of a Liberation Army'), and is Trinamool Congress's candidate from Balagarh in Hooghly district this year, says that he sees no hope in the movement any more. "What is the science behind rolling on the ground? Why should a leader from a community in which people don't get two square meals be bathed in milk? The movement has fallen into the trap of faith, moving away from science and rational questioning. Every time that happens, people will exploit you, whether they represent political powers or the caste powers that you freed yourself from," he says.

MAKING SOCIAL WELFARE UNIVERSAL (MADHURI DHARIWAL -SENIOR LEAD, ORGANIZATION DEVELOPMENT, INDUS ACTION)

India is one of the largest welfare states in the world and yet, with COVID-19 striking in 2020, the state failed to provide for its most vulnerable citizens. The country witnessed multiple crises: mass inter- and intra-migration, food insecurity, and a crumbling health infrastructure. The extenuating circumstances of the pandemic has pushed an estimated 75 million people into poverty. The second wave has brought even the middle and upper-class citizens to their knees. Economic capital, in the





absence of social capital, has proven to be insufficient in accessing healthcare facilities. Illness is universal, but healthcare is not.

Absorbing shocks

The country has over 500 direct benefit transfer schemes for which various Central, State, and Line departments are responsible. However, these schemes have not reached those in need. The pandemic has revealed that leveraging our existing schemes and providing universal social security is of utmost importance. This will help absorb the impact of external shocks on our vulnerable populations. An example of such a social protection scheme is the Poor Law System in Ireland. In the 19th century, Ireland, a country that was staggering under the weight of poverty and famine, introduced the Poor Law System to provide relief that was financed by local property taxes. These laws were notable for not only providing timely assistance but maintaining the dignity and respectability of the poor while doing so. They were not designed as hand-outs but as necessary responses to a time of economic crisis. Today, the social welfare system in Ireland has evolved into a four-fold apparatus that promises social insurance, social assistance, universal schemes, and extra benefits/supplements. A similar kind of social security system is not unimaginable in India. We have seen an example of a universal healthcare programme that India ran successfully — the Pulse Polio Universal Immunisation Programme. In 2014, India was declared polio-free. It took a dedicated effort over a number of years. However, it shows us what is possible. With the advancements in knowledge and technology, a universal coverage of social welfare is possible in a shorter time frame.

Ease of application

Existing schemes cover a wide variety of social protections. However, they are fractionalised across various departments and sub-schemes. This causes problems beginning with data collection to last-mile delivery. Having a universal system would improve the ease of application by consolidating the data of all eligible beneficiaries under one database. It can also reduce exclusion errors. The Pradhan Mantri Garib Kalyan Yojana (PMGKY) is one scheme that can be strengthened into universal social security. It already consolidates the public distribution system (PDS), the provision of gas cylinders, and wages for the MGNREGS. Generally, social assistance schemes are provided on the basis of an assessment of needs. Having a universal scheme would take away this access/exclusion barrier. For example, PDS can be linked to a universal identification card such as the Aadhaar or voter card, in the absence of a ration card. This would allow anyone who is in need of foodgrains to access these schemes. It would be especially useful for migrant populations. Making other schemes/welfare provisions like education, maternity benefits, disability benefits etc. also universal would ensure a better standard of living for the people. To ensure some of these issues are addressed, we need to map the State and Central schemes in a consolidated manner. This is to avoid duplication, inclusion and exclusion errors in welfare delivery. Alongside, a study to understand costs of welfare access for vulnerable groups can be conducted. This will help give a targeted way forward. The implementation of any of these ideas is only possible through a focus on data digitisation, data-driven decision-making and collaboration across government departments.

IMD PREDICTS RAIN IN SEVERAL PARTS TILL MONTH-END

The India Meteorological Department (IMD) on Monday predicted a wet spell over several parts of the country, including central, south and northeast India, from April 26 to 30. Lightning is





www.youtube.com/c/DreamIAS

predicted at isolated places over Gangetic West Bengal, Andaman and Nicobar Islands, central Maharashtra, Marathawada, Rayalaseema, south interior Karnataka and Tamil Nadu, Puducherry and Karaikal on Monday.

Heat wave in Gujarat

Heat wave conditions are very likely in isolated pockets over Gujarat and coastal Odisha, the IMD added. On April 27, thunderstorms with lightning and gusty winds (speed reaching 30-40 kmph) are very likely at isolated places over Uttarakhand, Assam, Meghalaya, central Maharashtra, Marathawada, Telangana, Kerala and Mahe. Lightning is also likely at isolated places over Jammu, Kashmir, Ladakh, Muzaffarabad, Himachal Pradesh, Gangetic West Bengal, Odisha, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Konkan, Goa, coastal A.P., Yanam, Rayalaseema, south interior Karnataka and Tamil Nadu and Puducherry. On April 28, thunderstorms with lightning are likely over Uttarakhand, Chhattisgarh, Vidarbha, sub-Himalayan West Bengal, Sikkim, Arunachal Pradesh, Assam, Meghalaya, central Maharashtra, Marathawada, Telangana, Kerala and Mahe. Heavy rainfall is likely at isolated places over south interior Karnataka and north Kerala on April 28. According to the IMD, thunderstorms with lightning and gusty wind (speed reaching 30-40 kmph) are likely at isolated places over Uttarakhand, Vidarbha, Chhattisgarh, West Bengal, Sikkim, Odisha, Arunachal Pradesh, Assam, Meghalaya, coastal A.P., Yanam, Telangana, Kerala and Mahe and with lightning at isolated places over J&K, Ladakh, Gilgit-Baltistan, Himachal Pradesh, Nagaland, Manipur, Mizoram & Tripura, Rayalaseema, coastal Karnataka, Lakshadweep and T.N. and Puducherry on April 29.

IN ASSAM EARTHQUAKE, REMINDER OF SEISMIC HAZARD ALONG HFT FAULTLINE

Several houses and buildings were damaged after an earthquake of magnitude 6.4 on the Richter scale hit Assam around 8 am on Wednesday. Six aftershocks, of magnitude ranging from 3.2 to 4.7, occurred in the two-and-a-half hours following the main tremor. Senior Minister Himanta Biswa Sarma posted on Twitter that the epicentre was in Dhekiajuli town in the state's Sonitpur district. Prime Minister Narendra Modi spoke to Chief Minister Sarbananda Sonowal and assured all help from the Centre.

On a fault line...

The primary earthquake had its epicentre at latitude 26.690 N and longitude 92.360 E, about 80 km northeast of Guwahati, and a focal depth of 17 km, the National Centre for Seismology (NCS) said. "The preliminary analysis shows that the events are located near to Kopili Fault closer to Himalayan Frontal Thrust (HFT). The area is seismically very active falling in the highest Seismic Hazard zone V associated with collisional tectonics where Indian plate sub-ducts beneath the Eurasian Plate," the NCS report said. HFT, also known as the Main Frontal Thrust (MFT), is a geological fault along the boundary of the Indian and Eurasian tectonic plates. The Kopili Fault is a 300-km northwestsoutheast trending fault from the Bhutan Himalaya to the Burmese arc. The United States Geological Survey (USGS), a scientific agency of the US federal government, defines a fault as "a fracture along which the blocks of crust on either side have moved relative to one another parallel to the fracture". According to the USGS, "When an earthquake occurs on one of these faults, the rock on one side of the fault slips with respect to the other. The fault surface can be vertical, horizontal, or at some angle to the surface of the earth."

3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR

40





...Seismically unstable

Prof Chandan Mahanta of the Department of Civil Engineering at the Indian Institute of Technology, Guwahati, said: "The Northeast is located in the highest seismological zone, so we must have constant earthquake preparedness at all levels. Continuous tectonic stress keeps building up particularly along the faultlines. Today's earthquake was an instance of accumulated stress release — probably, stress was constrained for a fairly long time at this epicentre, and hence the release was of relatively higher intensity." Prof Mahanta said the timing of the earthquake and its duration ensured the damage was restricted. "The earthquake occurred early in the day when people were mostly home. Had it happened during working hours, say when there were workers at underconstruction high-rise buildings, the earthquake might have taken lives," he said. "The duration is also important," Prof Mahanta said. "Had the main tremor continued for more than 30 seconds with the same intensity, the resultant acceleration and resonance could have cause greater damage to structures."

History of quakes

The NCS report said "historical and instrumentally recorded earthquake data" show the region has seen several "moderate to large earthquakes". The worst of these was the great Assam-Tibet Earthquake that occurred on Independence Day in 1950. "The Assam quake...stands out amongst the biggest temblors which have shaken our planet," says a piece on the UC Berkeley Seismology Lab blog. The tremors were "so strong that it caused huge landslides which in turn blocked many rivers in the mountainous region", it says. The earthquake "had a moment magnitude of 8.6 and hence was in the same league as the Great Chile Earthquake, with its magnitude of 9.5, ten years later or the Tohoku-oki quake off the coast of Honshu in 2011, for which the magnitude was determined to be 9.0". The piece concluded, "No matter what the mechanism, there is one item all seismologists agree upon: The collision zone between India and Eurasia along the tremendous Himalayan mountain range has one of the highest seismic hazards in the world." Another great earthquake, of magnitude 8.1, had shaken Assam earlier on June 12, 1897. The abstract of a scientific paper on the quake in the journal Nature recorded, "The great Assam earthquake of 12 June 1897 reduced to rubble all masonry buildings within a region of northeastern India roughly the size of England, and was felt over an area exceeding that of the great 1755 Lisbon earthquake." A 2015 paper by O Baro and A Kumar of IIT-Guwahati noted about the 1897 earthquake: "The shaking due to this earthquake was felt at several places across the Indian subcontinent. Large fissures of 18 to 30 m ran parallel to the banks of the Brahmaputra River and its various tributaries."

NO VOLUNTEER LIST UNDER CYBER SCHEME

The Union Home Ministry has said it does not maintain a centralised list of volunteers enrolled under the cybercrime volunteer programme since the police is a "State subject" under the Seventh Schedule of the Constitution. The Ministry, through its cybercrime grievance portal, cybercrime.gov.in, aims to raise a group of "cybercrime volunteers" to flag "unlawful content" on the Internet. A digital rights group, the Internet Freedom Foundation (IFF), has said the programme enables a culture of surveillance and could create potential social distrust by encouraging civilians to report the online activities of other citizens. In response to a Right to Information Act (RTI) application by The Hindu on the total number of volunteers who have applied under the Cybercrime Volunteers Programme

3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR

41





www.youtube.com/c/DreamIAS

of the National Cybercrime Reporting Portal, the Ministry said the information could be sought directly from the respective States and Union Territories.

State subjects

The Ministry said in the RTI reply that "police" and "public order" were State subjects in the Seventh Schedule of the Constitution, and the States were primarily responsible for the prevention, detection, investigation and prosecution of crimes through their law enforcement agencies (LEAs). "The Cybercrime Volunteer Framework has been rolled out as a part of cyber hygiene promotion to bring together citizens to contribute in the fight against cybercrime in the country and assist State/UT LEAs in their endeavour to curb cybercrimes. The volunteers are registered, and their services utilised, by the respective State/UT LEAs as per their requirement. It is requested to kindly seek the information directly from the respective State/UT LEAs. The detailed programme document is available at www.cybercrime.gov.in," the Ministry said in the RTI reply. Though the Ministry did not provide information in the RTI reply, according to its Output Outcome Monitoring Framework Budget of 2021-22, the programme was expected to include 500 volunteers, 200 "cyber awareness promoters" and 50 "cyber experts".

MP's poser

In March, Biju Janata Dal (BJD) MP Pinaki Misra asked whether "concerns of infringement of privacy due to surreptitious and mala fide intrusion into an individual's online activities are addressed in this programme". The National Cybercrime Ecosystem Management Unit, of which the Cybercrime Volunteers Programme is a constituent, is part of the Indian Cybercrime Coordination Centre (I4C) scheme launched by Union Home Minister Amit Shah in January 2020. The project was approved in October 2018 at an estimated cost of ₹415.86 crore. The I4C scheme that includes other components also has been allocated ₹69.80 crore in the 2021-22 Budget.

GROUNDWATER DEPLETION MAY REDUCE WINTER CROPPING INTENSITY BY 20% IN INDIA

India is the second-largest producer of wheat in the world, with over 30 million hectares in the country dedicated to producing this crop. But with severe groundwater depletion, the cropping intensity or the amount of land planted in the winter season may decrease by up to 20% by 2025, notes a new paper. Some of the important winter crops are wheat, barley, mustard and peas. The international team studied India's three main irrigation types on winter cropped areas: dug wells, tube wells, canals, and also analysed the groundwater data from the Central Ground Water Board. They found that 13% of the villages in which farmers plant a winter crop are located in critically water-depleted regions. The team writes that these villages may lose 68% of their cropped area in future if access to all groundwater irrigation is lost. The results suggest that these losses will largely occur in northwest and central India.

Alternative sources

The team then looked at canals to understand if they can be promoted as an alternative irrigation source and as an adaptation strategy to falling groundwater tables. But the results showed that "switching to canal irrigation has limited adaptation potential at the national scale. We find that even if all regions that are currently using depleted groundwater for irrigation will switch to using





www.dreamias.co.in

canal irrigation, cropping intensity may decline by 7% nationally," notes the paper published in Science Advances. When asked what new or additional adaptation strategies can be implemented, corresponding author Meha Jain explains: "We can conjecture based on other literature and say that adoption of water-saving technologies like a sprinkler, drip irrigation and maybe switching to less water-intensive crops may help use the limited groundwater resources more effectively," She is from the School for Environment and Sustainability at the University of Michigan. Her team is now trying to understand how groundwater depletion has already reduced yields and cropped areas in India over the last 20 years, and also how climate change may affect the future availability of groundwater resources.

Unsuited soils

Balwinder Singh from the International Maize and Wheat Improvement Center, New Delhi, explains more about the problems wheat farmers face in our country. "There are several first-generation (productivity) and second-generation (sustainability) problems. In the green revolution era, policy-supported environment led to a large increase in rice cultivation in northwestern India mainly in Punjab and Haryana which are ecologically less suitable for rice cultivation due to predominantly light soils." He explains that this policy-supported intensive agriculture led to unsustainable groundwater use for irrigation and in turn groundwater scarcity. There was also post-harvest residue burning to make way for the timely sowing of wheat. He is one of the authors of the paper.

Poor infrastructure

He adds that there are enough groundwater resources supported with higher monsoon rainfall in eastern Indian states like Bihar. But due to lack of enough irrigation infrastructure, farmers are not able to make use of natural resources there. "So we need better policies in eastern India to expand the irrigation and thus increase agriculture productivity. This will also release some pressure from northwestern Indian states," he concludes.

MORE PRODUCTS, SERVICES IN 'ESSENTIAL' LIST: GOVT TO TAKE CALL SOON

The central government is likely to take a decision in the next 10 days over updating the definition of 'essential products and services' to include products like mobile phones, laptops, essential apparel, aluminium food containers, infant and childcare essentials as well as other medical electronic equipment, according to sources in the know of the development. The issue of ambiguous definition of what constituted 'essential product' was flagged by several e-commerce platforms with the Ministry of Home Affairs (MHA), the Department for Promotion of Industry and Internal Trade (DPIIT), and the Ministry of Electronics and Information Technology (MeitY). These platforms had, in their representations to various ministries, argued that they be allowed to continue the delivery of all items listed on their websites as most of these deliveries were anyway "contact-less" in nature. They has also pointed out that several customers were now using some mode of digital payment to pay for these products, thereby making their deliveries even safer. Localised lockdowns imposed by several states across India have hindered the e-commerce platforms' ability to delivery products on time. In most of the cases, law enforcement agencies in the states have issued colour-based stickers for vehicles of delivery personnel carrying essential products and services. Despite that, most platforms had completely suspended the delivery of products such as mobile phones





and laptops, which are currently not in the list of 'essential products'. "The problem that arises from withholding non-essential products is that after the lockdown is lifted, the pressure for safe and timely deliveries is too much to handle. The customer then expects the products to be delivered within the usual time of 2-3 days, which becomes impossible to fulfill," a senior executive with an e-commerce platform said. E-commerce platforms which do not necessarily deal in essential products category have also said that localised lockdowns lead to severe losses and the company can not "hire and fire" staff depending on these rules, another e-commerce firm executive said. Experts believe that the government should keep in mind the "dynamic nature" of e-commerce to allow delivery of all products and services. "Since the second wave seems to be even more severe than the first — the infection rate is much faster, even affecting youths — the essentiality of e-commerce needs to be kept in mind while making any policy decisions," said Pradeep Mehta, secretary general, CUTS International. Following the first national lockdown imposed in March last year to contain the spread of the Covid-19 virus, the government had expanded the list to include several items such as tissue paper, oral care products, batteries, surface cleaners and disinfectants in the list of essential items, apart from the usual items like vegetables, fruits, milk and milk products, bakery products, egg, meat, fish, cooking oil, among others.

AMID CONCERNS IN INDIA AND BRAZIL, THE UNUSED VACCINE STOCKPILE IN US

US Secretary of State Anthony Blinken tweeted: "Our hearts go out to the Indian people in the midst of the horrific COVID-19 outbreak. We are working closely with our partners in the Indian government, and we will rapidly deploy additional support to the people of India and India's health care heroes." The tweet comes amid several campaigns calling upon the US to do more to contribute to vaccine equality. One of the latest campaigns involves a stockpile of millions of AstraZeneca doses. Epidemiologists to industry leaders are urging the Biden administration to release the reserve to countries like India and Brazil, given the assertion that the doses won't be used in the US.

Last summer, the US and AstraZeneca entered into a deal to deliver 300 million doses. The rollout timeline has taken longer than expected, and been overshadowed by several safety and efficacy concerns.

What's the argument for diverting it?

In early April, US chief medical adviser Anthony Fauci said the US will likely not need the AstraZeneca shot. The AstraZeneca vaccine has not been granted Emergency Use Authorization by the US Federal Drug Administration (FDA). With documented cases of blood clots in younger women in Europe correlated with the vaccine, FDA authorisation may be further delayed. By the time it would have gained clearance, most American adults will have already received a vaccine, experts note. There are at least three other shots readily available in the US. The US has given four million of the AstraZeneca doses to Mexico and Canada.

Serum Institute of India has said the US should lift an embargo on essential raw materials. CEO Adar Poonawalla later clarified it was for Covovax, not Covishield (which is a version of the AstraZeneca vaccine). A network of think-tanks, including Carnegie India, Observer Research Foundation, IDFC Institute, and Takshashila, have requested the US to exempt India from aspects of the Defense





www.dreamias.co.in

Production Act to allow the export of these materials. On a third front, there has been pressure on the US and other countries to support a patent waiver at the World Trade Organization to expedite production.

How are vaccines stocked around the world at present?

An overwhelming majority has been distributed in the richest countries, which negotiated directly with manufacturers early on. According to Bloomberg's Vaccine Tracker, highest income countries are vaccinating at a pace 25 times faster than the lowest ones. The US has 22.9% of the world's vaccines but only 4.3% of the world's population. China has 21.9% and 18.2% respectively, and India 13.8% and 17.7%, according to the tracker. Almost half of all vaccines have gone to 16% of the world's population. The Washington Post reported that the world's poorest 92 countries may not be able to vaccinate even 60% of their population for another three years. India has vaccinated 8% per cent of the population with one dose and 1% with two. Brazil has vaccinated less than 12% with one. In other concerns, India's stalled vaccine exports have domino effects on the rollouts in African nations and other developing countries, as Serum's productions were fuelling efforts globally before India's second wave.

U.S. TO ALLOW INDIA ACCESS TO VACCINE RAW MATERIALS

The U.S. will immediately deploy supplies and other assistance to India, the White House said, following a Sunday call between the National Security Advisers of the two countries, Ajit Doval and Jake Sullivan. The U.S.'s assistance will include making raw materials for COVID-19 vaccine Covishield immediately accessible and pursuing options to generate oxygen "on an urgent basis". However, there was no mention of the U.S. shipping ready-to-use vaccines. The administration denied that outright embargoes exist. However, as a consequence of the U.S.'s Defense Production Act (emergency powers that allow the government to control private sector production decisions), federal government purchase orders have to be prioritised over foreign orders. Sunday's statement from Ms. Horne detailed other forms of immediate assistance.

In the longer term, New Delhi wants Washington to consider a shift in its long-held state policies for the duration of the pandemic, which may be a more difficult proposition as it includes setting aside patent rights for pharmaceuticals produced in the U.S. and supporting the India-South Africa petition at the World Trade Organization for waiving all TRIPS (Trade-Related Aspects of Intellectual Property Rights) so vaccines can be manufactured generically for the next few years. The U.S. should consider its assistance to India both in light of their relationship and of the fact that as a key global supplier of pharmaceuticals and vaccines, India's faltering steps in the fight against COVID-19 will impact the world. There is no denying that the perceived delay in the U.S.'s response to the crisis in India, which is not just a bilateral strategic partner but key to the U.S.'s Indo-Pacific strategy as a member of the Quad, has caused some disappointment in South Block. However, it is unlikely that this will seriously impact the partnership, nor should such matters affect the broader relationship. There is also a kernel of truth in the U.S.'s earlier assertion that the American government has a "special responsibility" to American citizens first and addressing their COVID-19 needs was also in the world's interests. Instead of chiding the U.S. for its delay, New Delhi would do well to learn from this prioritisation, and complete its vaccination programme for all Indians, even as it uses all its resources and those received from the U.S. and other countries to rescue the nation from the current ravages of the pandemic.





AID POURS IN FROM THE WORLD

Nearly 15 countries, including the U.S., Russia, France and the U.K., are rushing critical emergency use equipment to help India counter the COVID-19 second wave. A compilation from the External Affairs Ministry showed that countries are sending hundreds of oxygen concentrators, respirators and large quantities of liquid oxygen to help ease the situation. Out of the promised international assistance, a large chunk is expected from the U.S., following President Joe Biden's telephonic conversation with Prime Minister Narendra Modi on April 26. An important part of support from the United States will include raw materials required for production of the vaccines here.

Vaccine manufacture

Under the Quad Vaccine Initiative, the U.S. Development Finance Corporation (DFC) is funding a substantial expansion of manufacturing capability for BioE, a vaccine manufacturer in India. It is expected that BioE may produce 1 billion doses of COVID-19 vaccines by 2022. Assistance from the leading economies of the world is expected to reach in multiple phases with France this week sending eight large oxygen generating plants and items such as respirators and electric syringe pushers. The French government is on track to send five liquid oxygen containers next week. Germany will make an oxygen production plant available for three months along with 120 ventilators and protective gear such as KN95 masks. Australia announced on Tuesday that it will send 500 ventilators, 1 million surgical masks, 5,00,000 P2 and N95 masks, and other protective items for frontline health workers. The Hindu had earlier reported citing official sources that Delhi is looking for oxygen-related items. Accordingly, four cryogenic oxygen containers were sourced from Singapore. Saudi Arabia has sent 80 metric tonnes of liquid oxygen which is currently en route via sea. *Thailand* and the *United Arab Emirates* have sent four and six cryogenic oxygen tanks respectively. As many as 800 oxygen concentrators were sent by *Hong Kong*. *Ireland* is on track to send 70 of this equipment. The international campaign to support India appeared to intensify with more countries joining the effort by late Tuesday. External Affairs Minister S. Jaishankar has also received calls from Canadian Foreign Minister Marc Garneau and Kuwaiti Foreign Minister Ahmed Nasser Mohammed Al Sabah offering support. Both countries discussed ways to strengthen efforts to deal with the second wave.

COVID-19'S TRIAGE CHALLENGE (SANJAY NAGRAL - MUMBAI-BASED SURGEON)

The second COVID-19 wave has hit India with great ferocity. It's déjà vu and more. Family, friends and colleagues are infected, hospitals are flooded with patients, there is a shortage of beds, and ambulances are screaming through the streets. There are curfews and lockdowns, and death is in the air. But there is something different about this wave. Apart from the difference in the disease pattern (infectivity is higher and younger people are being affected), a larger proportion of the elite has been infected. In Mumbai, high-rises have been more affected than slums. The elite have been rudely exposed to the dysfunctionality of our healthcare system which the poor have endured for years. The secure world of the privileged has been exposed. Imbalance between demand and supply of healthcare facilities is not peculiar to India. But there is something in our social DNA that could be making it worse.





Categorising patients based on severity

A time-tested, effective strategy to face the challenge of a sudden large load on the healthcare system is the *concept of 'triage'*. This means that *when there are a large number of people needing* urgent care and there are limited resources, the victims are divided into multiple categories based on severity of disease. The most severe are treated first as any delay will cost lives. The rest are treated later as per their level of severity. This idea was first introduced by Napoleon's military surgeons to treat battlefield injuries and showed immediate impact. It is now standard practice in many countries when treating mass casualties. It has also been used effectively during COVID-19. But triage is not a sterile, mechanical protocol insulated from its surroundings. Its wide acceptance and implementation are based on the powerful but complex principles of justice and solidarity. It is where the interests of everyone are put above the interest of an individual; where those who need care first are prioritised over those who can wait, irrespective of who they are. It works when there is social consensus on a level playing field. Right from the first wave, Mumbai has witnessed a rather unique effort by the Municipal Corporation to set up a single-window portal of helplines for hospital beds. For the first time, this includes both the public and private sector. There is, of course, an inherent bias in that the public beds are free but the private ones are paid though the charges are capped. A tiered system of observation, oxygen and ICU facilities is in place on paper. However, a few weeks ago, a rather exasperated Municipal Commissioner of Mumbai said that the system is under strain because people are insisting on private hospital beds. It would be unfair to fault a new Commissioner for a duality that has been cultivated over the years. I doubt whether many of us would easily use a public hospital today. After all, by design or habit, the sanitised world of private medicine is what the privileged have inhabited for years. Moreover, it is hard to remember any senior bureaucrat, politician or even doctor who has chosen to be treated in a public hospital in Mumbai for COVID-19. Even as the Municipal Commissioner was complaining, asymptomatic or mildly symptomatic people such as Sachin Tendulkar, Akshay Kumar and Rashmi Thackeray were admitted to large private hospitals as "abundant precaution". There are many individuals admitted to private hospitals because they fear that they won't get a bed if they need one suddenly. Serious triage doesn't only prioritise the sickest over the less sick. It also discourages futile treatment for the very sick who are unlikely to benefit from the treatment. Thus, a 90-year-old who maybe otherwise bedridden could be refused admission or someone with an advanced untreatable cancer who develops COVID-19 may be put lower in priority. It's the same principle of justice applied in the reverse. Executing triage in its truest sense is a big collective leap and needs a certain social sanction. It needs to be perceived to be fair and transparent. The person who gives up a bed does it with the understanding that as and when she really needs it, she will get it. Everyone falls in line towards a greater common good.

Challenges

In an unequal world, however, the challenges to this idea are immense. In India, a social triage based on class, caste and other hierarchies is everyday practice. Also, whatever the severity of the crisis, it is hard to imagine a determined neutral state implementing a strict triage. Finally, given the current dominance of the private sector, especially in intensive care, triage has to involve state control over the private sector. But if there was ever an opportune moment in this nation's history to muster courage to implement genuine triage, it is now.





PANDEMIC BLUES (R. SRINIVASA MURTHY WAS A PROFESSOR AT NIMHANS)

The past year of pandemic has brought to the fore the weaknesses of society and family life. The mirror to the fissures in society calls for empowering of individuals, families and communities to face adversity. Though the pandemic has been severe in terms of degree and duration, India has more than 40 years of experience in implementing emotional health interventions during disasters such as the Bhopal gas tragedy, the Orissa cyclone, the Gujarat earthquake, and the 2004 tsunami. The lessons learnt are three: *it is possible to share skills with the survivors to care for their emotional health; family life can be improved to make facing the pandemic a joint effort; and community support and cohesion can mitigate the negative effects.*

Personal level

During a disaster, there are two challenges, namely maintaining emotional health and addressing "distress". Luckily, similar to physical hygiene (mask, washing hands, social distance), there are psychological measures that can strengthen the emotions and prevent a breakdown. Specifically, daily exercise of at least 30 minutes, eight hours of sleep, a daily diet rich in fruits and vegetables, and relaxation techniques such as yoga, mediation, listening to music, art, and spirituality to make sense of the changes can strengthen emotional health. When there is "distress" causing a feeling of hopelessness, anger, uncertainty and fear of death, instead of using alcohol or unleashing anger at family members, seek help from friends and relatives, share feelings, write down daily thoughts (journalling), and make time daily for pleasurable activities and reading of books that help find a meaning to life.

Family level

One of the common observations during the pandemic is that each person, even within the family, experiences the situation in his or her own way. Most often, there is no communication, and lines of authority are altered. The most important step is to create spaces to share feelings (what is upsetting the person?). Doing common activities (eating together, games, art work, gardening, going to a park or temple together, singing and so on) is helpful. The individual problems can become family issues to address and solve.

Community level

Societies which have been cohesive and have within their structures opportunities to share and support come out winners in a pandemic. This type of support could be around a temple, church, mosque or professional groups or informal groups such as self-help groups. By sharing and caring, the weakness of some can be strengthened by the support of the other members. I remember an incident following an earthquake in Uttarakhand where most of the homes were destroyed and the families dislocated. To my question to a group of survivors, what do they want most, they asked for a place of worship, to have a common place to meet each other and share problems. One of the activities that has been strengthened during the pandemic is religious discourses in each community. I have noticed people participating in online discourses and finding emotional relief. What is achieved by these activities? Is it the "opium for the masses"? The pandemic has reminded people of their mortality and halted lives and plans. Finding meaning and purpose of life can only come from a larger understanding of the universe and connecting with the higher power. To

 3^{RD} FLOOR AND 4^{TH} FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR





conclude, however challenging the current pandemic, similar to the medical vaccine and physical hygiene, it is possible to strengthen individuals, families and communities and utilise the rich spiritual resources of the country towards that end. This can convert people from victims to victors.

INDIA FIRST COUNTRY TO REPORT 4 LAKH CASES IN SINGLE DAY

With 4,08,323 new COVID-19 cases recorded till 11 p.m. on Friday, India became the first country in the world to register over 4 lakh infections in a single day. The day also saw 3,464 deaths. Maharashtra reported 62,919 infections, followed by Karnataka (48,296), and Kerala (37,199). Maharashtra also recorded 828 casualties, followed by Delhi (375) and Uttar Pradesh (332). The country has so far reported a total of 1,91,63,488 cases and 2,11,778 deaths. The figures do not include cases and deaths from Ladakh. The data are sourced from covid19india.org, an independent aggregator of daily figures from State health departments. As many as 2,97,488 recoveries were recorded on Friday, taking the total to 1,56,71,536. As many as 19,20,107 samples were tested on Thursday (results of which were made available on Friday). This is the first instance when the daily tests have crossed the 19-lakh mark. On April 28, 17.68 lakh samples were tested. A total of 28.64 crore tests have been conducted in the country till April 29, since the beginning of the pandemic.

22.24 lakh doses given

Around 22.24 lakh vaccination shots were given in the 24 hours ending 7 a.m. on Friday, which is only 31,267 doses more than what was recorded in the previous 24 hours. The daily vaccination rate has decreased significantly in the second half of April compared to the first. Between April 1-14, India administered 35.26 lakh doses on an average every day. However, between April 15-29, the average daily doses given fell to just 25.16 lakh. Cumulatively, 15,00,20,648 vaccine doses had been administered till 7 a.m. on Friday.

ARMED FORCES GET POWERS FOR RELIEF WORK

Defence Minister Rajnath Singh has invoked special provisions and granted emergency financial powers to the armed forces to empower them and speed up their efforts to tide over the current COVID-19 situation. The emergency financial powers will help formation commanders to establish and operate quarantine facilities, hospitals and undertake procurement, repair of equipment, items, material and stores, besides provisioning of various services and works required to support the ongoing effort against the pandemic, the Defence Ministry said. Under these powers, Vice Chiefs of the armed forces, including the Chief Of Integrated Defence Staff to the Chairman Chiefs Of Staff Committee (CISC) and General Officer Commanding-in-Chiefs (GOC-in-Cs) and equivalents of all three Services have been given full powers, whereas Corps Commanders and Area Commanders have been delegated powers up to ₹50 lakh per case and Division Commanders, Sub Area Commanders and equivalents have been delegated powers up to ₹20 lakh per case. "These powers have been devolved initially for three months from May 1 to July 31, 2021. These are in addition to the emergency powers delegated to the medical officers of the armed forces last week," the Ministry said. To meet the urgent requirement of oxygen in various parts of the country, the Defence Research and Development Organisation (DRDO) is arranging big size oxygen cylinders

3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR

49







for fulfilling requirements of different hospitals. These cylinders are of 80 litres water capacity each and can be pressurised up to the 130 bar because of which each of these cylinders can store 10,000 litres of oxygen, the statement said.

Navy contingent

The Navy has sent a 76-member medical contingent from five Naval hospitals around the country to bolster availability of trained manpower in the 900-bed COVID hospital in Ahmedabad. The Cantonment Boards have extended support to civil administration in various parts of the country to tide over the surge in cases.

FACTS AND FIGURES

At Health Ministry press briefings, officials have long sought to convey that India's death toll as a fraction of its population was lower than that of several countries. This is fact and continues to be so. The three countries with a higher death toll have, per million, 1,600-1,800 deaths between them. India's is only about 150. This low count is meant to impress that India has done a better job in protecting its people. These numbers and the slackening of the coronavirus curve in winter even prompted respected scientists to hypothesise if genetic or peculiar social circumstances had combined to confer a certain broad immunity to the vast heterogenous population. On the other hand, a spectrum of independent experts have pointed out the problems in the system of deathreporting in India. Though undercounting deaths in a pandemic is expected, the concern in India has been that of deliberate omission. As this paper pointed out, on April 16, as per Gujarat's health bulletin, there were 78 official deaths. But 689 bodies were either cremated or buried following COVID-19 protocol. Last year, Tamil Nadu, Delhi and West Bengal did not count deaths in those who had co-morbidities as COVID-19 deaths. However, these backlogs were corrected over time. Two in three deaths in India occur at home and 14% of deaths are not registered. There are wide discrepancies within States on how many deaths are actually recorded and among these, how many are attributable to COVID-19. However, the ferocity of the second wave has brought COVID-19 deaths into renewed focus. Visuals of bodies and of people on the threshold of death from a lack of access to basic medical facilities such as oxygen have made it harder for the government to convince people that the coronavirus is better controlled in India than anywhere else. The aged continue to be the most vulnerable to the infection but that India on average being younger than the West is less vulnerable to death is a specious argument. The absolute number of the aged coupled with the fact that they lack the kind of access to health care their counterparts in developed countries have, means that the coronavirus, left unchecked, would wreak havoc. Even now, less than 4% Indians above 60 have been fully vaccinated. This when over 15 crore vaccine doses have been administered so far. India must redouble its efforts at being honest and transparent with its numbers, however unpalatable they may be.

GASPING FOR AIR, GASPING FOR ANSWERS (VIKRAM PATEL - THE PERSHING SQUARE PROFESSOR OF GLOBAL HEALTH AT HARVARD MEDICAL SCHOOL, AND A MEMBER OF THE LANCET CITIZEN'S COMMISSION ON RE-IMAGINING INDIA'S HEALTH SYSTEM)

The word 'trauma' typically evokes extreme events such as rape, sexual abuse and war-related violence. This is not surprising given that the word gained currency as a medical condition in the

3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR

50





aftermath of the *Vietnam war* when tens of thousands of soldiers from the United States returning from the brutal conflict exhibited a range of distressing symptoms, giving birth to the diagnosis of Post-traumatic Stress Disorder (PTSD). But the truth is that trauma can occur in many more diverse ways, and it is only now, with COVID-19 sweeping the world, that gasping for air has been recognised as a traumatic event. What ties these seemingly unconnected experiences together is that they all evoke the same intense emotions: a toxic brew of extreme fear and utter helplessness. These experiences, especially when sustained over hours or days, literally leave an imprint in the brain so that the hallmark features of PTSD symptoms such as nightmares, flashbacks and feeling on edge, recur at any time, sometimes triggered by a totally unrelated event which bear similarity to the trauma. A recent study from the United Kingdom (https://bit.ly/2SbDysD) of over 13,000 survivors of COVID-19 reported a strong correlation between the severity of the infection and subsequent PTSD. While just over 1% of the patients reported breathing problems or hospital admission, the prevalence of PTSD in the months which followed were staggering: 35% of the sickest, and 15% of even those who only needed home assistance. The most prominent symptoms were frightening intrusive images of being breathless or ventilated. Thus, for those who do survive these nightmarish moments on the edge of life, the ordeal is far from over. Even as we struggle to keep those gasping for air alive, we must simultaneously attend to the long-term mental health consequences of survivors, a task even more daunting in a country where trauma-related mental health problems are barely even acknowledged.

OXYGEN FROM STERLITE COPPER: PERMISSION, CAPACITY, AND ROAD AHEAD

The Supreme Court on Tuesday allowed Vedanta Limited to operate its oxygen production units at the Sterlite Copper plant in Thoothukudi in Tamil Nadu. The Sterlite Copper plant has been shut for three years following public protests and police firing that killed 13 protesters in May 2018. The Supreme Court decision follows a submission by Vedanta Limited, which cited the ongoing crisis for medical oxygen triggered by a surge in Covid-19 cases across the country.

How it went to court

Vedanta Limited had moved the Supreme Court last week requesting an emergency hearing. Citing the medical oxygen crisis, it asserted that it could produce 1,000 tonnes of oxygen if the plant was allowed to reopen. On the court's suggestion, the Tamil Nadu government, which was initially against the idea, held a public hearing in Thoothukudi last week, where most stakeholders opposed the proposal alleging that it was a strategy by Vedanta to reopen the entire plant. On Monday, Chief Minister E P Palaniswami met representatives of all major political parties. The meeting resolved that the plant would be allowed to reopen conditionally: only for standalone operations of oxygen production and for four months, strictly under the monitoring of the state and district administrations. And Tamil Nadu's requirement would be prioritised before supplying this oxygen to other states.

The oxygen crisis

There are many suppliers of liquid oxygen in the southern region, including in Sriperumbudur near Chennai. A portion of it was used for medical purposes earlier, too, while the bulk went for industrial purposes. Data in the public domain shows that the average liquid oxygen capacity of India is 7,200 metric tonnes a day, of which about 800 tonnes was the requirement for medical





purposes before the pandemic. Demand went up to 2,000 tonnes/day during the first wave around September 2020.

Oxygen in copper plant

The Vedanta Limited plant has two oxygen production units lying idle, with a combined capacity of 1,050 tonnes. The oxygen from these units is meant to feed the furnaces of the copper-melting plant. These facilities suck in air from the atmosphere, which is processed so that the oxygen-rich fraction of the air is absorbed in the final process. Vedanta Limited has claimed in the Supreme Court that it can produce 1,000 tonnes oxygen. The state government, however, had submitted in the Madras High Court that the plant has a production capacity of 1,050 tonnes, and only 35 tonnes can be used for medical purposes. Advocate General Vijay Narayan said what is required is liquid oxygen with at least 99.4% purity for medical use while industrial oxygen has only 92%-93% purity. The state submitted that Sterlite also has to install compression and bottling plants to convert gaseous oxygen to liquid oxygen, a process that will take a minimum six months. Sterlite has agreed to set up the compression and bottling plants as soon as possible. The oxygen produced at Sterlite's units is crude oxygen. However, on Tuesday, Vedanta Limited submitted in the Supreme Court that it would be able to produce up to 200 metric tonnes of liquid oxygen within 10 days' time. A source in Vedanta Limited told The Indian Express that the remaining 800 tonnes will be produced as gaseous oxygen, and they are in talks with different stakeholders in the government and private sector to figure out how it can be made available for medical use.

Local concerns

Sterlite Copper had been facing protests ever since its inception in 1994. The local community's concerns include hazardous industrial operations that produce toxins such as lead, arsenic and sulphur oxides, pollution of the environment, and their impact on public health. Following a gas leak in March 2013, the state government ordered shutting down of the plant, and the Supreme Court fined Sterlite Rs 100 crore for flouting environmental norms the following month, but the plant was in operation in June again. It was shut down again following the violent protests and police firing in May 2018. On Tuesday, Justice D Y Chandrachud said in the Supreme Court: "The nation must stand together in this moment." He was referring to the medical emergency. Oxygen production will now depend on maintenance and repair at a plant lying unused for three years. The local population will be apprehensive of any deviation from the agreement to produce oxygen only for medical purposes.

A PRAGMATIC APPROACH FOR COVID-19 (THE AUTHOR IS AN INFECTIOUS DISEASE PHYSICIAN AND CHAIR OF INFECTION PREVENTION AND CONTROL, MAYO CLINIC, MINNESOTA, U.S.)

The second wave of COVID-19 infections in India has turned into a public health emergency, and it has become difficult for most people to even access the healthcare system. Finding a hospital bed has turned almost impossible in many parts of the country, and if one does manage hospital admission, critical supplies like medical oxygen are hard to come by. Healthcare personnel have been trying to do their best under these trying circumstances, but they are now stretched to the breaking point. Amid this, a plethora of guidelines and lack of concordance across recommendations put forward by different States add to the confusion. Various drug cocktails







with unproven or marginal benefits are being used widely. To address the confusion, the India COVID SOS team (www.indiacovidsos.org), a group of volunteers from across the world, including India, has developed clear guidance in various Indian languages to help in home-management of patients. This is not intended to be a substitute for medical care but rather a way to assist people with mild to moderate symptoms safely at home.

Moderate illness

Starting with the basics, if one develops symptoms of COVID-19, like fever, sore throat, dry cough, headache, body aches, and loss of smell or taste, they should try to get tested. Given the high number of cases in India, if a person has one or more of these symptoms and lives in a highly affected area, they are very likely to have the infection. However, if testing is unavailable, they must assume that they have COVID-19 and should stay home, keep the windows open for ventilation, and follow other tips. Most importantly, avoid panic. It is important to remember that over 90% of people with COVID-19 recover fully without needing hospital care. A pulse oximeter must be used to check oxygen saturation levels three to four times a day, or more often if there is difficulty in breathing. There is some evidence that a steroid inhaler may be helpful for people over the age of 50 years. If available, an inhaled steroid (budesonide) may be used twice a day for five to seven days. If oxygen levels are at or above 92%, hospitalisation, blood tests or a CT scan are not needed. Further, oral steroids, intravenous Remdesivir, or plasma may not be beneficial for such patients. In fact, taking oral steroids at this stage could actually be harmful. In case the oxygen levels are less than 92%, one must reach out to a doctor and follow their recommendations. Our suggestions at this stage apply only if an individual cannot reach a doctor or find a hospital bed. The most important treatments at this point are oxygen and oral steroids. Dexamethasone is the most commonly used steroid medication, usually given at a dose of 6 mg per day for five days. In case dexamethasone is not available, there are several alternatives. If a patient has diabetes, it's important to monitor their blood sugar while on steroids, and if it is higher than normal, the doctor must be informed. They should also stay in touch with a doctor and seek urgent help if oxygen needs increase to more than four litres a minute.

Unproven methods

Most other treatments that have been tried for COVID-19 have shown no benefit. This includes widely prescribed treatments such as ivermectin, hydroxychloroquine, vitamin supplements, antivirals, and antibiotics. Convalescent plasma has not lived up to its initial promise and several trials have failed to demonstrate significant benefit with routine use. Collecting, testing, and administering plasma adds more strain to an already overburdened healthcare system and uses up valuable resources. Similarly, recent data indicate that Remdesivir has a limited role in COVID-19 treatment, and patients should not seek admission to hospitals solely to receive this drug. Most people will recover completely at home. Staying home if the symptoms are mild will help save hospital beds, oxygen, and other supplies for seriously ill patients. This also means that doctors, nurses, and other medical staff can do a better job of taking care of critical patients. However, worsening symptoms must not be ignored and a patient should not delay going to the hospital if needed. What else can individuals do? Wearing a mask, avoiding crowds, and washing hands are some ways through which people can prevent the spread. Getting vaccinated is the most important step. COVID-19 vaccines are safe and highly effective at preventing severe illness and death from the infection. One can still get COVID-19 after vaccination, but typically, the illness will be mild. The grave humanitarian crisis sweeping





through India can be controlled only by large-scale public health measures. Curfews and lockdowns will work if implemented carefully. Mass gatherings should be prohibited. Large-scale vaccination drives are essential. Celebrities from the film industry, social media influencers and sports stars should promote vaccination, the use of masks, and physical distancing. Testing needs to be scaled up and test results should be reported in a timely manner. Medical supplies, including oxygen, should be made available, not just in healthcare settings but also to persons at home. Tools for triage of patients and accessible dashboards listing available resources are the need of the hour. At this point, many of these things are being cobbled together by volunteers. But an organised response would be much more effective.

Acknowledging the crisis

Finally, much of the reporting of cases and deaths has been coming from media rather than government sources. Indeed, since the beginning of the pandemic, responsible science reporters have been the best sources of information, not just in India but around the world. We need robust data. In order to deal with the problem, it is important to acknowledge the enormity of it. India is facing an unprecedented public health crisis. The number of new cases being reported each day is higher than it has ever been in any country. As bad as the situation is currently, it could get much worse. We have seen that deaths from COVID-19 increase when the healthcare system is overwhelmed. But the damage can be greatly minimised by the measures described above: a combination of prevention and appropriate management. The massive spread can be arrested by following safety protocols and through rapid vaccination. If the vast majority of patients who can be treated safely at home stay home, so that hospital resources can be directed to critically ill patients who truly need them, we will be able to manage the crisis better. All eyes are on India and the actions we take now can help us turn the corner in the next few weeks.

MISINFORMED AND MISLEADING HEALTH MINISTRY RELEASE

The Health Ministry released its first COVID-19 management guidelines about a year ago. The initial treatment guidelines included hydroxychloroquine, which led to panic buying of the drug. Little was known in those initial months. In the last one year, multiple studies have proven the lack of efficacy of hydroxychloroquine. While most practitioners have moved away from prescribing hydroxychloroquine, it still remains in the guidelines released by the Health Ministry on April 22. While formulating national-level guidelines, the most important factors are strength of evidence, pricing, cost-effectiveness and social relevance. These guidelines not only disregard evidence, but also show the unawareness of policymakers about the struggles of the common populace and the importance of the aforementioned factors.

Disregarding lack of evidence

While hydroxychloroquine is one example that stands the test of time in terms of disregarding evidence, there are several others. The Indian Council of Medical Research (ICMR) completed a trial on convalescent plasma (of 464 patients), which proved that plasma does not save the lives of those with COVID-19. This was bolstered by further evidence from the U.K. (more than 10,000 patients). The only benefit of convalescent plasma was shown in a small study from Argentina which demonstrated that plasma prevented progression to severe disease in mild cases when high-titre plasma was infused within three days of disease onset. This strict timeline of three days lends plasma





www.youtube.com/c/DreamIAS

little to no translational value in India as plasma titres are seldom available and are expensive. Plus, there is a lag of 2-5 days in RT-PCR results now. Yet, convalescent plasma is mentioned in the Ministry's guidelines. Similarly, Ivermectin, a drug used against parasites, has been recommended in the guidelines. With no good clinical trials to support its use and the World Health Organization (WHO) recommending against its routine use, one wonders what led to its inclusion. While evidence was ignored, the importance of pricing and cost-effectiveness was also overlooked. Remdesivir, in shortage now, is being black-marketed across India, although it has no value in saving lives. The only marginal benefit it may have is in reducing the hospital stay, with a tradeoff of increasing the cost of hospitalisation by the steep price of the drug in the black market. Last year, when hydroxychloroquine was touted as the wonder drug, it ran out of stocks in the market, precipitating a crisis for patients who needed it chronically. Similarly, this year, budesonide inhalers have been included as an option for mild patients based on results of two clinical trials. With more than 80% of COVID-19 patients having only mild symptoms, patients with asthma and chronic obstructive pulmonary disease (COPD) may run out of inhalers. Moreover, according to the PRINCIPLE trial, a trial only in pre-print, budesonide improves only self-reported symptoms in mildly sick patients. It does not yet translate into saving lives or reducing hospital admissions. The larger social relevance of budesonide is still in question. Policymakers should have waited for the final publication, worked with industry to scale-up production of budesonide, and bolstered supply chains till the final results came in, rather than hastily making recommendations that may trigger panic buying and a crisis for patients who actually need it.

Missing from guidelines

What is missing from the guidelines is the lack of guidance on drugs being used for COVID-19. Misused drugs include Azithromycin, Doxycycline, Favipiravir, Itolizumab and Coronil. These are not mentioned in the guidelines, but practitioners are busy prescribing them. This may cause more harm than good. Lastly, absence of any mention of monoclonal antibodies from Regeneron or Eli Lilly in the guidelines, the most efficacious antivirals in COVID-19 till date, is baffling. COVID-19 is an administrative nightmare. A stark difference in messaging on COVID-19 management compared to the messaging of the WHO or other trusted sources like the Center for Disease Control and Prevention and the National Institutes of Health, U.S. will only create confusion. With the available evidence, and keeping cost-effectiveness and the social relevance of the Indian health system in context, the focus of COVID-19 treatment guidelines should be on oxygen delivery, steroids and anti-coagulants. More treatment does not necessarily lead to better outcomes but will definitely lead to higher out-of-pocket expenditure and healthcare-related bankruptcies and debts. The guidelines should be re-written in cognisance of the current strains on the healthcare system.

CENTRE'S SECOND SHOT

The Centre's Covid-19 vaccine strategy revolving around differential pricing and decentralised procurement needs to be reworked for an effective expansion of the vaccination programme. The Covid vaccine is a public good and the Centre has to helm its rollout as the target group expands to all those above 18 beginning May 1. The Centre must anchor the purchases — negotiate factory gate prices, but subsidise the consumer — and distribute among states. The key is to decentralise distribution, not procurement. The clamour for decentralisation revolved around providing states





greater flexibility in the rollout of the vaccination drive — if a state deems it necessary to vaccinate one sub-set of population given the peculiar geographic and demographic spread of the infected, then so be it. It was not to create 28 separate state entities negotiating with a private manufacturer for a public good. This needlessly complicates the process. Who will be given priority? Surely, it can't be first come, first served. Neither can it based on the quantum of order placed. Who will decide on allocation of vaccines across 28 states and eight Union Territories? Cannot be the sales directors of vaccine manufacturers. What is needed is to avoid a repeat of the oxygen crisis — state governments, guided by their considerations, blocking vaccine trucks from leaving their territories, causing anxiety in other parts of the country. Or, rushing to several High Courts for supplies and then waiting for the honourable Supreme Court to make sense of it! Because the fact is vaccine stocks are limited, and it has to be rationed. The vaccine basket has all of two vaccines, the new ones are weeks, if not months away. The anxiety of several state governments isn't misplaced. A more prudent approach would be to rely on a judicious mix of centralisation and decentralisation. Yes, some states and experts may have asked for a glorious free market for vaccines unmindful of the stocks and the science. But it is surprising the Centre took that simplistic suggestion so seriously. What is needed is a single government body (Centre and states) negotiating with vaccine manufacturers both prices and quantity, with states empowered to pursue a distribution strategy they deem fit. Of course, prices at which vaccines are bought should be high enough to incentivise manufacturers to ramp up production – altruism is no business model. But the pricing distinction made between Central and state governments — both represent the people — should be dispensed with. Private hospitals are integral to the rollout and their supplies should be under the regulatory eye of governments the CoWin platform will anyway register each vaccination. Irrespective of price, vaccines to end users can and should be subsidised by governments. Once the vaccine basket expands — and expand it will — there is merit in providing greater flexibility. Considering that vaccine is the only stimulus the country needs, at this critical juncture, the Centre needs to take a second shot on the strategy. How vaccination expands will shape how this treacherous curve bends.

WHAT RATE CARD DOES NOT SHOW: GOVT HELP IN DEVELOPING COVAXIN

Last year, Bharat Biotech's chairman Krishna Ella said that Indian vaccines, including his Covaxin, developed with help from the Government-run Indian Council of Medical Research, would cost less than a water bottle, almost a fifth. Yet, his rate card Saturday announced Rs 600/dose for states and Rs 1,200 for private hospitals. Not just on pricing, there are also questions regarding Ella's claim on ICMR's role. On April 21, Ella told NDTV Bharat Biotech had not received any government funding for the development of the vaccine. "...We never took any money from the Government of India. Even, including our clinical trials...for Phase 2, Phase 3 trials, we spent Rs 350 crore. We never took money from the government," he said. However, the Clinical Trial Registry of India (CTRI) lists ICMR as the source of "monetary and material support" in Covaxin's Phase 3 trials on over 25,000 participants. That's not all. Key to Covaxin's development was the role of ICMR's National Institute of Virology in Pune, which performed the crucial task of isolating the SARS-CoV-2 strain. In addition to this, it also assisted in some of the pre-clinical testing and human clinical trials of this vaccine. Indeed, Government officials have been listed as authors in either Phase 1 or Phase 2 human clinical trials of this vaccine. They include ICMR Director General Dr Balram Bhargava, NIV Director Dr Priya Abraham and All India Institute of Medical Sciences (AIIMS) Dr Randeep Guleria. As of September 18, 2020, ICMR spent "more than Rs 25 crore" from its intramural budget "for undertaking work related to development of vaccine candidate(s) and pre-clinical studies," as per a Lok Sabha 3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR

Telegram: http://t.me/DreamIAS Jamshedpur







response by Ashwini Kumar Choubey, Minister of State for Health and Family Welfare. However, it is unclear how much of this was used for Covaxin, as ICMR has also collaborated with other companies on the development of their Covid-19 vaccines. The vaccine was also the subject of controversy earlier this year when it received restricted use permission from the top drug regulator despite not having enrolled and vaccinated enough participants on time to generate interim information on its efficacy. The restricted use permission was given on January 3 in an emergency situation "in clinical trial mode" and "in public interest", citing concerns of mutant strains of the virus and the vaccine's potential to address them. The green light followed the reversal within 24 hours of an expert committee's decision over whether it wanted to recommend the vaccine's approval. One reason for the vaccine's final price being more than that of Covishield the other Covid-19 vaccine in use in India — is the potentially higher expenses of making an inactivated vaccine at a Biosafety Level (BSL) 3 facility, according to experts. "It is the need for production of the live virus in a BSL-3 facility followed by the inactivation and testing for the complete inactivation that makes the vaccine expensive," said Gagandeep Kang, a vaccine expert who worked with Bharat Biotech in testing India's first indigenously made rotavirus vaccine, Rotavac. "That being said, Rs 600 is a ridiculous price," she added, "for a vaccine that you're going to sell in tens of millions of doses to State governments." she said. "No vaccine costs that much." According to Bharat Biotech, the firm will supply more than 50 percent of its production to the Centre at Rs 150 a dose. The higher rates for States and private hospitals are necessitated by its needs to fund R&D for other vaccines, the company said. "As a company, we would like to have the maximum (price) possible. So, we want to recover as much as possible — all the clinical trial costs and all other costs, and then put it back for R&D... We need (the) cash. There's no question about that," said Ella in his interview to NDTV. Details of the agreements between ICMR and Bharat Biotech are opaque, especially with respect to the vaccine's funding and profits. Experts have raised questions about the ownership of the intellectual property (IP) of this vaccine — on the one hand, Bharat Biotech has been signing agreements for Covaxin with companies like Ocugen in the US. And on the other, the government has brought in Maharashtra-funded Haffkine Institute and Hyderabad's non-government vaccine maker, Indian Immunologicals, to ramp up its capacity. In order to help Bharat Biotech bring online its BSL 3 facility in Bengaluru, the Department of Biotechnology announced a grant of Rs 65 crore earlier this month. Yet, the terms of the deal are not in the public domain. On April 19, the Finance Ministry also relaxed rules that would allow the Health Ministry to pay Bharat Biotech Rs 1,500 crore in advance to procure doses of Covaxin. Detailed queries to Bharat Biotech and ICMR remained unanswered. In response to queries, DBT Secretary Renu Swarup said that the development of Covaxin "was supported by ICMR." DBT is supporting the development of other vaccine candidates by Bharat Biotech such as its single-dose intranasal vaccine for Covid-19 and its inactivated rabies vector platform-based vaccine, which are in early clinical and advanced pre-clinical stages of development, she said. In this regard, DBT has provided Bharat Biotech with funding support, she added. DBT, which has funded "more than 15 vaccine candidates" during this pandemic, has been providing support for the clinical trial sites, immunoassay labs and animal challenge models "to facilitate all vaccine candidates through their development stage," she said.

GOVT LEVERAGE IN COVID-19 VACCINE PRICING

During the hearing on issues related to the pandemic on Tuesday, the Supreme Court flagged differential pricing for vaccines, and directed the central government to clarify in its affidavit the 3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR

Telegram: http://t.me/DreamIAS Jamshedpur





www.youtube.com/c/DreamIAS

basis and rationale for pricing. One of the three judges on the Bench, Justice Ravindra Bhat, called on Solicitor General Tushar Mehta to explore legislative measures to address the issue. "There are powers under the Drugs Control Act and Patents Act. This is a pandemic and a national crisis. If this is not the time to invoke such powers, what is the time?" Justice Bhat said. The court noted that "different manufacturers are quoting different prices".

How does the government regulate the pricing of drugs?

To ensure accessibility, the pricing of essential drugs is regulated centrally through The Essential Commodities Act, 1955. Under Section 3 of the Act, the government has enacted the Drugs (Prices Control) Order. The DPCO lists over 800 drugs as "essential" in its schedule, and has capped their prices. The capping of prices is done based on a formula that is worked out in each case by the National Pharmaceutical Pricing Authority (NPPA), which was set up in 1997.

Can the government regulate the price of Covid-19 vaccines through DPCO?

Regulation through DPCO is not applicable for patented drugs or fixed-dose combination (FDC) drugs. This is why the price of the antiviral drug remdesivir, which is currently in great demand for the treatment of serious cases of Covid-19, is not regulated by the government. Last week, a notification by the Ministry of Chemicals & Fertilizers said that on the intervention of the government, major manufacturers/marketers of the remdesivir injection had reported voluntary reduction in the Maximum Retail Price (MRP). Globally, the American biotechnology firm Gilead Sciences owns the patent for the drug. Several pharma companies have obtained a licence from Gilead to manufacture remdesivir. To bring vaccines or drugs used in the treatment of Covid-19 such as remdesivir under the DPCO policy, an amendment can be brought.

What legal avenues are available for the government to address differential pricing for vaccines?

THE PATENTS ACT, 1970: This law, which was mentioned by the Supreme Court, has two key provisions that could be potentially invoked to regulate the pricing of the vaccine.

- * Section 100 of the Patents Act gives the central government the power to authorise anyone (a pharma company) to use the invention for the "purposes of the government". This provision enables the government to license the patents of the vaccine to specific companies to speed up manufacturing and ensure equitable pricing.
- * Under Section 92 of the Act, which deals with compulsory licensing, the government can, without the permission of the patent holder, license the patent under specific circumstances prescribed in the Act. "If the Central Government is satisfied, in respect of any patent in force in circumstances of national emergency or in circumstances of extreme urgency or in case of public non-commercial use, that it is necessary that compulsory licenses should be granted at any time after the sealing thereof to work the invention, it may make a declaration to that effect, by notification in the Official Gazette, and thereupon the following provisions shall have effect...," the provision says. After the government issues a notification under Section 92, pharma companies can approach the government for a licence to start manufacturing by reverse engineering the product. However, in the case of biological vaccines like Covid-19, even though ingredients and processes are well known, it is difficult to duplicate the process from scratch. The process will also entail new clinical trials to establish safety and efficacy, which makes compulsory licensing less attractive. The World Health





Organisation (WHO) is working to expand the capacity of low- and middle-income countries (LMICs) to produce Covid-19 vaccines and scale up manufacturing to increase global access to them. On April 16, it invited expressions of interest to enable "transfer of technology" and "appropriate know-how" to existing or new manufacturers in LMICs to enable them to develop and produce Covid-19 mRNA vaccines.

THE EPIDEMIC DISEASES ACT, 1897: Another legal route suggested by experts to regulate the pricing of vaccines is the Epidemic Diseases Act. This has been the main legal weapon for the government in dealing with the pandemic. Section 2 of this law gives the government "power to take special measures and prescribe regulations as to dangerous epidemic disease". The provision reads: "When at any time the State Government is satisfied that the State or any part thereof is visited by, or threatened with, an outbreak of any dangerous epidemic disease, the State Government, if it thinks that the ordinary provisions of the law for the time being in force are insufficient for the purpose, may take, or require or empower any person to take, such measures and, by public notice, prescribe such temporary regulations to be observed by the public or by any person or class of persons as it shall deem necessary to prevent the outbreak of such disease or the spread thereof, and may determine in what manner and by whom any expenses incurred (including compensation if any) shall be defrayed." These broad, undefined powers can be used to take measures to regulate pricing. However, the law lacks the teeth to implement such an important policy framework. Violation of the Act is penalised under Section 188 of the Indian Penal Code, which deals with "disobedience to order duly promulgated by (a) public servant". The punishment prescribed under this law is imprisonment of up to six months or a fine that could extend up to Rs 1,000. Apart from these legislative options, experts suggest that the central government procuring directly from the manufacturers could be the most beneficial route to ensure equitable pricing. As the sole purchaser, it will have greater bargaining power.

UNFAIR AND DANGEROUS VACCINE POLICY

In the midst of a raging second wave, which is touching new peaks each passing day, the Central government has abdicated its responsibility to ensure vaccine equity through free vaccination for the poor across all age groups. While State governments were never consulted or given prior notice about the change in vaccination policy, giving the two vaccine manufacturers a free hand to decide the price at which vaccines will be sold to State governments has made universal COVID-19 vaccination a difficult task to achieve. A large percentage of those aged 18-44 years does not have the resources to pay for vaccines and hence will fall through the cracks. So, the States will have to take a leading role in the free immunisation programme. While nearly two dozen States have already committed to vaccinate for free the target population, it remains to be seen if they use any criteria to identify the beneficiaries. Never before has universal immunisation of nearly 600 million people been left to State governments and the private sector while the Union government restricts itself to vaccinating for free just 300 million. With this precedent, States will probably be required to vaccinate children too, when vaccines become available, thus burdening them even further and thereby actively promoting vaccine inequity. If making States pay for vaccines is an illconceived idea, forcing them to shell out more than what the Union government pays for the same vaccines is a sure recipe for exacerbated vaccine inequity. With vaccination being the only safe way to end the pandemic, undertaking any exercise that leaves a large population unprotected will cost the country enormously in terms of lives and livelihoods. While the Union government has already





www.youtube.com/c/DreamIAS

allocated ₹35,000 crore for COVID-19 vaccination in this Budget and also committed to provide further funds if required, it will spend less than ₹10,000 crore to vaccinate for free all above 45 years. While the sudden change in policy is therefore not due to lack of financial resources, the State governments, which have not factored in funds for vaccination, will now be required to garner funds for the same. There is hence a great compulsion to make pricing more transparent and allow States to collectively bargain for a lower price and assured timelines to receive supplies. The current policy, which has earmarked 50% supplies to State governments and private hospitals, takes the States and the companies to a completely uncharted territory leading to competition among States, and between State governments and private hospitals. Vaccine shortage from both manufacturers is likely to last a few months. The combination of policy pandemonium, profiteering by vaccine manufacturers in the thick of the pandemic and vaccine shortage is unlikely to result in a smooth roll-out of vaccines for the target group. This could lead to a dangerous situation where containment and mitigation measures become even more difficult.

The decision to substantially deregulate the vaccine market raises serious questions in view of the reported advance of ₹45 billion made by the Government of India to the two vaccine producers in India for expanding their production capacities (https://bit.ly/3eveFzr). The Federal government in the United States has done similarly, providing financial support to vaccine producers, who are now set to rake in their billions by charging high prices. Several public interest groups in the U.S. have asked questions as to why the tax-paying public should bear the high prices of vaccines when Federal taxes have been used to beef up the vaccine producers. This question is more pertinent in India, where access to affordable vaccines is critical for ensuring "vaccination for all".

More open licensing needed

It is somewhat ironic that the new vaccine strategy, which could undermine "vaccination for all", comes from a country that has long championed the cause of access to affordable medicines in international forums. Rather than hand over the reins of price determination to the duopoly in the vaccine market, the government should have urgently addressed the serious doubts over affordability of vaccines by ensuring a competitive market for vaccines. According to recent estimates, existing producers in India will be unable to meet the country's vaccine requirements by some distance, and therefore, India needs more vaccine manufacturers to ensure uninterrupted supply. One positive step that the government has taken in this direction is to increase production of Bharat Biotech's vaccine through the involvement of three public sector undertakings, including Haffkine Institute. We would argue that there is a need for more open licensing of this vaccine to scale up production. This would enhance competition in the market, enabling the vaccines to reach every citizen in the country.

WHY THE GOVERNMENT WANTS YOU TO WEAR A MASK AT HOME TOO

The head of India's Covid-19 task force, Dr V K Paul, has said the time has come to wear masks at home settings to break the chain of transmission. His recommendation comes as India reported a record 352,991 new cases on Monday and 2,812 deaths in the last 24 hours; the country's active caseload has now reached 2,813,658.





What is the reason for this recommendation?

Covid-19 spreads primarily from person to person through respiratory droplets, which travel in the air when someone coughs, sneezes, talks, shout or sings. These droplets can then land in the mouths or noses of people in the vicinity, or may be breathed in. Again, a large population does not show symptoms. The asymptomatic people can continue to spread the infection at home, at a faster pace. Dr Paul stressed that even when asymptomatic people are talking, they can spread the infection. That is why we have been seeing entire families, in this wave, turning positive, even when most of them have stayed indoors.

But why during the second wave?

A significant proportion of the vulnerable population in India have been showing severe symptoms including shortness of breath, and many have required hospitalisation. The surge in the requirement of oxygen beds has overwhelmed the health infrastructure. *Masks are mainly intended to protect others from Covid-19 rather than just the wearer. Therefore, the recommendation is aimed not just at breaking the chain of transmission, but also at protecting those at highest risk.* There are two targeted outcomes. First, the elderly and those with co-morbidities can be protected significantly, even if one member of the family has an asymptomatic infection. Second, it can reduce the local house outbreaks that have marked the second wave.

Did the government cite any evidence while making these arguments?

Yes, it cited data from the North Carolina Department of Health and Human Service to say that there is a negligible risk of transmission when there is a distance of 6 feet between two persons and when both of them are wearing masks. According to the data cited, the risk is 1.5% (low) when both people are wearing masks, 5% (medium) when only the infected person is wearing a mask and uninfected persons are unmasked, 30% (high) if the infected person is not wearing a mask but the uninfected person is wearing one, and 90% (highest) when neither the infected nor the uninfected person is wearing a mask.

Have any other countries made a similar recommendation yet?

The US Centers for Disease Control and Protection (CDC) makes an almost similar recommendation. The CDC says masks should still be worn in addition to staying at least 6 feet apart, especially when indoors around people who don't live in your household. The CDC stresses that older people, specifically, should wear a mask when around people who don't live in their household. Which effectively means that if a new person comes home, the vulnerable need to wear a mask to reduce the risk of getting infected.

TO STOP A THIRD WAVE, INDIA HAS TO MASK UP

As the smoke from countless funeral pyres rises above our cities, and desperately sick people line the corridors and wards of our hospitals seeking beds, medication and oxygen to relieve their virus-damaged lungs, it is difficult to see a way out of the worst crisis India has faced since the plagues and famines of the 18th and 19th centuries. The anaemic pace of the government's vaccination drive is unlikely to slow the ferocity of this second wave of the pandemic, which epidemiological modellers predict could peak by the middle of May and gradually decline. If there





is one thing to be learned from the tragedy unfolding before us, it is that unless active measures are taken, this second wave will be followed by a third wave, and perhaps more.

Waves across the globe

If we look around the world, the United States has had three distinct waves since last March, as has Brazil. The United Kingdom had a small first wave, followed by nearly four months when cases were low and the virus seemed to be disappearing. This was followed by two explosive waves, which only subsided after a lockdown and an aggressive vaccination campaign in which 95% of all those over the age of 50 have been vaccinated to date, with the entire adult population to be vaccinated by the end of summer. South Africa saw a first wave peaking last August, followed by a second wave that began around November, and peaked in the first week of January (https://bit.ly/3vthhF4). Given this pattern, a second wave in India was almost a given. And once this wave recedes, it is highly likely that a third wave will build up, unless active measures are taken to stop it building up. Now is the time to think ahead and find ways to prevent the next wave. Vaccines are the best option. But given India's population, the slow pace of vaccination, inelastic vaccine supplies both in India and globally, and limited finances with State governments which have now been given the responsibility of vaccinating the bulk of the country's population, this is not going to happen quickly enough to blunt either this or future waves.

Tested methods that work

So along with vaccination, it is important to practisethe full methods that have been shown to slow the spread of COVID-19 in different parts of the world: mask wearing, physical distancing, hand hygiene and a ban on mass gatherings. These measures sound mundane and boring, but they work. They may not be as effective as mass vaccination, but in the absence of vaccines, they are perhaps the only way to reduce community transmission and slow the spread of the virus. Consider some of the evidence demonstrating the effect of these measures. A study last year in the American Journal of Tropical Medicine and Hygiene found that countries where masks were widely used (either because of government orders or cultural norms) had lower per capita mortality from COVID than countries where there was no universal masking (https://bit.ly/2RcjyW1). A smaller study of transmission among family members in Beijing households, found that face masks were 79% effective in preventing transmission when they were used by all household members (https://bit.ly/3e0mrlN).

Mask wearing by itself will not be enough: it needs to be part of a package of measures that include rigorous social distancing, hand hygiene and avoiding mass gatherings. The question is how can people be persuaded to wear masks? *Conventional wisdom in India has it that wearing a mask only* works when it is imposed as a police measure, with fines and punishments for non-compliance. Mask wearing and social distancing cannot be sustained through lathis. Public health measures that work best are those that the public voluntarily adopts because they see it as being in their best interests.

Bangladesh shows the way

But there is evidence from an experimental study in Bangladesh that people will use masks enthusiastically if they are provided free, are comfortable, and accompanied with appropriate instructional material. A team of researchers, led by Mushfiq Mobarak of Yale University, carried 3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR

Telegram: http://t.me/DreamIAS Jamshedpur





www.youtube.com/c/DreamIAS

out an experiment involving 350,000 adults in 600 villages in Bangladesh to try and understand how to increase mask usage. They found that *mask usage tripled when they were given away free and accompanied by well-designed instructional material, as well as reminders from religious and community leaders and volunteers.* These interventions increased the percentage of people using masks three fold. Having volunteers in public spaces such as markets to remind people to wear masks and distribute masks to those who did not have them, as well as frequent messages from religious and community leaders, saw an increase in mask usage from 13%, when none of these interventions existed, to over 40% with them. *One key to success was mask quality: masks needed to be comfortable to wear in hot and humid conditions, as well as being effective filters. Importantly, those who wore masks were also more likely to maintain social distancing.* Over the last year, India has built significant capacity to manufacture masks, so supplies should not be an issue. The cost of supplying reusable masks free will need to be budgeted for, but masks are far cheaper than vaccines and the economic benefits of avoiding crippling new waves of the virus should be taken into account.

Reaching out the right way

Communication at the level of communities is the key to getting people to protect themselves this way. People need to be explained the reasons for mask wearing as well as the right way to wear a mask. Imaginative and creative communication campaigns are essential. In Bangladesh, community-level leaders as well as religious leaders were used to reinforce mask wearing and social distancing messages. Most Indian States have reasonable, well-functioning networks of health workers at the village and community levels who can be used in health campaigns. These solutions may seem simplistic, but if the country is to reduce the impact of future waves, it is essential that they are put in place. Viruses are the most basic of organisms. And often, basic changes in human behaviour can drastically reduce the ability of a virus to transmit. Vaccines are the ultimate solution. But in the meanwhile, it is important to focus on what can be done right now if further disasters are to be prevented.







BUSINESS & ECONOMICS

ADB SEES INDIA GROW BY 11%, ADDS CAVEAT

The Asian Development Bank has raised its forecast for India's growth in 2021-22 to 11%, from 8% earlier, even as it warned that failure to control the resurgence of COVID-19 cases including April's exponential jump poses a "considerable downside risk to the recovery".

'Targeted containment'

In its assessment based on end-March data, the ADB cited this year's 'more targeted' containment measures compared with last year's 'large-scale' national lockdown and said these would *prove less costly*' to the economy, which had seen a strong rebound in recent months' economic indicators after last year's 'big recession'. "A stimulus-fuelled surge in the U.S., India's largest export market, will support the revival, but a severe second COVID-19 wave is threatening the recovery," the lender said in its Asian Development Outlook report, projecting growth to moderate to 7% in 2022-23, after a 11% expansion this year. Government capex and accommodative financial policies, along with the vaccine roll-out programme this year, would also help, it added. "Risks to the outlook tilt to the downside. The second wave of COVID-19 cases is worrying, especially if vaccine roll-out falters or fails to contain it. Another risk is a further tightening of global financial conditions, which would apply pressure on India's market interest rates and therefore affect economic normalisation," the ADB warned, adding that a likely pick-up in private investment could be dented as rising bad loans could discourage India's banks from undertaking fresh lending. The lender sees India's average inflation rate slowing to 5.2% this year from 6.2% last fiscal, and reverting to 4.8% (recorded in 2019-20), over the succeeding 12 months.

STATES IMPLEMENTING KEY INSTITUTIONAL REFORMS CAN BORROW RS 1.06 LAKH CRORE MORE

The Finance Ministry has permitted additional borrowings of ₹1.06 lakh crore as at March-end to those states which have carried out some key institutional reforms. Last October, the Central government had linked permission for additional borrowing of 1 per cent of their GSDP (Gross State Domestic Product) to implementation of four critical reforms. This was announced to provide an additional leeway to states in order to cope with the adverse effects of Covid-19 pandemic on the economy. Sources said additional borrowing limit of ₹37,600 crore has been given to states for implementing the 'One Nation One Ration Card' system, while another ₹39,521 of borrowing has been allowed to 20 states that implemented Ease of Doing Business reforms. While the first reform is aimed at providing ease of delivery of subsidised ration and free food, the latter is to facilitate better environment and seamless process for entrepreneurs and companies to operate. Eleven states that have implemented urban local body and utility reforms have been given additional borrowing limits of Rs 15,957 crore. Another 17 states received borrowing limit of Rs 13,201 crore in lieu of power sector reforms. In providing leeway for extra borrowings, the Centre had stressed on the need to push reforms in citizen-centric areas and processes. *Among* the states that have implemented all four reforms include Andhra Pradesh, Goa, Kerala, Madhya Pradesh, Punjab Rajasthan, Telangana and Tripura, sources said. This provides them extra cushion to borrow from the market in order to tide over any shortfalls in revenues and to push capital

 3^{RD} FLOOR AND 4^{TH} FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR





www.youtube.com/c/DreamIAS

expenditure (capex). States implementing at least three of these reforms get additional grants from the Centre for Capex purpose. In the fifth tranche of Aatmanirbhar economic stimulus package announced last May, the Central government announced support measures for states allowing them to raise their borrowing limit to 5 per cent of the GSDP from 3 per cent, translating into additional borrowing space of ₹ 4.28 lakh crore. However, the Centre had attached conditions for the increased borrowing space, permitting only 0.5 per cent of GSDP as an unconditional increase. The next 1 per cent was to be in four tranches of 0.25 per cent, with each tranche linked to expenditure on 'One Nation One Ration', urban local body revenues, power distribution, ease of doing business reforms. The last 0.5 per cent was to be allowed if at least three of four milestones are reached. Under this reforms-linked borrowing window, states were to get access to funds of up to Rs 2.14 lakh crore on completion of all the four reforms. The Centre had announced additional fiscal leeway to states as they were asking for greater fiscal headroom to tide over the crisis triggered by the pandemic. For states completing three of the four reforms, the Centre would provide additional funds assistance of Rs 2,000 crore for capital expenditure. The states that have implemented three of these four reforms include Himachal Pradesh, Karnataka, Odisha, Tamil Nadu, Uttar Pradesh and Uttarakhand. For FY22, the net borrowing ceiling for states has been fixed at 4 per cent of the projected GSDP (about Rs 8.46 lakh crore), based on recommendations of the Fifteenth Finance Commission. An amount of Rs 1.05 lakh crore, or 50 basis points of the total 4 per cent borrowing limit, has been earmarked for incremental capital by each state in the current financial year.

NEW SEBI RULE FOR FUND MANAGER COMPENSATION

The Securities and Exchange Board of India (SEBI) has said that a minimum 20% of the compensation of mutual fund managers and other key personnel in an asset management company (AMC) should be in the form of units of the mutual fund schemes they manage. Key personnel here refers to the likes of chief executive officer, chief investment officer, research head and their direct reportees.

What's new in this circular? Isn't pay linked to performance?

The compensation of fund managers — at least the variable pay component — is linked to performance. What SEBI has done here is crystallise the rules and extend it beyond fund managers to so-called key employees. Moreover, SEBI has specified the rules of allocation of this 20% by saying that is should be proportional to the assets under management of the schemes in which an employee has a role or oversight. For example, a CEO who has overall oversight will have 20% of her compensation spread across all the schemes. On the other hand, a fund manager who manages only one fund will have at least 50% of this type of compensation in the scheme she manages and the remaining in other schemes of the mutual fund that are riskier. The regulator has also specified that these units offered by way of compensation are locked-in for three years.

What has led to such a decision from SEBI?

The SEBI circular said this was to "align the interest of the key employees of the AMCs with the unit holders of the mutual fund schemes". In other words, SEBI wants fund managers to have skin in the game, or demonstrate to investors that they have confidence in the schemes they manage. This could also be a fall out of the events at Franklin Templeton which shuttered six debt funds in March 2020. A forensic audit alleged that some employees of the mutual fund redeemed their





www.dreamias.co.in

holdings just before the closure of the six schemes. Even earlier, there have been allegation of front running by mutual fund employees.

How will this help retail investors?

This move by SEBI will boost the transparency of fund manager compensation. It helps build accountability. It ensures that fund houses actually link the pay of fund managers to performance and go beyond lip service. Besides, *since a whole lot of employees' compensation is linked to how well a mutual fund is doing, it could encourage whistleblowing if wrongdoing is happening.* It will give a lot of psychological comfort to investors that their fund manager has skin in the game. Whether it will lead to higher returns is something we will have to wait and see.

Why is the mutual fund industry unhappy then?

The common refrain from mutual fund CEOs has been that SEBI's intention is good but the rules are too clunky to follow. For instance, a money market fund manager (where annual returns may not be more than 6-7 per cent) might have a huge risk appetite and channel all her investments in equity funds. This rule by SEBI, which in effect specifies percentages of investments in different schemes, could conflict with the personal finance goals of the fund managers. This could even lead to a flight of talent from the industry, warn fund house CEOs.

CCI CLEARS BIGBASKET-TATA DIGITAL DEAL; WHAT CHANGES IN E-GROCERY MARKET?

The Competition Commission of India (CCI) has cleared the acquisition of online grocery firm BigBasket by Tata Digital, a subsidiary of the Tata Group. With this approval, the deal, which has been in the works for over the last six months, is nearing its close.

What are the details of the BigBasket and Tata Digital deal?

In the deal, Tata Digital Ltd will acquire up to 64.3% of Supermarket Grocery Supplies Pvt Ltd — the B2B unit of BigBasket and get sole control over the B2C unit Innovative Retail Concepts Pvt Ltd. Reportedly, the deal values BigBasket at over \$1 billion. BigBasket's CEO Hari Menon is expected to continue in his role after the acquisition.

What does the deal mean for BigBasket and Tata Digital?

For the Tata Group, the deal marks its first major step towards its plan of setting up a "super-app". While the company has significant presence in several other retail segments like electronics, fashion, and even has an e-commerce portal TataCliq, it had not entered the online grocery segment. For BigBasket, it will provide the necessary firepower to the brand to compete against the latest entrants in the e-grocery segment such as Reliance, Amazon and Walmart-owned Flipkart.

How is India's e-grocery market shaped?

According to RedSeer Consulting, the e-grocery segment is a \$300 billion market. According to the firm, although the sector received a significant boost from COVID, e-grocery platforms still penetrate less than 1% of the grocery space in India. The total size of the e-grocery segment grew from \$1.9 billion at the beginning of 2020, to \$3 billion by year end. Other than large players such as BigBasket, Amazon, Reliance and Flipkart, smaller or segmented players such as Softbank-





backed Grofers, Milkbasket, CountryDelight, Godrej Nature's Basket, Easyday are also present in the sector.







LIFE & SCIENCE

A SPACE FOR SCIENCE, EXPERIMENTS AND UNITY

The International Space Station (ISS) is a landmark of international cooperation. For over 20 years, it has seen intense collaboration between the U.S., Russia, the EU, Japan and Canada, and has played host to people from 19 countries since its launch in 1998. This scenario appears to be coming to an end, as Russian space agency Roscosmos's chief has declared that Russia is ready to build its own space station and launch it by 2030 if President Vladimir Putin would give the go ahead. Further, in an interview to Russian TV, Deputy Prime minister Yuri Borisov said Russia would give notice and leave the ISS by 2025. The idea of the ISS was born in 1984 when Ronald Reagan, then the US President, announced it in a State of the Union address. Since then, the ISS project saw a collaboration grow between several countries, mainly the following space agencies: NASA (U.S.), Roscosmos (Russia), ESA (Europe), JAXA (Japan) and CSA (Canada). Though the programme began in 1993, the construction of the station started only in 1998. The ISS has been assembled section by section over several years. The first segment was launched on November 20, 1998 in a Russian proton rocket named Zarya (which means 'sunrise'). The first human expedition to the station was launched in a Soyuz TM 31 rocket from Baikonur Cosmodrome in Kazakhstan. This crew became the very first to inhabit the ISS — these were NASA astronaut Bill Shepard and Yuri Gidzenko and Sergei Krikalev from Roscosmos, who reached the station on November 2, 2000 and stayed for several months. The assembling of the ISS has been a complex undertaking in itself. It took over 10 years and over 30 missions to bring it to its present form. Though the basic unit was launched in 1998, a photograph of the station taken in September 2000 from spaceship Atlantis looked markedly different from a picture taken in October 2018 by Expedition 56 members after undocking in a Soyuz spacecraft. Installation of different parts took place on close to 40 different occasions from 1998 to 2020.

Human presence

One of the most spectacular achievements of the ISS is that ever since November 2, 2000, it has seen the steady presence of human beings. So far, 240 individuals from 19 countries have visited the ISS, including from Malaysia and the UAE. Most have been from the U.S., numbering 151; Russia has sent 48 people; Japan 9; Canada 8 and so on. In the realm of science fiction, the sight of the ISS hurtling through space at a speed of 28,000 km per hour is something that can be watched from the Earth and wondered at. According to Niruj Mohan Ramanujan, a radio-astronomer who is with Indian Institute of Astrophysics, "If the ISS flies over your location a bit before sunrise or a bit after sunset, for those few minutes, it is usually the brightest object in the sky." There are apps that indicate where exactly it is in the sky at any time. The length of the ISS is just about a metre short of the length of an American football field at 109 m. It has a habitable volume of 388 cu. m. and includes six sleeping quarters, two toilets and a gym. It weighs 419,725 kg, which to give a perspective, is the weight of 1,090 cows. The ISS, at a height of about 402 km above the Earth, orbits it 16 times every day, once every 90 minutes. Over a period of 24 hours, the people inhabiting the ISS see 16 sunrises and sunsets. The ISS's recent tweet celebrated the conclusion of the 64th expedition that began in October 2020 and ended on Friday April 23, after approximately six months. It said: "There was a change of guard this week onboard the station. Expedition 64 concluded their mission and returned to Earth, and the Crew-2 astronauts docked with the station on Saturday."





CHINA LAUNCHES KEY MODULE FOR ITS PERMANENT SPACE STATION

China on Thursday launched the main module of its first permanent space station that will host astronauts for the long term, in the latest success for a programme that has realised a number of its growing ambitions in recent years. *The Tianhe, or the "Heavenly Harmony" module, blasted into space atop a Long March 5B rocket from the Wenchang Launch Center on the southern island province of Hainan.* The launch kicks off the first of 11 missions necessary to complete, supply and crew the station by the end of next year. China's space programme also recently brought back the first new lunar samples in more than 40 years and it also expects to land a probe and rover on the surface of Mars later next month. Minutes after the launch, the fairing opened to expose the Tianhe atop the core stage of the rocket, with the characters for "China Manned Space" emblazoned on its exterior. Soon after, it separated from the rocket, which will orbit for about a week before falling to Earth, and minutes after that, opened its solar arrays to provide a steady energy source. A message of congratulations from state leader and head of the ruling Communist Party Xi Jinping was also read to staff at the Wenchang Launch Center.

FAKE IMAGES

Every year a stunning and colourful image of India does the rounds on Diwali, with claims that it was taken from space. In reality, the image is a composite of several satellite photos, created in 2003 by the National Oceanic and Atmospheric Administration (NOAA) to highlight population growth in the country. So how do we know if a satellite image is fake or even if it has been used for misinformation? A new study says that there is a lot of this 'deepfake geography' happening in recent times and with new and more sophisticated artificial intelligence technologies available today, the problem could grow. To the untrained eye it may be difficult to detect the differences between real and fake images, the researchers point out. To try to identify a "fake," researchers employed many technical aspects of image processing, such as colour histograms and spatial domains. Bo Zhao, assistant professor of geography at the University of Washington and lead author of the study said in a release that the study's goal was not to show that geospatial data can be falsified, rather it was to learn how to detect fake images so that geographers can begin to develop the data literacy tools, similar to today's fact-checking services, for public benefit.

15 PEOPLE SPEND 40 DAYS IN CAVE, LOSE SENSE OF TIME

Ever wonder what it would feel like to unplug from a hyperconnected world and hide away in a dark cave for 40 days? Fifteen people in France did just that, emerging on Saturday from a scientific experiment to say that time seemed to pass more slowly in their cavernous underground abode in southwestern France, where they were deprived of clocks and light. With big smiles on their pale faces, the 15 left their voluntary isolation in the Lombrives cave to a round of applause and basked in the light while wearing special glasses to protect their eyes after so long in the dark. "It was like pressing pause," said Marina Lançon,33, one of the seven female members in the experiment, adding she didn't feel there was a rush to do anything. Although she wished she could have stayed in the cave a few days longer, she said she was happy to feel the wind blowing on her face again and hear the birds sing in the trees of the French Pyrénées. And she doesn't plan to open her smartphone for a few more days, hoping to avoid a "too brutal" return to real life. For 40 days and 40 nights, the group lived in and explored the cave as part of the Deep Time project. There was 3RD FLOOR AND 4TH FLOOR SHATABDI TOWER, SAKCHI, JAMSHEDPUR

Telegram: http://t.me/DreamIAS Jamshedpur





no sunlight inside, the temperature was 10 degrees Celsius and the relative humidity stood at 100%. The cave dwellers had no contact with the outside world, no updates on the pandemic nor any communications with friends or family. Scientists at the Human Adaption Institute leading the \$1.5 million "Deep Time" project say the experiment will help them better understand how people adapt to drastic changes in living conditions and environments. As expected, those in the cave lost their sense of time.

30 days, 23 days?

"And here we are! We just left after 40 days... For us it was a real surprise," said project director Christian Clot, adding for most participants, "in our heads, we had walked into the cave 30 days ago." At least one team member estimated the time underground at 23 days. Johan Francois, 37, a math teacher, ran 10-km circles in the cave to stay fit. He sometimes had "visceral urges" to leave. With no daily obligations and no children around, the challenge was "to profit from the present moment without ever thinking about what will happen in one hour, in two hours," he said. In partnership with labs in France and Switzerland, scientists monitored the 15 member's sleep patterns, social interactions and behavioural reactions via sensors. One sensor was a tiny thermometer inside a capsule that participants swallowed like a pill. It measured body temperatures and transmitted data to a computer until it was expelled naturally. The team followed their biological clocks to know when to wake up, go to sleep and eat.

ANTIMICROBIAL RESISTANCE: THE SILENT THREAT

Since January 2020, there have been over three million deaths globally on account of COVID-19, starkly exposing the vulnerabilities of health systems to infectious diseases, even in the richest countries. The speed of COVID-19's spread across international borders has underscored the need for cross-national cooperation around surveillance, monitoring and disease notification — the key activities that underpin our ability to minimise the impact of acute public health events and maintain global health security. As serious as the current health and economic crisis is, COVID-19 may just be the harbinger of future crises. Antimicrobial resistance (AMR), the phenomenon by which bacteria and fungi evolve and become resistant to presently available medical treatment, is one of the greatest challenges of the 21st century. World Health Organization Director-General Tedros Adhanom Ghebreyesus said in July 2020, "AMR is a slow tsunami that threatens to undo a century of medical progress". AMR is already responsible for up to 7,00,000 deaths a year. Unless urgent measures are taken to address this threat, we could soon face an unprecedented health and economic crisis of 10 million annual deaths and costs of up to \$100 trillion by 2050.

Diverse challenges

AMR represents an existential threat to modern medicine. Without functional antimicrobials to treat bacterial and fungal infections, even the most common surgical procedures, as well as cancer chemotherapy, will become fraught with risk from untreatable infections. Neonatal and maternal mortality will increase. All these effects will be felt globally, but the scenario in the low- and middle-income countries (LMICs) of Asia and Africa is even more serious. LMICs have significantly driven down mortality using cheap and easily available antimicrobials. In the absence of new therapies, health systems in these countries are at severe risk of being overrun by untreatable infectious diseases. The challenges are complex. Drug resistance in microbes emerges for several





www.youtube.com/c/DreamIAS

reasons. These include the misuse of antimicrobials in medicine, inappropriate use in agriculture, and contamination around pharmaceutical manufacturing sites where untreated waste releases large amounts of active antimicrobials into the environment. All of these drive the evolution of resistance in microbes. This is compounded by the serious challenge that no new classes of antibiotics have made it to the market in the last three decades, largely on account of inadequate incentives for their development and production. A recent report from the non-profit PEW Trusts found that over 95% of antibiotics in development today are from small companies, 75% of which have no products currently in the market. Major pharmaceutical companies have largely abandoned innovation in this space. Tackling these diverse challenges requires action in a range of areas - in addition to developing new antimicrobials, infection-control measures can reduce antibiotic use. A mix of incentives and sanctions would encourage appropriate clinical use. At the same time, it is critical to ensure that all those who need an antimicrobial have access to it; 5.7 million people worldwide die annually because they cannot access drugs for infections that are treatable. Further, to track the spread of resistance in microbes, surveillance measures to identify these organisms need to expand beyond hospitals and encompass livestock, wastewater and farm run-offs. Finally, since microbes will inevitably continue to evolve and become resistant even to new antimicrobials, we need sustained investments and global coordination to detect and combat new resistant strains on an ongoing basis.

The way forward

There is room, however, for cautious optimism. A multi-sectoral \$1 billion AMR Action Fund was launched in 2020 to support the development of new antibiotics, and the U.K. is trialling a subscription-based model for paying for new antimicrobials towards ensuring their commercial viability. This means that the government will pay upfront for these new antimicrobials, thereby delinking the life-saving value of the drugs from the volume of sales and providing an incentive for their production in market conditions that do not do so. Other initiatives focused on the appropriate use of antibiotics include Peru's efforts on patient education to reduce unnecessary antibiotic prescriptions, Australian regulatory reforms to influence prescriber behaviour, and initiatives to increase the use of point-of-care diagnostics, such as the EU-supported VALUE-Dx programme. Beyond human use, Denmark's reforms to prevent the use of antibiotics in livestock have not only led to a significant reduction in the prevalence of resistant microbes in animals, but also improved the efficiency of farming. Finally, given the critical role of manufacturing and environmental contamination in spreading AMR through pharmaceutical waste, there is a need to look into laws such as those recently proposed by India, one of the largest manufacturers of pharmaceuticals, to curb the amount of active antibiotics released in pharmaceutical waste. While the range of initiatives that seek to control the emergence and spread of AMR is welcome, there is a need to recognise the limitations of a siloed approach. Current initiatives largely target individual issues related to AMR (such as the absence of new antibiotics, inappropriate prescription and environmental contamination) and consequently, narrowly defined groups of stakeholders (providers, patients and pharmaceutical companies). Regulating clinician prescription of antimicrobials alone would do little in settings where patient demand is high and antimicrobials are freely available over-the-counter in practice, as is the case in many LMICs. Efforts to control prescription through provider incentives should be accompanied by efforts to educate consumers to reduce inappropriate demand, issue standard treatment guidelines that would empower providers to stand up to such demands, as well as provide point-of-care diagnostics to aid







clinical decision-making. Policy alignment is also needed much beyond the health system. Solutions in clinical medicine must be integrated with improved surveillance of AMR in agriculture, animal health and the environment. This means that AMR must no longer be the remit solely of the health sector, but needs engagement from a wide range of stakeholders, representing agriculture, trade and the environment with solutions that balance their often-competing interests. Finally, successful policies in individual countries are no guarantee of global success. International alignment and coordination are paramount in both policymaking and its implementation. Indeed, recent papers have proposed using the Paris Agreement as a blueprint for developing a similar global approach to tackling AMR. With viral diseases such as COVID-19, outbreaks and pandemics may be harder to predict; however, given what we know about the "silent pandemic" that is AMR, there is no excuse for delaying action.

HOW SARS CORONAVIRUSES USE HOST CELLS TO PRODUCE PROTEINS AND REPLICATE

Coronavirus researchers have discovered how SARS viruses enhance the production of viral proteins in infected cells, so that many new copies of the virus can be generated. Notably, coronaviruses other than SARS-CoV (which causes SARS) and SARS-CoV-2 (which causes Covid-19) do not use this mechanism, the researchers said. This may therefore provide a possible explanation for the much higher pathogenicity of the SARS viruses, they report in the EMBO Journal. Coronaviruses that cause harmless colds in humans were discovered more than 50 years ago. When it emerged in 2002-03, the SARS coronavirus was the first coronavirus found to cause severe pneumonia in infected people. From comparisons of the RNA genomes of innocuous coronaviruses with those of the SARS coronavirus, researchers identified a region that only occurred in the latter, and was called the "SARS-unique domain" (SUD). Such genomic regions and their protein products might be linked to the extraordinary pathogenicity of SARS coronavirus and its cousin, SARS-CoV-2, they said. The research groups involved in the new study showed that the SUD proteins of these two viruses interact with a human protein called Paip-1, which is involved in the first steps of protein synthesis. Together with Paip-1 and other proteins in human cells, SUD apparently binds to the ribosomes, the molecular machines that are responsible for protein synthesis in cells. This would lead to an enhancement of the production of all proteins, both those of the host cell and those of the virus. However, in cells infected with SARS-CoV or SARS-CoV-2, the messenger RNA molecules that code for host proteins are selectively destroyed by a viral protein named Nsp1. As a result of this complicated process, the infected cell predominantly produces viral proteins, so that many new copies of the virus can be created.

WHY MANY PEOPLE WITH COVID-19 SYMPTOMS HAVE BEEN TESTING NEGATIVE

As India struggles to cope with the unprecedented demand for RT-PCR tests, reports suggest that up to 20% symptomatic Covid-19 patients are testing negative. This apparent trend of false negative results may deny serious patients hospital admission and critical care while letting asymptomatic ones move around and spread the virus. The trend has prompted experts, including AIIMS director Dr Randeep Guleria, to recommend Covid-19 treatment for everyone showing classic symptoms irrespective of RT-PCR results.





Why false negatives

RT-PCR tests, considered the gold standard in the diagnosis of Covid-19, are not meant to be perfect. The minimum sensitivity (ability to detect positives) demanded by the Indian Council of Medical Research (ICMR) for validating an RT-PCR test is 95%. That means up to 5% false negative results are expected. While anecdotal reports suggest that the share of false negative results is on the rise across India, there is no study yet to back this. In theory, *four broad factors determine the accuracy of an RT-PCR test: the viral load in the person, the quality of sample collection and processing, the efficacy of the test kit itself, and also the benchmark for test interpretation.*

VIRAL LOAD: Typically, Covid-19 manifests adequately by the fifth day of an infection cycle. Tested any sooner post exposure, an infected person may turn out Covid-negative. This may not be a major factor behind the recent false negative trend as certain Covid-19 mutants apparently show early symptoms. A number of symptomatic patients who tested false negative in RT-PCR assays have subsequently been confirmed Covid-positive in Bronchoalveolar Lavage (BAL) tests that collect samples from the lower respiratory tract through a bronchoscope. This has led to conjectures that certain mutants bypass the upper respiratory tract to target the lung — a scenario that may deny an RT-PCR test, based on sample collected from the nasal cavity and throat, the viral load required for an accurate result.

CAPACITY EXPLOSION: The number of Covid test labs in India increased from 14 in February 2020 to more than 2,400 in April 2021. *Such a rapid expansion required approving hundreds of labs for RT-PCR testing and training thousands of technicians in a hurry.* As a safeguard, ICMR in July 2020 listed 30 Quality Control labs to check on all the Covid labs it approved. Another 8 QC labs have been added since. However, sources in multiple labs across three states said "only a few inspections of facilities and instruments" took place. "Ideally, a mix of positive and negative samples should be picked up at random from every lab periodically for re-testing. Was that ever done? Yes. Was that done consistently? No," said a scientist with an ICMR institute who is not authorised to speak to the media. Approached for periodic lab monitoring and quality compliance data since July 2020, ICMR and a number of QC labs remained silent.

HUMAN ELEMENT: Tests can go wrong at various stages — from bad sample collection and storage to faulty extraction and amplification. *All RT-PCR kits include an internal control (IC) to safeguard against a scenario when no RNA is extracted/amplified, leading to a false negative. The IC can be exogenous or endogenous. It is exogenous when an artificial RNA template molecule is added to each sample before RNA extraction. The test is considered void when the synthetic RNA is not detected post-extraction and a re-test is prescribed. And, an endogenous control uses a human 'house-keeping' gene present in the sample; its non-detection after the RNA extraction procedure invalidates the test. "A human house-keeping gene also ensures the sample quality... But over 75% RT-PCR kits in the Indian market use the cheaper exogenous internal controls," said a Mumbai-based molecular biologist. ICMR's April 2020 SOP on RT-PCR held that exogenous control for extraction "can be ignored as it will not reflect the quality of the sample collected". It recommended "separate RNase P or any other human house-keeping gene... should be run parallel in a separate tube... (to) check both the quality of sample collected" and the extraction procedure.*

VIRAL MUTATION: A RTR-PCR test targets specific area/s of one or more viral genes to detect its presence. A test may return false negative results if a mutation occurs in the segment of the





genome assessed. Tests that use multiple genetic targets, like the ones in use in India, are less likely to be fooled by mutations. Regulators such as the US FDA routinely monitor the impact of mutations on RT-PCR tests While experts such as Dr Rakesh Mishra, director of Hyderabad's Centre for Cellular and Molecular Biology (CCMB), feel ICMR should initiate a similar exercise, it may not be easy to monitor real-time over 200 RT-PCR kits approved in India against emerging mutations. For one, no manufacturer has (or will) made public the detailed sequences its tests target. "While submitting for validation to ICMR, they only mention the target genes and not the primer sequence," said a senior researcher with the Health Ministry. Until now, though, there is ground to feel fairly confident even in the absence of any real-time efficacy check. "So far, Covid-19 variants have mainly S gene (spike protein) mutations. Majority of kits here use conserved (unchanged) regions of targets," said Dr Shanta Dutta, director of National Institute of Cholera and Enteric Diseases (NICED), Kolkata.

Price crash

In one year, the price of the RT-PCR kit fell from over Rs 1,100 to under Rs 40. Since import duty exemption was withdrawn in October 2020, most foreign brands left the Indian market due to the additional 15% cost burden. A number of Indian brands, too, have been refusing to sell below Rs 100. Many have found dedicated corporate clientele who do not mind paying a little extra to ensure quality. Some are even offering multiple PCR kits at different price levels. While nobody says it on record, many question the quality of the cheaper competition. The counterview is that every test kit available in the market meets ICMR's validation benchmarks and that any price war ultimately benefits the consumer. Not everyone is convinced, though. "The corresponding drop in the cost of the lab test is from Rs 4,500 to Rs 800. Besides, does one visiting her local lab for a Covid test know which kit is being used? How many labs will spend Rs 100 when they can get away with using a Rs-40 kit?" said one of the first Indian manufacturers of Covid PCR kits.

The Ct value

An RT-PCR test amplifies the nucleic acid extracted from the sample to detect the one specific to the Covid-19 virus. The amplification happens in cycles with a threshold (Ct) value. Clearly, the higher the viral presence/load, the lower the Ct value or the number of amplification cycles required to make it detectable. ICMR set the Ct value at 35 for negative results. Beyond this, any trace of virus potentially present is deemed negligible and the sample is ruled Covid negative. But certain states such as Maharashtra sought to stretch the limit of admissibility by suggesting a Ct value of 24. As this would exclude potentially a large number of people with quantitatively lower but clinically significant viral load, ICMR reiterated its position on a Ct value of 35. However, there is little clarity if all the states are following the same Ct benchmark. According to senior executives of at least two multi-state lab networks, they have received contradictory and at times unwarranted verbal instructions on such test parameters. Even a molecular test is not immune to subjective bias.

THE CT VALUE IN A COVID-19 TEST

Short for cycle threshold, Ct is a value that emerges during RT-PCR tests, the gold standard for detection of the SARS-CoV-2 coronavirus. In an RT-PCR test, RNA is extracted from the swab collected from the patient. It is then converted into DNA, which is then amplified. Amplification





www.youtube.com/c/DreamIAS

refers to the process of creating multiple copies of the genetic material — in this case, DNA. This improves the ability of the test to detect the presence of virus. Amplification takes place through a series of cycles — one copy becomes two, two becomes four, and so on — and it is after multiple cycles that a detectable amount of virus is produced. According to the ICMR advisory, the Ct value of an RT-PCR reaction is the number of cycles at which fluorescence of the PCR product is detectable over and above the background signal. Put simply, the Ct value refers to the number of cycles after which the virus can be detected. If a higher number of cycles is required, it implies that the virus went undetected when the number of cycles was lower. The lower the Ct value, the higher the viral load — because the virus has been spotted after fewer cycles.

Why is it important?

To put that in context, let us look at the ICMR advisory and Maharashtra's letter to ICMR. According to the ICMR, a patient is considered Covid-positive if the Ct value is below 35. In other words, if the virus is detectable after 35 cycles or earlier, then the patient is considered positive. If the benchmark were to be lowered to 24 — the value mentioned in Maharashtra's letter — it would mean that Ct values in the range 25-34 would not be considered positive. A benchmark of 35, therefore, means that more patients would be considered positive than we would get if the benchmark were 24. The ICMR has said lowering Ct threshold parameter may lead to missing several infectious persons. One can think of Ct value as a measure of transmission potential, said leading virologist Dr Shahid Jameel. "So if there is more virus in my throat and nose, I will transmit it better," said Dr Jameel, who is Director of the Trivedi School of Biosciences at Ashoka University.

What is the significance of the ICMR threshold of 35?

Globally, the accepted cut-off for Ct value for Covid-19 ranges between 35 and 40, depending on instructions from the respective manufacturers of testing equipment. The ICMR has arrived at the Ct value of 35 based on laboratory experiences and inputs taken from several virology labs. There was no new advisory, but ICMR informed the Maharashtra government that it was not advisable to use a lower cycle threshold parameter as it would lead to missing several infectious persons and increase disease transmission, Dr Balram Bhargava, DG of ICMR, has said.

Is there any correlation between a Ct value and severity of disease?

No. Although Ct value is inversely correlated with viral load, It does not have any bearing on the severity of the disease, experts have said. A patient can have a low Ct value, which means her viral load is high enough to be detected rapidly, but she may still be asymptomatic. A small study published in the Indian Journal of Medical Microbiology in January this year found that there was no correlation between Ct values and severity of disease or mortality in patients with Covid-19 disease. It found that the time since the onset of symptoms has a stronger relationship with Ct values as compared to the severity of the disease. The Ct value tells us about the viral load in the throat and not in the lungs, said Dr Parikshit Prayag, consultant for infectious diseases at Deenanath Mangeshkar Hospital, Pune. "The Ct value does not correlate with severity – only with infectivity. In the first report I do not really look at the Ct value, but for follow -up of patients in the hospital, I do consider the Ct value, as then I can decide whether to transfer the patient to the non-Covid building or not. From the infectivity point of view, it can matter, not severity," Dr Prayag said.





Does a high Ct value always mean a low viral load?

While that may be the obvious inference, some experts stress that *some patients can have a high Ct value and yet have a very significant level of Covid-19 infection, and vice versa. Many factors are important in interpreting an RT-PCR test, and the results may also depend on the method of specimen collection and time from infection to collection and to analysis.* An ICMR advisory in August last year noted that Ct values depend on how the sample has been collected. *A poorly collected sample may reflect inappropriate Ct values.* Besides, Ct values are also determined by *the technical competence of the person performing the test,* calibration of the equipment, and the analytical skills of the interpreters. Again, *Ct values may differ between nasal and oropharyngeal specimens collected from the same individual. The temperature of transportation, as well as the time taken from collection to receipt in the lab, can also adversely impact Ct values.*

SINGLE DOSE OF PFIZER VACCINE CUTS COVID-19 SPREAD BY HALF

A single dose of either the Oxford/AstraZeneca or Pfizer/BioNTech vaccines have been found to cut COVID-19 transmission rates by up to half, according to a new Public Health England (PHE) study on Wednesday. Those given a first dose of either of the two vaccines currently being administered by the National Health Service (NHS) and who became infected with SARS-Cov-2 the coronavirus which causes COVID-19 three weeks later were between 38 and 49 per cent less likely to pass the virus on than unvaccinated people. The PHE also found that protection against COVID-19 was seen from about 14 days after vaccination, with similar levels of protection regardless of age of cases or contacts. A new study shows one dose of the vaccine can cut the risk of household transmission by up to 50 per cent. This is further evidence that the vaccine protects you and those around you. When you get the call, get the jab, said UK Health Secretary Matt Hancock.

COVAXIN SHIELDS FROM B.1.617

A study has found that people who have been vaccinated with Covaxin have protection against the double mutant (B.1.617) variant first found in India. A preprint of the study carried out by the Indian Council of Medical Research (ICMR) and Bharat Biotech researchers has been posted in biorXiv. Preprints are yet to be peer-reviewed and published in medical journals. So far, 21 countries have detected the B.1.617 variant. Of those, the majority of cases has been reported from India. The researchers used the sera collected from 28 people who had participated in the Covaxin phase-2 trial.

HIGHER RISK OF DEATH AND DISEASE IN COVID SURVIVORS

As the Covid-19 pandemic has progressed, it has become clear that many survivors — even those who had mild cases — continue to manage a variety of health problems long after the initial infection should have resolved. *In a comprehensive study of long Covid-19, researchers at Washington University School of Medicine in St Louis have shown that Covid-19 survivors* — *including those not sick enough to be hospitalized* — *have an increased risk of death in the six months following diagnosis with the virus.* The researchers also have catalogued the numerous diseases associated with Covid-19, providing a big-picture overview of *the long-term complications of Covid-19 and revealing the massive burden this disease is likely to place on the world's population in*





the coming years. The study, involving more than 87,000 Covid-19 patients and nearly 5 million control patients in a US database, appears online in the journal Nature. The investigators showed that, after surviving the initial infection (beyond the first 30 days of illness), Covid-19 survivors had an almost 60% increased risk of death over the following six months compared with the general population. At the six-month mark, excess deaths among all Covid-19 survivors were estimated at eight people per 1,000 patients. Among patients who were ill enough to be hospitalised with Covid-19 and who survived beyond the first 30 days of illness, there were 29 excess deaths per 1,000 patients over the following six months. The researchers confirmed that, despite being initially a respiratory virus, long Covid-19 can affect nearly every organ system in the body. Evaluating 379 diagnoses of diseases possibly related to Covid-19, 380 classes of medications prescribed and 62 laboratory tests administered, the researchers identified newly diagnosed major health issues that persisted in Covid-19 patients over at least six months and that affected nearly every organ and regulatory system in the body, including:

Respiratory system: persistent cough, shortness of breath and low oxygen levels in the blood.

Nervous system: stroke, headaches, memory problems and problems with senses of taste and smell.

Mental health: anxiety, depression, sleep problems and substance abuse.

Metabolism: new onset of diabetes, obesity and high cholesterol.

Cardiovascular system: acute coronary disease, heart failure, heart palpitations and irregular heart rhythms.

Gastrointestinal system: constipation, diarrhoea and acid reflux.

Kidney: acute kidney injury and chronic kidney disease that can, in severe cases, require dialysis.

Coagulation regulation: blood clots in the legs and lungs.

Skin: rash and hair loss.

Musculoskeletal system: joint pain and muscle weakness.

General health: malaise, fatigue and anemia.

While no survivor suffered from all of these problems, many developed a cluster of several issues that have a significant impact on health and quality of life.

OXYGEN CONCENTRATORS: WHY ARE THEY IN DEMAND, AND HOW ARE THEY DIFFERENT FROM CYLINDERS?

It's only a little bigger than a computer monitor, yet as cases surge and with oxygen cylinders in short supply across several states, the concentrator is among the most sought after devices for oxygen therapy, especially among patients in home isolation and for hospitals running out of oxygen.





How does it work?

An oxygen concentrator is a medical device that *concentrates oxygen from ambient air*. Atmospheric air has about 78 per cent nitrogen and 21 per cent oxygen, with other gases making up the remaining 1 per cent. *The oxygen concentrator takes in this air, filters it through a sieve, releases the nitrogen back into the air, and works on the remaining oxygen.* This oxygen, *compressed and dispensed through a cannula, is 90-95 per cent pure.* A pressure valve in concentrators helps regulate supply, ranging from 1-10 litres per minute. According to a 2015 report by the WHO, *concentrators are designed for continuous operation and can produce oxygen 24 hours a day, 7 days a week, for up to 5 years or more.*

At 90-95 per cent purity, is the oxygen from concentrators pure enough?

While it is not as pure as LMO (99%), experts say it is good enough for mild and moderate Covid-19 patients with oxygen saturation levels of 85% or above. It is, however, not advisable for ICU patients. Concentrators can be attached with multiple tubes to serve two patients at the same time, but experts don't recommend it since it carries risk of cross-infection.

How are concentrators different from oxygen cylinders and LMO?

Oxygen concentrators are the easiest alternatives to cylinders but can only supply 5-10 litres of oxygen per minute (critical patients may need 40-50 litres per minute) and are best suited for moderately ill patients. Concentrators are portable and unlike LMO that needs to be stored and transported in cryogenic tankers, need no special temperature. And unlike cylinders that require refilling, concentrators only need a power source to draw in ambient air.

How do they compare with cylinders in terms of cost and maintenance?

While at 340,000-90,000 concentrators are more expensive than cylinders (38,000-20,000), it's largely a one-time investment. Apart from electricity and routine maintenance, there's little by way of operational cost, unlike cylinders that involve refilling costs and transportation.

The market

Industry experts say the demand of oxygen concentrators has gone up from 40,000 annually to 30,000-40,000 a month. Dr Rajiv Nath, forum coordinator of AIMED, an association of the medical device industry, estimates a daily demand of 1,000-2000 concentrators, but says there are not enough manufacturers to meet that kind of demand. It's a largely import market, with Philips and Longfian Scitech among the big players.