



Current Affairs, 26th April to 2nd May, 2020

International

At the Edge of a New Nuclear Arms Race (Rakesh Sood - Former Diplomat And Presently Distinguished Fellow At The Observer Research Foundation)

- In mid-April, a report issued by the United States State Department on “Adherence to and Compliance with Arms Control, Non-proliferation, and Disarmament Agreements and Commitments (Compliance Report)” raised concerns that **China might be conducting nuclear tests with low yields at its Lop Nur test site**, in violation of its **Comprehensive Nuclear-Test-Ban Treaty (CTBT) undertakings**. The U.S. report also claims that Russia has conducted nuclear weapons experiments that produced a nuclear yield and were inconsistent with ‘zero yield’ understanding underlying the CTBT, though it was uncertain about how many such experiments had been conducted. Russia and China have rejected the U.S.’s claims, but with growing rivalry among major powers the report is a likely **harbinger of a new nuclear arms race which would also mark the demise of the CTBT that came into being in 1996 but has failed to enter into force even after a quarter century**.

What Does CTBT Ban Mean?

For decades, a ban on nuclear testing was seen as the necessary first step towards curbing the nuclear arms race but Cold War politics made it impossible. **A Partial Test Ban Treaty was concluded in 1963 banning underwater and atmospheric tests but this only drove testing underground**. By the time the CTBT negotiations began in Geneva in 1994, global politics had changed. The Cold War had ended and the nuclear arms race was over. The **Union of Soviet Socialist Republics**, or the USSR, had broken up and its principal testing site, Semipalatinsk, was in Kazakhstan (Russia still had access to Novaya Zemlya near the Arctic circle). In 1991, Russia declared a unilateral moratorium on testing, followed by the U.S. in 1992. By this time, the U.S. had conducted 1,054 tests and Russia, 715. Negotiations were often contentious. France and China continued testing, claiming that they had conducted far fewer tests and needed to validate new designs since the CTBT did not imply an end to nuclear deterrence. **France and the U.S. even toyed with the idea of a CTBT that would permit testing at a low threshold, below 500 tonnes of TNT equivalent. This was one-thirtieth of the “Little Boy”, the bomb the U.S. dropped on Hiroshima on August 6, 1945 – its explosive yield was estimated to be the equivalent of 15,000 tonnes of TNT.** Civil society and the non-nuclear weapon states reacted negatively to such an idea and it was dropped. Some countries proposed that the best way to verify a comprehensive test ban would be to permanently shut down all test sites, an idea that was unwelcome to the nuclear weapon states. Eventually, **the U.S. came up with the idea of defining the “comprehensive test ban” as a “zero yield” test ban that would prohibit supercritical hydro-nuclear tests but not sub-critical hydrodynamic nuclear tests**. Once the United Kingdom and France came on board, the U.S. was able to prevail upon Russia and China to accept this understanding. After all, this was the moment of the U.S.’s unipolar supremacy. At home, the Clinton administration in the U.S. satisfied the hawks by announcing a science-based nuclear Stockpile Stewardship and Management Program, a generously funded project to keep the nuclear laboratories in business and the Pentagon happy. Accordingly, the CTBT



prohibits all parties from carrying out “any nuclear weapon test explosion or any other nuclear explosion”; these terms are neither defined nor elaborated.

Why It Lacks Authority

Another controversy arose regarding the **entry-into-force provisions (Article 14) of the treaty**. After India’s proposals for anchoring the CTBT in a disarmament framework did not find acceptance, in June 1996, India announced its decision to withdraw from the negotiations. Unhappy at this turn, the U.K., China and Pakistan took the lead in revising the entry-into-force provisions. **The new provisions listed 44 countries by name whose ratification was necessary for the treaty to enter into force and included India**. India protested that this attempt at arm-twisting violated a country’s sovereign right to decide if it wanted to join a treaty but was ignored. **The CTBT was adopted by a majority vote and opened for signature. Of the 44 listed countries, to date only 36 have ratified the treaty. China, Egypt, Iran, Israel and the U.S. have signed but not ratified. China maintains that it will only ratify it after the U.S. does so but the Republican dominated Senate had rejected it in 1999. In addition, North Korea, India and Pakistan are the three who have not signed. All three have also undertaken tests after 1996; India and Pakistan in May 1998 and North Korea six times between 2006 and 2017. The CTBT has therefore not entered into force and lacks legal authority.** Nevertheless, an international organisation to verify the CTBT was established in Vienna with a staff of about 230 persons and an annual budget of \$130 million. Ironically, the U.S. is the largest contributor with a share of \$17 million. The Comprehensive Nuclear-Test-Ban Treaty Organisation (CTBTO) runs an elaborate verification system built around a network of over 325 seismic, radionuclide, infrasound and hydroacoustic (underwater) monitoring stations. **The CTBTO has refrained from backing the U.S.’s allegations.**

Competition Is Back

The key change from the 1990s is that the U.S.’s unipolar moment is over and strategic competition among major powers is back. The U.S. now identifies Russia and China as ‘rivals’. **Its Nuclear Posture Review asserts that the U.S. faces new nuclear threats because both Russia and China are increasing their reliance on nuclear weapons. The U.S., therefore, has to expand the role of its nuclear weapons and have a more usable and diversified nuclear arsenal. The Trump administration has embarked on a 30-year modernisation plan with a price tag of \$1.2 trillion, which could go up over the years. Readiness levels at the Nevada test site that has been silent since 1992 are being enhanced to permit resumption of testing at six months’ notice. Russia and China have been concerned about the U.S.’s growing technological lead particularly in missile defence and conventional global precision-strike capabilities. Russia has responded by exploring hypersonic delivery systems and theatre systems while China has embarked on a modernisation programme to enhance the survivability of its arsenal which is considerably smaller. In addition, both countries are also investing heavily in offensive cyber capabilities.** The new U.S. report stops short of accusing China for a violation but refers to “a high level of activity at the Lop Nur test site throughout 2019” and concludes that together with its lack of transparency, China provokes concerns about its intent to observe the zero-yield moratorium on testing. The U.S. claims that Russian experiments have generated nuclear yield but is unable to indicate how many such experiments were conducted in 2019. It suggests that Russia could be testing in a manner that releases nuclear energy from an explosive canister, generating suspicions about its compliance. **The New Strategic Arms Reduction Treaty (New START) limits U.S. and Russian arsenals but will expire in 2021 and U.S. President Donald Trump has already indicated that he does not plan to extend it. Instead, the Trump administration would like to bring China into some kind of nuclear arms control talks, something China has avoided by pointing to the fact that the U.S. and Russia still account for over 90% of global nuclear arsenals.**



Current Context

Both China and Russia have dismissed the U.S.'s allegations, pointing to the Trump administration's backtracking from other negotiated agreements such as the Iran nuclear deal or the U.S.-Russia Intermediate-Range Nuclear Forces (INF) Treaty. Tensions with China are already high with trade and technology disputes, militarisation in the South China Sea and most recently, with the novel coronavirus pandemic. The U.S. could also be preparing the ground for resuming testing at Nevada. The Cold War rivalry was already visible when the nuclear arms race began in the 1950s. New rivalries have already emerged. Resumption of nuclear testing may signal the demise of the ill-fated CTBT, marking the beginnings of a new nuclear arms race.

The Script of Disruption and A New Order (M.K. Narayanan - Former National Security Adviser and A Former Governor of West Bengal)

- The COVID-19 pandemic is unprecedented, involving as it does far too many variables. The very complexity of the novel coronavirus leads to radical uncertainty. Hence, it is unlikely that the world will ever be the same again. Abnormal could well become the new normal. Pandemics have often changed the world and reshaped human society. Empires have collapsed. Commentators are already talking of fundamental alterations in governance and business norms. What is left unsaid – and likely to pose an even bigger challenge – is the extent to which the pandemic will impact human values and conduct. There is already concern that a diminution in human values could occur, and with this, the concept of an international community might well cease to exist. Each nation is tending to look inwards, concentrating on its narrowly defined national interests.

Institutions Under Fire

It is singularly unfortunate that at a time like this, existing international institutions such as the United Nations, the United Nations Security Council and the World Health Organization (WHO) are seen to have failed to measure up to the grave challenge posed by the pandemic. While the UN Security Council is under attack for being slow in dealing with a situation that appears, at least on the surface, far graver than any military threat in recent decades, WHO has been tarred with the charge of bias and of grossly underestimating the nature of the epidemic. That prestigious global institutions should have been singled out for attack at this time speaks volumes about the mood prevailing across the world.

Economic Shock

There are many other aspects of the COVID-19 crisis that will drastically impact the globe. On the economic front, the World Bank has already predicted negative growth for most nations. India's growth forecast for the current fiscal year has been put at 1.5% to 2.8%. Contraction of the economy and the loss of millions of jobs across all segments will further complicate this situation. What is likely to change even more dramatically are certain other aspects relating to political management and security. Both terms are set to gain new meanings. The role of the state as an enforcer of public good will almost certainly become greatly enhanced. The dominant imperative would be to not put limits on the role of the state even where the situation may not be as grave as the present one. Many pieces of legislation of yesteryears that had been relegated to the archives – they were perceived to be anachronistic in a modern democratic set-up – may get a new lease of life. Some pieces of legislation such as the Disaster Management Act already reflect this reality today. Other pieces of legislation could follow in its wake. This trend is already becoming evident to some extent across the world. Europe has shown a willingness to sacrifice personal liberties in favour of greater state control.



There are no serious protests over the fact that many of the powers being vested in the instruments of state in democracies today, to meet the current challenge, are eerily similar to those already practised by authoritarian regimes such as China. Post COVID-19, the world may have to pay a heavy price in terms of loss of liberty. An omnipotent state could well become a reality.

China in The Spotlight

Far-reaching changes can also be anticipated in the realm of geo-economics and geopolitics. The world needs to prepare for a sea change. One nation, viz. China, is presently seeking to take advantage of and benefit from the problems faced by the rest of the world in the wake of the epidemic. Already one of the most prominent nations of the world and an important player in international institutions, China remains totally unfazed by the stigma that the current world pandemic owes a great deal to its negligence — the first identified and detected COVID-19 victim in Wuhan was on December 1, 2019, but it was only in the second week of January 2020, that China sounded the alarm. More importantly, it is seeking to convert its 'failure' into a significant opportunity. This is Sino-centrism at its best, or possibly its worst. Already indispensable as the world's supplier of manufactured goods, China now seeks to benefit from the fact of its 'early recovery' to take advantage of the travails of the rest of the world, by using its manufacturing capability to its geo-economic advantage. Simultaneously, it seeks to shift from being a Black Swan (responsible for the pandemic), to masquerade as a White one, by offering medical aid and other palliatives to several Asian and African countries to meet their current pandemic threat. In turn, it seeks to gain a geopolitical advantage by this action. China also seems to be preparing for the eventuality that the current pandemic could hollow out the financial viability of many companies, institutions and banks across the world. There are enough reports of China's intentions to acquire financial assets and stakes in banks and companies across the world, taking advantage of the scaled-down value of their assets to support this. India seems to have woken up only recently to this threat, after the Peoples' Bank of China acquired a 1% stake in India's HDFC, taking advantage of the sharp decline in the price of HDFC stocks. Across the world, meanwhile, the clamour against China's hostile takeover bids is becoming stronger. Several countries apart from India, such as Australia and Germany, have begun to restrict Chinese foreign direct investment in companies and financial institutions in their countries, recognising the inherent danger of a possible Chinese hostile takeover of their critical assets. This may not, however, be adequate to checkmate China, which is poised to dominate the Regional Comprehensive Economic Partnership (RCEP), thus enabling it to exploit market access across the Association of Southeast Asian Nations, East Asian nations, Australia and New Zealand. Together with its Belt and Road Initiative, which seeks to combine regional connectivity alongside gaining a virtual economic and substantial stranglehold across Asia, China is ostensibly preparing the way for a China-centric multilateral globalisation framework.

A Faltering West

The geopolitical fallout of this pandemic could be still more serious. One distinct possibility is that COVID-19 would effectively put paid to the existing global order that has existed since the late 1940s. The United States which is already being touted in some circles as a 'failing' state, will be compelled to cede ground. Weakened economically and politically after COVID-19 has ravaged the nation, the U.S.'s capacity to play a critical role in world affairs is certain to diminish. The main beneficiary of this geopolitical turnaround is likely to be China, a country that does not quite believe in playing by the rules of international conduct. Europe, in the short and medium term, will prove incapable of defining and defending its common interests, let alone having any influence in world affairs. Germany, which may still retain some of its present



strength, is already turning insular, while both France and a post-Brexit United Kingdom will be out of the reckoning as of now.

West Asia and India

Coming to West Asia, both Saudi Arabia and Iran are set to face difficult times. The oil price meltdown will aggravate an already difficult situation across the region. There may be no victors, but Israel may be one country that is in a position to exploit this situation to its advantage. In the meantime, the economic downturn greatly reduces India's room for manoeuvre. In South Asia, it faces the prospect of being isolated, with the Chinese juggernaut winning Beijing new friends and contacts across a region deeply impacted by the economic consequences of the COVID-19 pandemic. Likewise, India's leverage in West Asia – already greatly diminished – will suffer further, with oil prices going down and the Indian expatriate community (who are among the hardest hit by this downturn) out on a limb. Many of the latter may seek repatriation back to the host country, substantially reducing the inflow of foreign funds to India from the region.

UN Warns of A 'Human Rights Disaster'

→ The UN rights chief warned that countries flouting the rule of law in the name of fighting the novel coronavirus pandemic risk sparking a "human rights disaster". **UN High Commissioner for Human Rights Michelle Bachelet** called on countries to refrain from violating fundamental rights "under the guise of exceptional or emergency measures". "Emergency powers should not be a weapon government can wield to quash dissent, control the population, and even perpetuate their time in power," she warned in a statement. "They should be used to cope effectively with the pandemic – nothing more, nothing less." Her comments came after more than 200,000 people have perished in the pandemic and nearly 3 million have been infected worldwide by the novel coronavirus since it surfaced in China late last year. Ms. Bachelet acknowledged that states have the right to restrict some rights to protect public health, but she insisted that any restrictions should be necessary, proportionate and non-discriminatory, and also limited in duration. "There have been numerous reports from different regions that police and other security forces have been using excessive, and at times lethal, force to make people abide by lockdowns and curfews," she said, lamenting that "such violations have often been committed against people belonging to the poorest and most vulnerable segments of the population". "Shooting, detaining, or abusing someone for breaking a curfew because they are desperately searching for food is clearly an unacceptable and unlawful response. So is making it difficult or dangerous for a woman to get to hospital to give birth. In some cases, people are dying because of the inappropriate application of measures that have been supposedly put in place to save them," Ms. Bachelet said. She also decried the mass arrests in some countries over curfew violations as "both unnecessary and unsafe." "Jails and prisons are high risk environments, and states should focus on releasing whoever can be safely released, not detaining more people." The UN rights chief also warned that efforts to rein in dangerous misinformation around the pandemic was in some cases being used as an excuse to crack down on legitimate free speech. "It is important to counter misinformation, but shutting down the free exchange of ideas and information not only violates rights, it undermines trust," she said.

Highest Level of Alarm

Meanwhile, the WHO chief said that the agency had sounded the highest level of alarm early on, but lamented that not all countries had heeded its advice. Tedros Adhanom Ghebreyesus pointed out that the WHO warned the COVID-19 outbreak constituted a 'Public Health Emergency of International Concern' on January 30, when there were only 82 cases registered



outside China. "The world should have listened to WHO then carefully," he told a virtual press briefing.

Immigration Ban and The Impact

- With the toll of the novel coronavirus on the American population spiralling rapidly, and political pressure increasing on the country's leader to take effective action to bring the pandemic under control, United States President Donald Trump announced, on Twitter, that he would be using an executive order to suspend legal immigration into the U.S. for 60 days. The White House has indicated that the time limit could be extended depending on conditions on the ground.

Why Has Mr. Trump Taken Such A Step?

The immediate context of his proposal is the teetering U.S. economy, which, like many others across the world, has ground to a virtual halt in the face of the pandemic. The deeper context to the announcement is the fact that Mr. Trump is seeking re-election in the November 2020 election against the presumptive Democratic nominee, former U.S. Vice-President Joe Biden. Proposals to restrict immigration served Mr. Trump's campaign well during the 2016 presidential election, particularly when they were situated in the context of protecting jobs for U.S. workers.

What Does It Mean for Visa Applicants?

The order is not expected to halt visa processing for many thousands of temporary employees, including a sizeable number of Indian nationals in the **H-1B skilled worker category; agricultural workers classified under the H-2A visa; and seasonal workers, who fall into the H-2B category.** Second, according to the White House, the policy will also likely carve out exemptions for certain categories of essential workers, including those in health care and who have a critical role to play in fighting the pandemic. Third, exemptions are also being made for those who seek to immigrate via their immediate relatives. This includes spouses and minor children of U.S. citizens applying for green cards, or permanent residency. Also, those who have already been granted permanent residence will not be impacted by this executive order. Fourth, members of the armed forces, those who are immigrating for law enforcement reasons and are already in the pipeline, and those on the EB-5 programme, which requires individuals to invest at least \$500,000 in U.S. real estate projects, will be considered. Beyond these exemptions, there is a broader question of how many jobs that could potentially be taken by incoming immigrants will be saved for out-of-work U.S. workers. **The number of unemployment claims filed since the pandemic started eating into the U.S. economy is now over 26 million. According to some analysts, out of the million-plus green cards that the U.S. issues annually, approximately 358,000 could possibly be impacted by the pause in immigration processing for the duration of the proclamation. The gap between these two figures is nothing short of gargantuan, and it begs a question of motive behind the executive order.**

Could There Be Any Impact on Skilled Workers from India?

On tourism, there is little concern at the present juncture given that India has stopped commercial flights owing to the risks of coronavirus spread. Numerous airlines across the world have also suspended operations and have cancelled flights across the board. Further, in many countries, quarantine procedures apply to international arrivals and this will dissuade many visitors from international travel. Finally, the U.S. State Department announced in March 2020 that it would be suspending all routine visa processing at its consulates and embassies abroad; this has not only dampened the pace of visa issuance but it has also slowed legal



immigration considerably. As a comparator, more than 9.2 million visas were issued at U.S. diplomatic missions abroad last year. When the worst phases of the pandemic have passed in the U.S. and India, there could be a resumption of air traffic and international visitors may have the option to travel to the U.S. once again. But presently, there is no visibility whatsoever on when such conditions might emerge. So far as skilled workers seeking the H-1B visa are concerned, similar conditions apply. U.S. visa issuance in all countries, not only in India, has ground to a halt. This has left many H-1B visa-seekers in the lurch in India, and that could have an economically debilitating impact on the Indian IT and Information Technology Enabled Service (ITeS) sectors. However, this derives more from the overall impact of the pandemic, and not from Mr. Trump's immigration ban.

How Will It Affect U.S. Politics?

Given the minimal impact on net jobs saved for U.S. workers, there is a real question regarding whether the ban was conceived of as a genuine policy measure or whether it is a diversionary tactic to mask the Trump administration's failure to save more lives, and to bolster the President's sinking political standing. If the latter case applies, then this executive action has already set the tenor of the upcoming U.S. presidential election. Immigration was a divisive issue in 2016. A Trump-driven encore for immigration issues in 2020 could well polarise American society further and lead to an acrimonious campaign season.

President Under Probe

→ Brazilian President Jair Bolsonaro's decision to sack the country's federal police chief has come back to haunt him. First, Sérgio Moro, one-time Bolsonaro ally and Justice Minister, announced his resignation in a press conference, accusing the leader of trying to interfere in the federal police. Then the Attorney-General moved the Supreme Court seeking authorisation for a probe into Mr. Moro's allegations. On Tuesday, the top court approved a 60-day probe into the President's actions. The police were reportedly investigating two of the President's sons, both public officials, over alleged fake news dissemination, corruption and mafia group ties. While the President and his sons have dismissed the allegations, the move to quickly replace the police chief with a "friend" of one of the President's sons, has strengthened Mr. Moro's claim that the President wants someone in the police "from whom he can collect intelligence". The probe comes at a time when the President's handling of Latin America's largest coronavirus outbreak is already under fire. Mr. Bolsonaro, who wants the economy to be reopened sooner, sacked his Health Minister Luiz Henrique Mandetta earlier this month over disagreements.

Mr. Bolsonaro is not new to controversies. From his incessant attacks on political rivals, activists, environmentalists and sexual minorities to the controversial handling of the Amazon fires, he has triggered sharp criticism. But this time, he is perhaps facing his biggest crisis as President. Mr. Moro and Dr. Mandetta were relatively popular figures in his Cabinet. The alliance with Mr. Moro, a former judge, had been particularly strong. Last year, a media report showed that Mr. Moro had colluded with the prosecutors who led a corruption investigation against former President Lula da Silva. Lula was convicted in 2018 when he was leading in the presidential election. His exit enabled an easy win for Mr. Bolsonaro. With Mr. Moro's resignation, Mr. Bolsonaro has lost a powerful ally, and is now surrounded by his unpopular far-right Cabinet colleagues and family. Hundreds are dying from COVID-19 and the government appears to be clueless about its containment. Brazil's economy is expected to contract 5.3% this year, a sharp fall from the government's rosy projections made earlier. Mr. Bolsonaro's approval ratings are also steadily falling. Left-wing Senators have already launched a campaign to impeach him. According to a recent poll, while 45% Brazilians support his impeachment, 46% want him to resign. All these point to an isolated, unpopular President



who is losing allies and followers and facing a police probe at a time when the country is going through grave political, economic and health crises.

Yemen Separatists Declare Self-Rule in South

- Yemen's main southern separatist group announced that it would establish self-rule in areas under its control, which the Saudi-backed government warned would have "catastrophic consequences". The move threatens to renew conflict between the UAE-backed separatist Southern Transitional Council (STC) and the Saudi-backed government, allies in Yemen's war. **The STC is one of the main groups fighting against the Houthis as part of a coalition led by Saudi Arabia. But the separatists have clashed with government forces in the past.** In a statement, the STC announced emergency rule in Aden and all southern governorates, saying it would take control of Aden's port and airport and other state institutions such as the central bank.

Saudi Arabia Abolishes Flogging as Punishment

- Saudi Arabia has abolished flogging as a punishment, the state human rights commission said, hailing a "major step forward" in the reform programme launched by the King and his powerful son. Court-ordered floggings in Saudi Arabia — sometimes extending to hundreds of lashes — have long drawn condemnation from human rights groups. But they say the headline legal reforms overseen by Crown Prince Mohammed bin Salman have brought no let-up in the conservative Islamic kingdom's crushing of dissent, including through the use of the death penalty. The state human rights commission said the latest reform, which was reported by Saudi media, including the pro-government Okaz newspaper, would ensure that no more convicts were sentenced to flogging. **"This decision guarantees that convicts who would previously have been sentenced to the lash will from now on receive fines or prison terms instead,"** its chairman, Awad al-Awad, said. Previously, the **courts had powers to order the flogging of convicts found guilty of offences ranging from extramarital sex and breach of the peace to murder. In future, judges will have to choose between fines and/or jail sentences, or non-custodial alternatives like community service.**

Blogger Flogging

The most high-profile instance of flogging in recent years was the case of **Saudi blogger Raif Badawi** who was sentenced to 10 years in prison and **1,000 lashes in 2014 on charges of "insulting" Islam.** He was awarded the **European Parliament's Sakharov human rights prize** the following year. The abolition of corporal punishment in Saudi Arabia comes just days after the Kingdom's human rights record was again in the spotlight following news of the death from a stroke in custody of leading activist Abullah al-Hamid, 69. Hamid was a founding member of the Saudi Civil and Political Rights Association (ACPRA) and was sentenced to 11 years in jail in March 2013, campaigners said He was convicted on multiple charges, including "breaking allegiance" to the Saudi ruler, "inciting disorder" and seeking to disrupt state security, Amnesty International said. Criticism of Saudi Arabia's human rights record has grown since King Salman named his son Prince Mohammed the Crown Prince and heir to the throne in June 2017. The King has launched ambitious economic and social reforms, allowing women to drive and for sports and entertainment events to be staged in the kingdom.

Murder of Khashoggi

However, the brutal murder of journalist Jamal Khashoggi inside the Saudi consulate in Istanbul in October 2018 and the increased repression of dissidents at home have overshadowed the Prince's pledge to modernise the economy and society. **The Saudi**



authorities put a record 184 people to death last year, according to figures released by Amnesty International. Saudi Arabia's growing use of the death penalty, including as a weapon against political dissidents, is an alarming development," the human rights group said.

Gotabaya Rules Out Reconvening Dissolved Sri Lankan Parliament

- Sri Lankan President Gotabaya Rajapaksa ruled out reconvening the dissolved Parliament using his discretionary powers. In a letter signed by his secretary – released to the media – the President said the Opposition parties “do not believe in holding elections and instead engage in a narrow political agenda at a crucial time when the government is striving to safeguard public health, social security and welfare”. The letter comes days after leaders of major political parties in Opposition wrote to President Rajapaksa, urging him to reconvene Parliament that he dissolved on March 2, using his discretionary powers, to enhance the country's COVID-19 response by passing “necessary laws”. Further, they pledged “responsible cooperation”, assuring the President that they would not draw salaries or thwart any “legitimate actions” of the government. However, President Rajapaksa said the requirement to abide by Article 70 (7) of Sri Lanka's Constitution didn't arise. He was referring to the article evoked by the Opposition that says that if “the President is satisfied that an emergency has arisen of such a nature that an earlier meeting of Parliament is necessary”, he may summon the dissolved legislature by proclamation.

Polls Postponed

Sri Lanka's Election Commission postponed the general elections – earlier scheduled for April 25 – to June 20 in the wake of COVID-19, but many Opposition parties have objected to the new date, citing likely public health risks. Some have also pointed to the risk of an “imminent constitutional crisis” posed by the new poll date, as the Constitution requires Parliament to be summoned not later than three months after the proclamation dissolving the House [March 2]. President Rajapaksa has earlier said the poll date was the prerogative of the Election Commission. Sri Lanka reported a total of 671 cases as of Friday. The country saw a spike in the number of cases after over 200 Navy personnel tested positive last week. Sri Lanka has been in near-total lockdown since March 20, with government-imposed curfews in high-risk districts, including Colombo that has the greatest number of cases. Meanwhile, Prime Minister Mahinda Rajapaksa has invited all MPs of the last Parliament for a meeting at Temple Trees, his official residence. PM Rajapaksa earlier convened a party leaders' meeting to discuss Sri Lanka's response to COVID-19.

Foreign Affairs

Pakistan Cleric Slammed for Misogynistic Remarks

- A Pakistani cleric whose group has been blamed for spreading COVID-19 is facing ridicule after he suggested the pandemic was caused partly by the “immodesty” of women. Maulana Tariq Jameel appeared on a telethon with Prime Minister Imran Khan, when he explained various Islamic religious codes and said humanity had been punished in the past for breaking these. “Who has demolished modesty in my country? Who is making the nation's daughters dance? Who is shortening their dresses? Who should be held responsible?” Mr. Jameel said during the fundraiser hosted by Mr. Khan. The comment spurred an immediate backlash with leading activists and a government Minister blasting the cleric, while social media users



roasted the preacher for ignoring his own group's role in spreading the virus. Mr. Jameel is a senior member of the Tablighi Jamaat group which has been blamed for seeding the epidemic in Pakistan by holding a gathering with 1,00,000 participants in March after the virus had already been detected in the country – leading to hundreds of transmissions. The Human Rights Commission of Pakistan warned that the remarks “only compound the misogyny entrenched in society”.

Hostage to Obscurantism (Mohammed Ayoob - University Distinguished Professor Emeritus of International Relations, Michigan State University)

- In the month of Ramadan, Muslims renew their faith by fasting, participating in family and community dinners, and congregational prayers. This Ramadan is unique, however, because of COVID-19, which in most Muslim-majority countries as well as in India has led to the shutting down of mosques and banning of congregational prayers. The holiest sites of Islam in Mecca and Medina have been subject to lockdowns as well. Most Muslims have adjusted to the new reality justifying it with reference to the Prophetic tradition that human life is more important than the performance of religious rituals.

Defying Orders

The most visible exception to this rule is Pakistan where reactionary mullahs have defied government orders and insisted on performing congregational prayers even against the powerful military's preferences. Imran Khan's government has buckled under this obscurantist pressure and allowed congregational prayers to continue. It has attached certain social distancing provisions that are unenforceable in the Pakistani milieu. This is a signal that the most obscurantist elements in Pakistan are now capable of calling the shots even in defiance of the country's powerful military brass as well as putting at risk thousands of lives because of lack of physical distancing. These elements, including some religious parties and jihadist organisations, have been gaining ground politically over the years. It is commonly assumed that their political clout has amplified since General Zia-ul-Haq's programme of Islamising the country and Pakistan's participation in the Afghan "jihad" in the 1980s that, it is argued, changed the political culture of the country. While there is a good deal of substance to this argument it ignores the basic fact that while the movement for Pakistan's creation was led by a largely secular elite it was undertaken in the name of religion, and Islam was touted as the *raison d'être* for its establishment. Mohammad Ali Jinnah, who was from a peripheral Shia community, became the Qaid-e-Azam of the predominantly Sunni Pakistan movement. He and his lieutenants viewed Islam in instrumental terms. To them it was the most effective tool to mobilise Muslim masses to aggrandise power while leaving Muslims in the minority provinces, who they considered dispensable, far more vulnerable than they would have been in undivided India. All they were interested in was creating a Muslim-majority state over which they could rule since they could not compete with the Indian National Congress for influence and power in a united India after the British withdrawal.

A Slippery Slope

Pakistan's founders were not interested in creating an Islamic theocracy. However, less than two years after Pakistan's independence religious leaders pressured Prime Minister Liaquat Ali Khan to include in the Objectives Resolution (which later became the Preamble to Pakistan's first Constitution) that sovereignty belongs to Allah who had delegated his authority to the state of Pakistan. This was the first step on the slippery slope towards making Pakistan an ideological Islamic state. It is clear from hindsight that despite a few bumps on the way there was a linear development from the Objectives Resolution to Zia's Islamisation and the



entrenchment of the most reactionary and jihadist elements, the latter encouraged by the military for its own ends, in Pakistan's body politic. *The message that India should imbibe from the Pakistani experience is that once religion is employed, even for instrumental purposes, as the principal component of a nation's identity, it is inevitable that the most bigoted religious elements will end up defining the dominant ideology of the nation's polity.* The experience of Israel teaches the same lesson. Established by a secular elite that used religio-ethnic identity for instrumental purposes, it has ended up empowering Jewish fundamentalists who now hold the political balance.

A Task for South Asia (Aamir Jafarey - Surgeon Based In Karachi And Sanjay Nagral - Surgeon Based In Mumbai)

- South Asia, one of the world's most populous regions, is also affected by the COVID-19 pandemic. Both Karachi and Mumbai, among the world's most densely populated cities, where we live and work, are being overwhelmed by cases. While the death rate in these places may not be as alarming as in Europe and the U.S., the collateral damage of the lockdown is taking its own toll. While there are many differences amongst the countries of the region, there are also common features which impact the health of its people, some of them a result of our shared cultural and geopolitical history. The collective experience of dealing with COVID-19 may provide important lessons, which transcend national boundaries.

Poor Healthcare System

South Asian countries have invested very little in health. This is reflected in our abysmally low health parameters. It is interesting that Britain, which formulated our health policies before independence, went on to form one of the world's strongest public health systems, the National Health Service, whereas its South Asian colonies chose to stray from that path. This resulted in a dysfunctional public healthcare system. Governments have also relinquished what ought to have been their primary duty, of health care provision, to the private sector. Having become an industry, the focus of healthcare in the private sector is on profit rather than on people's needs. Whilst privatisation has brought in advanced technology and expertise, the high costs of treatment in the private sector have resulted in impoverishment as most of the population has no insurance or third-party coverage, and pays out of pocket. The sector has also been poorly regulated. The result is that it is responsible for several excesses in its quest for profit. Hunger, malnutrition, poor sanitation and large-scale migration are features of this region. Existing infectious diseases like TB, HIV and malaria have been worsened by emerging ones like dengue, chikungunya, healthcare-associated infections and antimicrobial resistance. The region is also an epicentre of an epidemic of lifestyle diseases. Constant internal and external conflicts in South Asia not only consume a large portion of national budgets, but also divert the attention of the public and policymakers from healthcare needs. Defence budgets take the largest share of national budgets, and obviously adversely impact social sector spending. Underfunded public health is going to hinder our capacity to fight COVID-19. Religion continues to occupy a central space in the society and politics of the region. Though it offers succour to many, religious dogma can impact health policy and health-seeking behaviour. The refusal of devotees across Pakistan to avoid religious congregations during Ramadan despite the government's orders has significantly fed the community spread of the virus. On the other hand, the Tablighi Jamaat congregation in Delhi was used to whip up sentiments against the entire Muslim population in India. This will only put a further strain on the social fabric. The medical community must emphasise that religious practices cannot be exceptions to epidemic-control practices.



A Silver Lining

If there is a silver lining, COVID-19 has forced us to seriously reflect on our healthcare system. This is welcome if it results in policy change. Healthcare professionals and bodies must seize this opportunity to push our respective governments to address it seriously and not just as a pre-election strategy. A long-term commitment to universal health care, with not only a national but also a regional and global focus, is needed. The SAARC heads of state have already offered help to one another. A regional strategy has a better chance of controlling the pandemic than isolated national-level efforts. Pooling of resources and sharing data may not only help flatten the curve but perhaps even develop into longer-term efforts towards effective treatment. It is being speculated that our populations are behaving differently; that the BCG vaccine may be a protective influence. Joint research into such areas can be a unifying point for SAARC. The region's healthcare community has many tasks. We have the responsibility of upholding science as the guiding principle of policy, of guarding against fake cures, unethical experimentation and quackery. We also have the onerous task of convincing our people that regional conflicts fuelled by geopolitical interests are not in our mutual interest. This could even mean standing up to populist narratives on nationalism and reminding our citizens that the real threat to the security of our nations is our misplaced priorities. It is in our collective interest to look at health security and not just national security. By the accident of their birth, South Asians have endured a lot. They merit better.

Afghan Peace and India's Elbow Room

- The United Nations Secretariat held a meeting of what it calls the "6+2+1" group on regional efforts to support peace in Afghanistan, a group that includes six neighbouring countries: China, Iran, Pakistan, Tajikistan, Turkmenistan and Uzbekistan; global players the United States and Russia, and Afghanistan itself. India was conspicuous by its absence from the meeting on April 16, given its historical and strategic ties with Afghanistan, but not for the first time.

Left Out, But Some Recovery

In December 2001, for example, the Indian team led by special envoy Satinder Lambah arrived in Germany's Petersberg hotel near Bonn, where the famous Bonn agreement was negotiated, to find no reservations had been made for them at the official venue. In January 2010, India was invited to attend the "London Conference" on Afghanistan, but left out of the room during a crucial meeting that decided on opening talks with the Taliban. In 2020, the reason given for keeping India out of regional discussions on Afghanistan was ostensibly that it holds no "boundary" with Afghanistan; but in fact, it is because New Delhi has never announced its support for the U.S.-Taliban peace process. In both 2001 and 2010, however, India fought back its exclusion successfully. At the Bonn agreement, Ambassador Lambah was widely credited for ensuring that Northern Alliance leaders came to a consensus to accept Hamid Karzai as the Chairman of the interim arrangement that replaced the Taliban regime. After the 2010 conference, New Delhi redoubled its efforts with Kabul, and in 2011, Prime Minister Manmohan Singh and Afghanistan President Karzai signed the historic Strategic Partnership Agreement, which was Afghanistan's first such agreement with any country.

New Delhi's Stand

As planners in South Block now consider their next steps in Afghanistan, they must fight back against the idea that any lasting solution in Afghanistan can be discussed without India in the room, while also studying the reasons for such exclusions. To begin with, India's resistance to publicly talking to the Taliban has made it an awkward interlocutor at any table. Its position that only an Afghan-led, Afghan-owned, and Afghan-controlled process can be allowed is a principled one, but has no takers. Kabul, or the Ashraf Ghani government does not lead, own

Shatabdi Tower, Sakchi, Jamshedpur



or control the reconciliation process today, comprising the U.S.-Taliban negotiation for an American troops' withdrawal, and intra-Afghan talks on power sharing. **The U.S.-Taliban peace deal means that the Taliban, which has not let up on violent attacks on the Afghan Army, will become more potent as the U.S. withdraws soldiers from the country, and will hold more sway in the inter-Afghan process as well, as the U.S. withdraws funding for the government in Kabul.** New Delhi's decision to **put all its eggs in the Ghani basket has had a two-fold effect: its voice in the reconciliation process has been limited, and it has weakened India's position with other leaders of the deeply divided democratic setup in Kabul such as the former chief executive Abdullah Abdullah.** Meanwhile, India's presence inside Afghanistan, which has been painstakingly built up since 2001, is being threatened anew by terror groups such as the Islamic State Khorasan Province (ISKP), believed to be backed by Pakistan's establishment. Intercepts showed that the brutal attack, in March, that killed 25 at a gurudwara in Kabul was meant for the embassy in Kabul, and intelligence agencies had warned of suicide car bomb threats to the **consulates in Jalalabad and Herat** last December. While the government has said that the novel coronavirus pandemic prompted its decision to **clear out both consulates** this month, the truth is that a full security reassessment is under way for them. Either way, India's diplomatic strength in Afghanistan should not appear to be in retreat just when it is needed the most.

What Dents India's Goodwill

The government must also consider the damage done to the vast reservoir of goodwill India enjoys in Afghanistan because of recent events in the country, especially the controversy over the Citizenship (Amendment) Act. The building blocks of that goodwill are India's assistance in infrastructure projects, health care, education, trade and food security, and also in the liberal access to Afghans to study, train and work in India. Above all, it is India's example as a pluralistic, inclusive democracy that inspires many. **Afghanistan's majority-Muslim citizens, many of whom have treated India as a second home, have felt cut out of the move to offer fast track citizenship to only Afghan minorities, as much as they have by reports of anti-Muslim rhetoric and incidents of violence in India.** While many of these are problems of perception, New Delhi must move swiftly to regain the upper hand in the narrative in Afghanistan. India's assistance of more than \$3 billion in projects, trade of about \$1 billion, a \$20 billion projected development expenditure of an alternate route through Chabahar, as well as its support to the Afghan National Army, bureaucrats, doctors and other professionals for training in India should assure it a leading position in Afghanistan's regional formulation. Three major projects: **the Afghan Parliament, the Zaranj-Delaram Highway, and the Afghanistan-India Friendship Dam (Salma dam),** along with hundreds of small development projects (of schools, hospitals and water projects) have cemented that position in Afghan hearts nationwide, regardless of Pakistan's attempts to undermine that position, particularly in the South. As a result, **it would be a mistake, at this point, to tie all India's support in only to Kabul or the Ghani government; the government must strive to ensure that its aid and assistance is broad-based, particularly during the novel coronavirus pandemic to centres outside the capital, even if some lie in areas held by the Taliban.**

Making A Leap

India must also pursue opportunities to fulfil its role in the peace efforts in Afghanistan, starting with efforts to bridge the Ghani-Abdullah divide, and bringing together other major leaders with whom India has built ties for decades. It would be an utter tragedy if the Taliban were to enter the government in Kabul as the U.S. deal envisages, to find the opposing front collapse as it did in 1996. The conversation India's External Affairs Minister S. Jaishankar had with the U.S.'s Special Envoy Zalmay Khalilzad, where they discussed India's "engagement" in the peace process, appears to open a window in that direction. **An understanding between Iran**



and the U.S. on Afghanistan is necessary for lasting peace as well, and India could play a mediatory part, as it did in order for the Chabahar project. Finally, New Delhi should use the United Nation's call for a pause in conflicts during the novel coronavirus pandemic, to ensure a hold on hostilities with Pakistan. This will be even more difficult than it sounds, given the abyss that bilateral relations have fallen into in the past year over Kashmir and the rise in firepower exchanged at the Line of Control. However, if there is one lesson that the U.S.-Taliban talks have imparted, it is that both have found it necessary to come to the table for talks on Afghanistan's future. For India, given its abiding interest in Afghanistan's success and traditional warmth for its people, making that leap should be a bit easier. Above all, the government must consider the appointment of a special envoy, as it has been done in the past, to deal with its efforts in Afghanistan, which need both diplomatic agility and a firmness of purpose at a watershed moment in that country's history.

For BRICS, Challenges and Opportunities

- The COVID-19 crisis seems to have put Russia's Presidency of BRICS (a grouping of **Brazil, Russia, India, China and South Africa**) to the test. While each BRICS country is busy fighting the pandemic in its own way, Moscow is trying to make sure that it gains from the crisis. The plans for 12th BRICS summit, scheduled for July 21-23 in St. Petersburg, are still on, although many believe it could be postponed or organised online. **Speaking at a summit in Brasilia on November 14, 2019, Russian President Vladimir Putin said BRICS should pay special attention to expanding foreign policy coordination, primarily at the UN.** Many experts believe the COVID-19 pandemic that highlighted a crisis of globalisation and global governance could help the Russian President convince his BRICS partners to overcome the lack of common vision, especially in the political domain, and lead the group towards filling the void of governance. A report, "BRICS and the Rivalry Pandemic", released by Russian think-tank Valdai Club this week, notes that the question of considering BRICS as a global governance institution has now come to the fore. It argues that COVID-19 is another stage for political rivalry that has reinforced some international disputes and conflicts with the U.S. "ratcheting up its confrontational policy towards China and Russia". In this scenario, BRICS emerges as an important global governance institution. "BRICS looks better than other global governance institutions amidst the ongoing COVID crises. There is no blame-game or pointing fingers within BRICS, rather there is only a common vision for intensifying cooperation, including in sectors like healthcare, social welfare,". The pandemic has intensified the fight for global leadership and the tools used in this fight, such as economic sanctions and trade wars, would keep developing and improving. While G7, created during the Cold War, is today used by the leading Western powers to strengthen their position in the competition with non-West and to restore a rules-based international order, BRICS is based on entirely different values, and adheres to the goals and objectives of the UN Charter and the idea of equality. The BRICS grouping is often criticised for being ineffective. Many, especially in the West, predicted that it would not live long. **But BRICS is very much alive, has progressed on developing a common position on the most important matters of the global economy and security and also got institutionalised with the setting up of the BRICS New Development Bank in 2015.**

Slow Progress

However, disagreements between its members and slow progress shown on the ground when it comes to implementation of initiatives make it quite vulnerable to criticism. This is exactly where the pandemic could help BRICS, experts believe. So, what can be done? "The pandemic has highlighted that the five countries need to pay more attention to speeding up the practical implementation of the projects and decisions that are being agreed on,". Work should be accelerated on establishing the BRICS Centre for Research and Development of vaccines. The



decision to set it up was taken back in 2018 at the Johannesburg summit. Apart from that, BRICS countries are planning to work on an early warning mechanism for outbreaks of infection, the development of diagnostic and preventive measures for the disease, as well as joint epidemiological exercises while the New Development Bank would provide financial anti-crisis assistance to members to fight the pandemic. The intentions are good, but money could be an issue, said Nandan Unnikrishnan from Observer Research Foundation (ORF), New Delhi. "There is going to be very serious lack of money as all the countries in the BRICS are going to be economically affected because of COVID," he said. "So, at this juncture, BRICS should focus on what is achievable, making sure it uses the crises time to find a common vision, lack of which has always been one its weaknesses."

Study on China Dams Brings the Brahmaputra Into Focus

→ A new study highlighting the **impact of China's dams on the Mekong river** has raised fresh questions on whether dams being built on other rivers that originate in China, such as the Brahmaputra, may similarly impact countries downstream. While China's southwestern Yunnan province had above-average rainfall from May to October 2019, there was "**severe lack of water in the lower Mekong**", the study found based on satellite data from 1992 to 2019. **The Mekong flows from China to Myanmar, Laos, Thailand, Cambodia and Vietnam.** The Mekong River Commission, which comprises Cambodia, Laos, Thailand, and Vietnam, has said more scientific evidence was needed to establish whether dams caused a 2019 drought. The study released this month said **six dams built since the commissioning of the Nuozhadu dam in 2012 had altered natural flow of the river.** It was published by the **Sustainable Infrastructure Partnership in Bangkok** and the Lower Mekong Initiative, which is a U.S. partnership with all the downstream countries besides Myanmar. The study was funded by the U.S. government.

'Groundless Study'

China has maintained that the dams it is building on the river, known as the Lancang there, are "run of the river" dams that only store water for power generation. The Foreign Ministry said the study was "groundless". Yunnan had also suffered from drought, while the Lancang only accounted for 13.5% of the Mekong's flows. **India has long expressed concerns over dam-building on the Brahmaputra.** In 2015, China operationalised its first hydropower project at Zangmu, while three other dams at Dagu, Jiexu and Jiacha are being developed. **Indian officials have said the dams are not likely to impact the quantity of the Brahmaputra's flows because they are only storing water for power generation. Moreover, the Brahmaputra is not entirely dependent on upstream flows and an estimated 35% of its basin is in India. India does not have a water-sharing agreement with China, but both sides share hydrological data.** "We have got China to cooperate with us for warnings on how floods are moving down the **Yarlung Tsangpo** and into the Brahmaputra, so that



the study was "groundless". Yunnan had also suffered from drought, while the Lancang only accounted for 13.5% of the Mekong's flows. **India has long expressed concerns over dam-building on the Brahmaputra.** In 2015, China operationalised its first hydropower project at Zangmu, while three other dams at Dagu, Jiexu and Jiacha are being developed. **Indian officials have said the dams are not likely to impact the quantity of the Brahmaputra's flows because they are only storing water for power generation. Moreover, the Brahmaputra is not entirely dependent on upstream flows and an estimated 35% of its basin is in India. India does not have a water-sharing agreement with China, but both sides share hydrological data.** "We have got China to cooperate with us for warnings on how floods are moving down the **Yarlung Tsangpo** and into the Brahmaputra, so that



we can warn our population living in low-lying areas and move them safely to higher ground,” said Gautam Bambawale, who was India’s Ambassador to China until December 2018. “India will continue to raise the issue of river waters in the Brahmaputra with China, as that appears to be the only methodology to ensure what happened on Mekong does not happen on Brahmaputra,” he said.

India Remains on U.S. Priority Watch List

→ India continues to be on the ‘Priority Watch List’ of the United States Trade Representative (USTR) for lack of adequate intellectual property (IP) rights protection and enforcement, the USTR said in its Annual Special 301 Report, released. India remained one of the most challenging economies for IP enforcement and protection, the report said, using language it has used previously. Algeria, Argentina, Chile, China, Indonesia, Russia, Saudi Arabia, Ukraine and Venezuela are also on the Priority Watch List. While India made “meaningful progress” to enhance IP protection and enforcement in some areas over the past year, it did not resolve recent and long-standing challenges, and created new ones, the report said. The same assessment was made in the 2019 report. These long-standing concerns were about innovators being able to receive, maintain and enforce patents particularly in the pharmaceutical sector; concerns over copyright laws not incentivising the creation and commercialisation of content; and an outdated trade secrets framework. “India also further restricted the transparency of information provided on state-issued pharmaceutical manufacturing licenses, continues to apply restrictive patentability criteria to reject pharmaceutical patents, and still has not established an effective system for protecting against the unfair commercial use, as well as the unauthorized disclosure, of undisclosed test or other data generated to obtain marketing approval for pharmaceuticals and certain agricultural chemical products,” the report said. The report also mentioned high customs duties on medical devices and Information and Communications Technology. These goods categories were persistent challenges in trade talks between the two countries last year – the language used in the 2020 report in this context is the same as in the 2019 report. Online IP enforcement in India has improved, the report said, but progress is undercut by factors including weak enforcement by courts and the police, lack of familiarity with investigative techniques and no centralised IP enforcement agency.

Religion and Freedom

→ Religious freedom is of paramount importance, not because it is about religion, but because it is about freedom. The characterisation by the U.S. Commission on International Religious Freedom (USCIRF) of India as a country of particular concern, in its annual report, is not entirely surprising, considering its dim and known views about sectarian violence and aggravating governmental measures over the last year. The Indian government not only repudiated the report but also ridiculed the USCIRF. The autonomous, bipartisan commission’s influence over any U.S. executive action is limited and occasional but its presumption of global authority appears amusingly expansive. Whether or not the U.S. government acts on its recommendation to impose targeted sanctions on Indian government agencies and officials depends on American strategic interests. The U.S. has used arguments of freedom, democracy, tolerance, and transparency as tools in its strategic pursuits, but there is no proof of any uniform or predictable pattern of enforcement of such moral attributes. The process can be selective and often arbitrary in spotlighting countries. Mirroring this pattern, India selectively approaches global opinions on itself, embracing and celebrating laudatory ones and rejecting inconvenient ones. The frantic, and relatively successful, efforts to raise its Ease of Doing Business ranking by the World Bank is a case in point. Many of these reports have a



circulatory life – the USCIRF report quotes UN Special Rapporteurs to buttress its point on the discriminatory outcome of the National Register of Citizens in Assam. Overall, such reports contribute to the construction of an image of a country, and the Indian government is cognisant of this pattern. In March, the Indian government told Niti Aayog to track 32 global indices and engage with the bodies that measure them, to advance reform and growth. India advertises itself as a multi-religious democracy and as an adherent to global norms of rule of law. It also aspires to be on the table of global rule making. For a country with such stated ambitions, its record on religious freedom as reflected through events of the last one year is deeply disconcerting. The catalogue of religious violence, incitement and wrecking of the rule of law in several parts of the country remains an unsettling fact. The partisan nature of the ruling dispensation is also difficult to wish away. Reputation is important for a country's economic development and global standing but beyond that instrumental perspective, rule of law and communal harmony are essential for any functioning democracy.



Nation

Regulating Academics Is in National, Public Interest: SC

- ➔ Regulating academics and imposing reasonable restrictions to ensure educational standards are in national and public interest, a three-judge Bench of the Supreme Court ruled, holding that the National Eligibility-cum-Entrance Test (NEET) is mandatory for admission to medical colleges run by religious and linguistic minority communities. The right to freedom of trade or business is not absolute. It is subject to “reasonable restriction in the interest of the students’ community to promote merit, recognition of excellence, and to curb the malpractices. A uniform entrance test qualifies the test of proportionality and is reasonable”, Justice Arun Mishra wrote for the Bench comprising Justices Vineet Saran and M.R. Shah. “NEET is intended to check several maladies which crept into medical education, to prevent capitation fee by admitting students which are lower in merit and to prevent exploitation, profiteering, and commercialisation of education. The institution has to be a capable vehicle of education,” Justice Mishra observed. The court said minority institutions were equally bound to comply with the conditions imposed under the law. The regulations, including admission through NEET, were neither divisive or dis-integrative. They were necessary. The judgment was based on a challenge by the colleges to several notifications issued by the Medical Council of India (MCI) and the Dental Council of India (DCI) under Sections 10D of the Indian Medical Council Act, 1956, and the Dentists Act, 1948, for uniform entrance examinations. “Professional educational institutions constitute a class by themselves. Specific measures to make the administration of such institutions transparent can be imposed. The rights available under Article 30 [right of minorities to administer their institutions] are not violated by provisions carved out in Section 10D of the MCI Act and the Dentists Act and Regulations framed by MCI/DCI,” the court held.
- ➔ The court dismissed arguments by the managements of several minority-run medical institutions, including the Christian Medical College Vellore Association, that bringing them uniformly under the ambit of NEET would be a violation of their fundamental right to “occupation, trade and business”. The colleges had argued that imposing NEET would violate their fundamental rights of religious freedom, to manage their religious affairs, to administer their institutions. They said the State was reneging on its obligation to act in the best interest of minorities. But Justice Mishra, who wrote the 108-page judgment, said it was time the field



of education returned to the “realm of charity”, a character it had lost over the years. NEET was brought in to weed out malpractices in the field.

Virtual, Yet Open

→ Amidst the national lockdown, the Supreme Court and several other courts have been holding virtual proceedings. A question of concern to the Bar is whether virtual courts have become the “new normal” and whether it means a move away from the idea of open courts towards technology-based administration of justice without the physical presence of lawyers and litigants. Chief Justice of India S.A. Bobde emphasises that virtual courts are open courts too; and that one cannot describe them as closed or in camera proceedings. The correct way of framing the difference, he says, is to call them virtual courts as distinct from “courts in congregation”. A three-judge Bench headed by the CJI, in an order earlier this month, laid down broad norms for courts using video-conferencing and ratified the validity of virtual judicial proceedings. Two aspects are not in dispute: the vital necessity to keep the courts open even during a national lockdown so that access to justice is not denied to anyone; and second, the need to maintain physical distancing. The Supreme Court Bar Association has written to the CJI and other judges that open court hearings should be restored at the earliest, subject of course to the lockdown ending. Citing earlier judgments on the importance of open court hearings, the SCBA has requested that the use of video conferencing should be limited to the duration of the current crisis, and not become the “new normal” or go on to replace open court hearings.

The SCBA also has a specific request: that proceedings held virtually may also be streamed live so that access is not limited to the lawyers concerned, but is also available to the litigants and the public. The court administration should readily agree to this. Advocates appearing in a particular case are now barred from sharing the passwords given to them to join the proceedings through video conference. While it is theoretically possible for the parties to join their lawyers during the hearing, in practice they may be unable to travel to their offices. Media access is also limited. These issues can be resolved through live-streaming. And in the longer term, it should become the general practice. As the use of technology is stepped up, courts should consider other steps that will speed up the judicial process and reduce courtroom crowding. In the lower courts, evidence could be recorded, with the consent of parties, by virtual means. In the higher courts, a system based on advance submission of written briefs and allocation of time slots for oral arguments can be put in place. It may even lead to more concise judgments. Despite the possibility of technical and connectivity issues affecting the process, one must recognise that virtual hearings are no different from open court conversations, provided access is not limited. The opportunity now to improve the judicial process must be utilised well.

Explain MHA Order on Full Wages, SC Tells Govt.

→ The Supreme Court has given the Centre two weeks to explain a Ministry of Home Affairs (MHA) order, issued on March 29, directing employers to pay full wages to their workers during the lockdown. A three-judge Bench, led by Justice N.V. Ramana, allowed Solicitor-General Tushar Mehta, appearing for the government, to file his response to a batch of petitions filed by several companies challenging the constitutional validity of the March 29 order, which mandates that industry, shops and commercial establishments, without exception, pay their workers without any deduction in the name of COVID-19. The petitions said a blanket direction to private establishments to pay full salaries against no work was arbitrary and violative of Article 14 (right to equality) of the Constitution.



'No Obligation'

"It is implicit in the fundamental right of an employer to trade or business that there is an obligation to pay when work is actually done and there is no obligation if no work is done. An employer and employee have reciprocal promises whereby the right of an employee to demand salary is reciprocal to performance of work by such employee. The employer has a right to not pay if no work is done," the petition filed by private firms such as Nagreeka Exports Limited and Ficus Pax Private Ltd. said.

EC Vague on RTI Asking If J&K Is in Electoral College

- The Election Commission of India (ECI) has replied ambiguously to a Right to Information (RTI) query **if the Union Territory of Jammu and Kashmir will be part of the Electoral College for the election of the President of India**. The RTI request by Shubham Khatri, a student, sought a list of the State and Union Territory Legislative Assemblies which were part of the Electoral College for election of the President. He also asked the EC to clarify if the newly-formed Union Territory of J&K was part of the Electoral College. The EC sent a single-line response, merely saying "for the information, applicant may be informed to refer Article 54 of the Constitution of India." Under Article 54, the President is elected by an Electoral College, which consists of the elected members of both Houses of Parliament and the elected members of the Legislative Assemblies of all the States and also of Delhi NCT and Puducherry U.T. **Article 54**, thus, only specifically mentions NCT of Delhi and Puducherry as eligible to be part of the Electoral College. The **J&K Reorganisation Act** does not specify anything about whether the legislature would be able to vote in the election for a President. A passing mention is made in **Section 13 of the 2019 Act**, which claims that J&K Legislature would have the same powers as its Puducherry counterpart.

Kashmir Saffron Gets GI Tag

- Kashmir saffron, which is cultivated and harvested in the **Karewa (highlands) of Jammu and Kashmir**, has been given the **Geographical Indication (GI) tag** by the Geographical Indications Registry. The spice is grown in some regions of Kashmir, including Pulwama, Budgam, Kishtwar and Srinagar. The application was filed by the Directorate of Agriculture, Government of Jammu and Kashmir, and facilitated by the Sher-e-Kashmir University of Agriculture Sciences and Technology, Kashmir, and Saffron Research Station, Dussu (Pampore).

'Very Precious'

Chinnaraja G. Naidu, Deputy Registrar of Geographical Indications, said, "Kashmir saffron is a very precious and costly product. **Iran is the largest producer of saffron and India is a close competitor**. With the GI tag, Kashmir saffron would gain more prominence in the export market," he added. **Kashmir saffron is renowned globally as a spice**. It rejuvenates health and is used in cosmetics and for medicinal purposes. It has been associated with traditional Kashmiri cuisine and represents the rich cultural heritage of the region. The unique characteristics of Kashmir saffron are its **longer and thicker stigmas**, natural **deep-red colour**, **high aroma**, **bitter flavour**, **chemical-free processing**, and **high quantity of crocin (colouring strength)**, **safranal (flavour)** and **picrocrocin (bitterness)**. **It is the only saffron in the world grown at an altitude of 1,600 m to 1,800 m AMSL (above mean sea level)**. The saffron available in Kashmir is of three types – '**Lachha Saffron**', with stigmas just separated from the flowers and dried without further processing; '**Mongra Saffron**', in which stigmas are detached from the flower, dried in the sun and processed traditionally; and '**Guchhi Saffron**', which is the same as Lachha, except that the latter's dried stigmas are packed loosely in air-tight containers while the former has stigmas joined together in a bundle tied with a cloth thread.



GI Tag to Manipur Black Rice, Gorakhpur Terracotta

→ Chak-Hao, which is a black rice variety of Manipur, and Gorakhpur terracotta have bagged the Geographical Indication (GI) tag. The application for Chak-Hao was filed by the Consortium of Producers of Chak-Hao (Black Rice), Manipur and was facilitated by the Department of Agriculture, Government of Manipur and the North Eastern Regional Agricultural Marketing Corporation Limited (NERAMAC). In the case of Gorakhpur terracotta, the application was filed by Laxmi Terracotta Murtikala Kendra in Uttar Pradesh. Chak-Hao, a scented glutinous rice which has been in cultivation in Manipur over centuries, is characterised by its special aroma. It is normally eaten during community feasts and is served as Chak-Hao kheer. Chak-Hao has also been used by traditional medical practitioners as part of traditional medicine. According to the GI application filed, this rice takes the longest cooking time of 40-45 minutes due to the presence of a fibrous bran layer and higher crude fibre content. At present, the traditional system of Chak-Hao cultivation is practised in some pockets of Manipur. Direct sowing of pre-soaked seeds and also transplantation of rice seedlings raised in nurseries in puddled fields are widely practised in the State's wetlands. The terracotta work of Gorakhpur is a centuries-old traditional art form, where the potters make various animal figures like, horses, elephants, camel, goat and ox with hand-applied ornamentation. Some of the major products of craftsmanship include the Hauda elephants, Mahawatdar horse, deer, camel, five-faced Ganesha, singled-faced Ganesha, elephant table, chandeliers and hanging bells.

Strategic Shift

→ On March 28, only 130 districts of India's 736 had reported COVID-19 cases. The Health Ministry's strategy then, after the national lockdown, was to ensure State supervision of those who manifested symptoms – as well as their high-risk contacts – and who had a travel history. Suspected high-risk contacts or those likely to have been exposed to the infection were subjected to varying degrees of State quarantine. Those not showing signs of the disease or 'mild' manifestations, were put in care centres and those noticeably sicker, in hospitals. The idea always was that if the sick and their contacts were segregated from the community long enough, the transmission chain would be broken and the disease extinguished. As April ends, the number of affected districts stands at 401 and confirmed cases have risen by a 1,000 a day; the daily death count hovers between 50 and 60. In a containment strategy tweak, those with a mild form of the disease, or are pre-symptomatic, would have the option of home quarantining. But their homes ought to have self-isolation facilities, a full-time caregiver, and daily health-status reports given to the district surveillance officer. The Health Ministry has not explained what prompted this relative relaxation. However, anecdotal evidence suggests doctors and health-care workers have been disproportionately vulnerable to the infection and a single case leads to entire hospitals being shut down. Unlike in the U.S. and western Europe, India's hospitals are not yet clogged with seriously ill patients. It could be due to India's relatively low case-count and also people not turning up fearing infection. Allowing home quarantine could be seen as health authorities inferring that quarantining in public facilities posed more risks. The pre-symptomatics (mild illness) and asymptomatics (no signs) did not benefit from treatment and were potent virus spreaders, and therefore endangered the staff and health workers. They also stretched State resources in maintenance. The Ministry also found that among those who tested positive, there were two pre-symptomatics or asymptomatics for every symptomatic. The disease spread, it appears, is now beyond the ability of the state to contain, by quarantine, and it was far more prudent to fortify health workers and hospitals with the best facilities available to handle patients. Officially, there is no community transmission in India but at this magnitude of cases, it does



not practically matter. Gujarat, Maharashtra, Madhya Pradesh and Delhi are powering the spread of cases and only consistent declines here can broach discussion on the end of the pandemic. From a month ago, India, on paper, is equipped with better supply channels of personal protective equipment, infusion pumps (for oxygen), hospital beds, laboratories for testing and PCR kits. If the lockdown is lifted on May 3, the rationale behind the government's containment strategy will be put to a stringent test.

What Are the Concerns Around the Aarogya Setu App?

- On April 2, the Aarogya Setu app – for pan-India use and available in 11 languages – was launched as the main contact tracing technology endorsed by the Central government. Developed by the National Informatics Centre under the Ministry of Electronics & Information Technology, the app got its biggest push when Prime Minister Narendra Modi urged the nation to download it while announcing the extension of the national lockdown till May 3. Soon it became one of the most downloaded apps globally, and has crossed the 75 million mark. The app has now added on functionalities such as donating to the Prime Minister's Citizen Assistance and Relief in Emergency Situations Fund, or PM CARES fund, and hosting e-passes for essential services providers.

How Does the App Work?

It is designed to keep track of other Aarogya Setu users that a person came in contact with, and alert him or her if any of the contacts tests positive for COVID-19. It achieves this using the phone's Bluetooth and GPS capabilities. The app will keep a record of all other **Aarogya Setu users that it detected nearby using Bluetooth, and also a GPS log of all the places that the device had been at 15-minute intervals. These records are stored on the phone till the time any user tests positive or declares symptoms of COVID-19 in a self-assessment survey in the app.** In such cases, the records are uploaded to the servers. According to the privacy policy of the app, it gives users a colour coding of green and yellow based on their self-assessment. **The data of users who fall in the yellow category are uploaded to the server, while that of those in the green category – purportedly the lower risk group – is retained in the app.** While registering, the app collects a set of personal information such as name, sex, age, phone number, current location and travel history that is uploaded to government servers, which then generates a unique digital identity for that user. **When the Bluetooth of two Aarogya Setu users sniff each other out, this unique digital identity is exchanged along with the time and location of the meeting.** When an app user tests positive, all unique digital identities in his or her records get an alert on the risk they face and instructions on self-isolation and next steps.

Has It Been Effective?

The Aarogya Setu app faces the same issue as every other contact tracing technology that has come up during the pandemic period – it is people dependent. It needs widespread usage and self-reporting to be effective. Given that any number of total users will be a subset of smartphone owners in India, and there are bound to be variations in the levels of self-reporting, the efficacy is not bulletproof. The terms of use of the app also say as much, distancing the government from any failure on the part of the app in correctly identifying COVID-19 patients. Jason Bay, the brain behind Trace Together, a contact tracing app from Singapore which has been among the more successful ones, emphasised the point that “automated contact tracing is not a panacea”.



Are There Privacy Concerns?

Definitely. First of all, the **app exists in the privacy law vacuum** that is India. With no legislation that spells out in detail how the online privacy of Indians is to be protected, Aarogya Setu users have little choice but to accept the privacy policy provided by the government. The policy goes into some detail on where and how long the data will be retained, but **it leaves the language around who will have access to it vague**. As per the policy, “**persons carrying out medical and administrative interventions necessary in relation to COVID-19**” will have access to the data. According to a working paper from the Internet Freedom Foundation, this “suggests interdepartmental exchanges of people’s personal information” and is “more excessive than countries like Singapore and even Israel”. Beyond the legal loopholes, there are technical loopholes as well. **The unique digital identity in Aarogya Setu is a static number, which increases the probability of identity breaches. A better approach would be constantly-changing digital identification keys like what Google and Apple deploy in their joint contact tracing technology.** The abundance of data collected is also potentially problematic. **Aarogya Setu uses both Bluetooth and GPS reference points, which could be seen as an overkill. Other apps such as Trace Together make do with Bluetooth.** Another issue that forums such as the Internet Freedom Foundation and the Software Freedom Law Centre have raised is that the Aarogya Setu app is something of a black box. There is no documentation publicly available on the app. The advocacy groups argue that there should be more transparency on the inner workings of an app that is being promoted by the government and which is asking for the personal details of millions of citizens.

How Is the Apple-Google Project Different?

The two technology giants that had till date baulked at the idea of offering integrations with each other’s operating systems, are now doing so, thanks to a global crisis. **Android and iOS phones will be able to talk to each other via Bluetooth.** While they are currently offering it built into government health-care apps, this facility may soon be baked into operating systems. This may mean that different health-care apps will also be able to speak to one another using this channel, ensuring wider reach. While Google and Apple have emphasised that consent would be required for this feature to track you, privacy concerns prevail here too.

- The Union government has made Aarogya Setu, its contact-tracing application, its signal response to the pandemic. Thus far, details of the application’s technical architecture and its source code have not been made public. The programme also shares worrying parallels with the Aadhaar project in that **its institution is not backed by legislation**. Like Aadhaar it increasingly seems that the application will be used as an object of coercion. There have already been reports of **employees of both private and public institutions being compelled to download the application**. Also, much like Aadhaar, Aarogya Setu is framed as a necessary technological invasion into personal privacy, in a bid to achieve a larger social purpose. But without a statutory framework, and in the absence of a data protection law, the application’s reach is boundless. One shudders to think how the huge tranches of personal data that it will collect will be deployed.

To be sure, the right to privacy is not absolute. There exist circumstances in which the right can be legitimately curtailed. However, any such restriction, as the Court held in Puttaswamy, must be tested against the **requirements of legality, necessity and the doctrine of proportionality**. This will require government to show us, first, that the restriction is sanctioned by legislation; second, that the restriction made is in pursuance of a legitimate state aim; third, that there exists a rational relationship between the purpose and the restriction made; and fourth, that the State has chosen the “least restrictive” measure available to achieve its objective. In this case, not only are **the government’s technological solutions unfounded in legislation, there is also little to suggest that they represent the least restrictive measures**



available. Our fight against COVID-19 is no war. Even if it were, our Constitution is intended for all times – for times of peace and for times of crises.

Ministry Does U-Turn on Plasma Therapy

- Plasma therapy is not an approved treatment for COVID-19 and is only one of the several therapies being explored currently, the Union Health Ministry said on Tuesday. The therapy is still at an experimental stage and the Indian Council for Medical Research (ICMR) is currently studying its efficacy, it added. “ICMR has not given any clearance for its use as a prescribed treatment and the misuse can have fatal outcome for the patients,” the Ministry said. The Health Ministry statement comes days after the Drug Controller General of India gave its go-ahead to a proposal by the ICMR for the clinical trial of convalescent plasma therapy in COVID-19 patients as per the protocol developed by the Council.

Evidence Not Enough

The ICMR has launched a national-level study to look into the efficacy of plasma therapy in treatment of COVID-19. “Till the ICMR concludes its study and a robust scientific proof is available, plasma therapy should be used only for research or trial purpose. If plasma therapy is not used in proper manner under proper guidelines, then it can also cause life threatening complications,” he cautioned. Last week, Union Health Minister Harsh Vardhan had asked the Indian Red Cross Society (IRCS) to contact recovered COVID-19 patients to come forward for blood donation, from which convalescent plasma could be collected and used. “As mentioned by ICMR, the convalescent plasma will be really helpful in treating severe and serious COVID-19 patients,” Mr. Vardhan had said. Several States across India too have been using and advocating for the therapy with Uttar Pradesh Chief Minister Yogi Adityanath directing officials to encourage use of plasma therapy for the treatment of infected people and to increase testing capacity. Delhi, Gujarat and Maharashtra, among other States, have started clinical trials for the plasma-based treatment.

Vividly Imagining the Life of Migrant Workers

- Socioeconomic rights, including the right to work, have long been part of our Directive Principles of State Policy. By enacting the Mahatma Gandhi National Rural Employment Guarantee Act law in 2005, the Indian Parliament had set in motion a process that makes a specific and significant welfare provision constitutive of the very idea of citizenship. To be a citizen of a polity is to be entitled to an opportunity to work. Now, manual work in extremely hot conditions on parched terrain is an energy-draining, back-breaking chore, not quite a source of self-realisation central to the emancipatory vision of Gandhi, Hegel or Marx. And yet, even such paid manual labour is a far cry from receiving charity. Under democratic norms of equality, living on charity is demeaning and lowers self-esteem. There is a sense in which any voluntary work, no matter how arduous, quietly uplifts and enhances dignity and basic self-respect – a point gracefully underscored by a group of painters (migrant labour) in Palsana, Sikar in Rajasthan, when they chose to give a fresh coat of paint to an entire school building in return for the shelter provided to them during lockdown. Work is one among many sources of satisfaction and self-respect. Our Directive Principles focus on others – proper housing, for instance. It is time the state took these seriously. While no state can build a home – which needs personal care and must be our own handiwork – the right to housing can certainly be guaranteed for it is implicit in the article enjoining the state to provide a decent standard of living.



Multiple Deprivations

However, such social policies will not be forthcoming unless we, who make these policies, stopped viewing the poor as sub-human. This is a controversial statement and requires some explanation. I believe the best of us carry the image of the poor as labouring creatures with basic material needs who beget children. They suffer when deprived of these material needs. Our humanity lies in empathetically acknowledging this suffering. This, however, is not an image that we have of ourselves. We have more complex social, cultural, political and even spiritual needs. We need quality time with our children, and leisure for ourselves; companionship and friendship, a flourishing social life; music, literature, art, poetry; time to fulfil our obligations in the public domain. And of course, we need our privacy, hours of solitude, space for self-reflection. Our suffering too is different: we have anxieties and phobias, inner turmoil, loss of a sense of self. Assuming these profound differences between them and us, it does not cross our minds that the **poor have multiple deprivations – not only material but social, cultural, familial, spiritual**. When did a policymaker ever worry about the quality of family or spiritual life among the poor? Or whether they have time for their children or for leisure? Or how impoverished they might be because of their inability to adequately self-reflect. I do not wish to make the absurd demand that our state policies be designed to care for all these non-material needs. **My point is that unless policymakers have the same conception of the poor as they have of themselves – persons with rich, varied and complex needs – they will not realise the grave consequences of the material deprivations endured by the poor or show the urgency to remove them.** In short, policymakers need to realise that they deal with complete human beings. Unless they are able to vividly imagine the poor as fully human, they will never design proper policies to address even their material needs. Alas, this will not happen unless policymakers feel their pain – literature and cinema can help here – and there is real, continuing contact between the two.

- ➔ Some migrant workers, who stare at a continuing loss of livelihoods in their adopted places of work, are better off depending upon the social safety nets and familial support structures in their native places. They should be allowed to avail these in a dignified and humane way. Restarting work under the MGNREGA that went dormant in the earlier period of the lockdown, has provided an incentive for workers to leave for their native places. It is evident that the option of keeping workers at their respective places is no longer viable and the Centre must work at ways to allow for their transport to their native places.

U.P., Bihar Migrants Can Get Rations in Other States Too

- ➔ Uttar Pradesh and Bihar joined the Centre's ration card portability scheme on International Labour Day, offering some hope that their huge migrant worker populations can start accessing subsidised and free food grains in many of the States where they have been left stranded by the COVID-19 lockdown. Punjab, Himachal Pradesh, Dadra and Nagar Haveli and Daman and Diu also joined the national cluster under the Food Ministry's One Nation One Ration Card scheme, **taking the total number of integrated States and Union Territories to 17**, according to a Food Ministry statement. The other States which are already part of the national cluster are Andhra Pradesh, Goa, Gujarat, Haryana, Jharkhand, Kerala, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Telangana and Tripura.

June 1 Deadline

All remaining States and Union Territories are supposed to come on board by June 1. However, the integration of States is running behind schedule, with a number of remaining States yet to complete installation of electronic point of sale machines at all ration shops and seeding of Aadhaar data into their NFSA databases. In a mid-April interview, Food Minister Ram Vilas



Paswan told The Hindu that “the project has been halted now because of the pandemic”. However, on April 28, the Supreme Court directed the Centre to consider whether it was possible to implement the scheme, keeping in mind the plight of migrants left stranded by the pandemic. **The addition of five new States potentially means nearly 60 crore beneficiaries of the National Food Security Act (NFSA) can now use their ration cards, issued in their home States, to pick up their entitled quota of food grains from any ration shop of their choice in these 17 States and Union Territories. However, the Centre has qualified that actual implementation is still dependent on “on-field readiness”, so it remains to be seen when workers start using the facility.** Also, Aadhaar is a precondition for availing this facility as the biometric ID is used to ensure that beneficiaries are not claiming food grains in multiple States, above their entitled quota. The Food Ministry has earlier clarified that a single family holding one ration card can **split the locations** from where they pick up their ration. If one migrant worker from the family is in a distant city while the rest of the family remains in their home village, **both can avail themselves of a 50% portion of the ration allocation in the two different locations by providing ration card and Aadhaar authentication.** The Food Ministry has activated the facility for web-services for inter-State transactions and monitoring through central dashboards with immediate effect. All 17 States have been requested to formally start seamless portability operations in a single cluster with effect from May 1, “or at the earliest, depending on their on-field readiness”, said the statement.

Punjab Could See More Areas Under Cotton Cultivation

- Punjab can see around three lakh acres more under the **cotton crop this kharif (summer) season against the previous year as farmers could shift from paddy (rice) on account of possible labour shortage** in the State. Also, State government’s push for crop diversification would be another factor that could aid the acreage under cotton, farmers and traders told The Hindu. “Labour from Bihar and Uttar Pradesh have an expertise in planting paddy but with many of them back to their native places there will be some difficulty,” said Rakesh Rathi, former president of India Cotton Association Limited. **In Punjab and Haryana, BT cotton is sown in over 95% of the total area, the rest 5% cotton is usually the indigenous (desi) cotton varieties.** Cotton is usually planted from mid-April to till late May in most parts of the two States. “Paddy is a labour-intensive crop and if migrant labour doesn’t return in the coming months then surely many farmers, where sowing cotton is a viable option will go for it. I am sure the area under cotton will increase this season in Punjab. Also, the government is promoting cotton sowing,”. The Punjab government has set a target of enhancing the area under cotton cultivation from 9.7 lakh acres last year to 12.5 lakh acres in 2020, in a bid to promote crop-diversification. Government data shows that in year 2018 cotton was sown in 6.62 lakh acres and in 9.7 lakh acres in 2019. Amid the ongoing curfew, following the COVID-19 outbreak, the agriculture department has coordinated with the Cotton Corporation of India to buy last season’s remaining cotton produce from farmers at the MSP and for this – 19 markets in the cotton belt have already been made operational.

Lacking in Transparency (Suvrat Raju - Physicist with The International Centre For Theoretical Sciences, Bengaluru)

- If the government had scaled up testing capability in February, tested and quarantined international travellers from high-risk countries, including asymptomatic travellers, and established stocks of personal protective equipment, a total lockdown could have been avoided. India could not have escaped the epidemic entirely, but it could have minimised damage to the economy, while keeping infections at a manageable level through testing, contact-tracing and, possibly, targeted lockdowns. It follows that the social catastrophe

[Shatabdi Tower, Sakchi, Jamshedpur](#)



caused by the lockdown is the direct result of the failure of the government to respond to the epidemic in a timely manner. In his address to the nation on April 14, the Prime Minister remarked that his government took “quick decisions” to contain the disease. This myth has allowed the government to escape accountability for its past failures and emboldened it to charge ahead with problematic policies. An example is the Indian Council of Medical Research (ICMR)’s reluctance to expand the scope of testing. On April 27, India had tested **486 individuals per million of the population**. This is not only more than 50 times lower than the corresponding rate in Italy, it is significantly lower than the rate in Pakistan. Almost a week into the lockdown, on March 30, the ICMR admitted that it was testing at “less than 30%” of its capacity. This raises serious questions about whether ICMR’s strict testing guidelines are partly motivated by the desire to keep the number of reported infections low and disingenuously suggest that the epidemic is in control. Studies suggest that more than 80% of those infected by COVID-19 are asymptomatic or only mildly symptomatic. Since such individuals can nevertheless infect others, they must be included in the ambit of testing. Otherwise, they could form the base for a rapid spread of the epidemic.

How MPLAD Scheme Works, And How Far Its Suspension Will Help COVID-19 Fight

→ Earlier this month, the government suspended the Member of Parliament Local Area Development (MPLAD) Scheme so that these funds would be available for its COVID-19 management efforts. Following the Centre’s announcement, UP Chief Minister Yogi Adityanath suspended the state’s MLALAD scheme for a year, a move that will allow the state to spend ₹1,500 crore on COVID-related efforts. A look at the scheme, and the implications of the move:

What Is the MPLAD Scheme?

MPLAD is a central government scheme, under which MPs can recommend development programmes involving spending of ₹5 crore every year in their respective constituencies. **MPs from both Lok Sabha and Rajya Sabha, including nominated ones, can do so.** States have their version of this scheme with varying amounts per MLA. **Delhi has the highest allocation under MLALAD; each MLA can recommend works for up to ₹10 crore each year.** In Punjab and Kerala, the amount is ₹5 crore per MLA per year; in Assam, Chhattisgarh, Maharashtra and Karnataka, it is ₹2 crore; in Uttar Pradesh, it was recently increased from ₹2 crore to ₹3 crore.

How Much Will the Suspension Contribute to The Centre’s Efforts to Manage the Pandemic?

Suspension of the MPLAD Scheme will make ₹7,800 crore available to the government. For comparison, this is only 4.5% of the ₹1.70 lakh crore relief package for the poor announced under the Pradhan Mantri Garib Kalyan Yojana. Opposition MPs have reacted sharply. Adhir Ranjan Choudhary, leader of the Congress Legislature Party in Lok Sabha, termed the move a gross injustice towards people’s representatives. RJD MP Manoj Jha said the diversion of MPLAD funds would centralise their administration and decrease the efficiency of their disbursement.

How Does the Scheme Work?

MPs and MLAs do not receive any money under these schemes. The government transfers it directly to the respective local authorities. The legislators can only recommend works in their constituencies based on a set of guidelines. **For the MPLAD Scheme, the guidelines focus on the creation of durable community assets like roads, school buildings etc. Recommendations for non-durable assets can be made only under limited circumstances.** For example, last month, the government allowed use of MPLAD funds for the purchase of personal protection



equipment, coronavirus testing kits etc. The guidelines for use of MLALAD funds differ across states. For example, Delhi MLAs can recommend the operation of fogging machines (to contain dengue mosquitoes), installation of CCTV cameras etc. **After the legislators give the list of developmental works, they are executed by the district authorities as per the governments financial, technical and administrative rules.**

When Did the Scheme Start?

Prime Minister P V Narasimha Rao announced the scheme on December 23, 1993 in Lok Sabha. He mentioned that it was being started at the request of MPs across parties. Opposition to the proposal came from CPI(M) MPs Nirmal Kanti Chatterjee and Somnath Chatterjee. This happened during a tumultuous year for Rao's minority government. Earlier that month, Parliament was agitated that the government was trying to clip Election Commissioner T N Seshan's wings by converting the EC into a multi-member body. Months earlier, the government had survived a controversial trust vote in Lok Sabha. And in May that year, Lok Sabha witnessed the first impeachment proceedings in India's history, against High Court Judge Justice V Ramaswami. These events led some commentators to suggest that the scheme was an attempt by the minority government to appease MPs. Over the years, the scheme was adopted and adapted by state governments.

How Long Are the Schemes Supposed to Continue?

The central scheme has continued uninterrupted for 27 years. It is budgeted through the government's finances and continues as long as the government is agreeable. In 2018, the Cabinet Committee on Economic Affairs approved the scheme until the term of the 14th Finance Commission, that is March 31, 2020. In the recent past, there has been one example of discontinuation of a Local Area Development scheme. Bihar Chief Minister Nitish Kumar discontinued the state's scheme in 2010, only to revive it before the 2014 general elections.

What Has Been the Impact of The MPLAD Scheme?

In 2018, when continuation of the scheme was approved, the government noted that "the entire population across the country stands to benefit through the creation of durable assets of locally felt needs, namely drinking water, education, public health, sanitation and roads etc, under MPLAD Scheme". Until 2017, nearly 19 lakh projects worth ₹45,000 crore had been sanctioned under the MPLAD Scheme. Third-party evaluators appointed by the government reported that the creation of good quality assets had a "positive impact on the local economy, social fabric and feasible environment". Further, 82% of the projects have been in rural areas and the remaining in urban/semi-urban areas.

Why Has the Scheme Been Sometimes Criticised?

The criticism has been on two broad grounds. First, that it is **inconsistent with the spirit of the Constitution as it co-opts legislators into executive functioning.** The most vocal critic was a DMK ex-MP and a former Chairman of the Public Accounts Committee, Era Sezhiyan. He said the **workload on MPs created by the scheme diverted their attention from holding the government accountable and other legislative work.** The National Commission to Review the Working of the Constitution (2000) and the Second Administrative Reforms Commission, headed by Veerappa Moily (2007), recommended discontinuation of the scheme. **In 2010, the Supreme Court held that the scheme was constitutional.** The second criticism stems from allegations of **corruption associated with allocation of works.** The Comptroller and Auditor General has on many occasions highlighted gaps in implementation.



Witnessing the Future Through the Lockdown (S.N. TRIPATHI - Professor at IIT-Kanpur and Member of the Steering Committee, NCAP MoEFCC)

- The nationwide lockdown, and halting of most economic activities as a way to combat the novel coronavirus has brought about significant improvements in air quality across the country, albeit in the short term. However, this phase of good air quality is lending itself as a real-life experiment to determine the lowest achievable pollution levels possible in a very long time. Attaining blue skies in a short period of about two weeks has allowed us to take a long view of the problem, the multiple sources of air pollution and to imagine a future with clean air. It has allowed us to understand clearly which solutions will work, how, and at what scale.

Fall in Pollutant Levels

Central Pollution Control Board data analysed from the last two weeks indicates a sudden reduction in pollutant levels across the country, including in some of the most polluted cities. Due to stringent travel restrictions, shutting of most industries and halting commercial and construction activity, the impact of air quality improvements has become immediately visible within and outside the cities. Delhi, across its 35 monitoring locations, has recorded a drop of 44% in PM_{2.5} levels between March 24 and April 6. Noida and Gurugram have recorded similarly large and rapid decreases of 51% in their PM_{2.5} levels and 55% in PM₁₀ levels. Other capital cities, such as Mumbai, Bengaluru and Lucknow have reported a decrease in the range of 18% to 30% during the lockdown period. It is also notable that the decrease in particulate levels is the same if we compare the two-week period (March 24 to April 6) between 2019 and 2020. Delhi NCR registers a drastic decline of 65%-70% in PM₁₀ values compared with 2019 mainly due to construction activity coming to a grinding halt. Also, Delhi, Mumbai, Bengaluru and Kolkata, and even smaller cities such as Jaipur and Guwahati, have recorded significant drop in nitrogen dioxide (NO₂) concentration, ranging from 53-68%, which is largely related to a dramatic decline in vehicle movement. Sulphur dioxide, another polluting gas, mostly released by burning of coal, oil and gas, either in vehicles or in power plants and other industries, also registered a big drop.

Business & Economics

RBI Opens ₹50,000 Cr. Liquidity Tap for MFs

- The Reserve Bank of India (RBI) has announced a special window of ₹50,000 crore for mutual funds in view of the redemption pressure that the fund houses are facing. While announcing the window, the RBI said the liquidity stress was limited to high risk debt funds and the larger industry remains liquid. Under the scheme, the RBI will conduct repo operation of 90-day tenor at the fixed rate repo. Funds availed under this facility will be used by banks exclusively for meeting the liquidity requirements of mutual funds by extending loans, and for undertaking outright purchase of and/or repos against the collateral of investment grade corporate bonds, commercial papers, debentures and certificates of deposit held by the funds, the central bank said.

Franklin Templeton

The move comes after Franklin Templeton Mutual Fund last week decided to wind up six debt funds that have combined assets under management of nearly ₹26,000 crore on account of illiquid and low-rated instruments in its portfolio. The fund house said it decided to wind up



the schemes to preserve the value at least at the current levels. Their value was getting eroded due to a combination of redemption pressures and mark-to-market losses due to a lack of liquidity on account of the coronavirus impact on the markets, it said. **The scheme is available from Monday i.e., April 27, 2020 till May 11, 2020 or up to utilisation of the allocated amount.** The RBI will review the timeline and amount, depending upon market conditions. RBI said that it remains vigilant and will take whatever steps are necessary to mitigate the economic impact of COVID-19 and preserve financial stability. The facility is on-tap and open-ended, and banks can submit their bids to avail funding on any day from Monday to Friday.

- While the facility is a straightforward 90-day repo-based lending window from which banks can avail credit to provide loans to mutual funds, there are concerns about the banking industry's willingness to expose itself to the credit risk involved in making these fresh loans. That the RBI was cognisant of this is evident in the way that the norms have been tailor-made to incentivise the banks to lend. **From allowing banks to breach their 25% ceiling on held-to-maturity investments as a consequence of lending to mutual funds, to exempting the support extended from banks' overall capital market exposure limits, the central bank has sought to ease the flow of credit to the fund houses.** Still, if the recent experience of getting lenders to support the non-banking financial companies through a targeted long-term repo operation backed by ₹50,000 crore is any pointer, clearly the banking industry – beset by bad loans – appears to have little appetite for adding any credit that it deems risky. Moreover, with the economy still in lockdown and the credit ratings of even relatively well-established companies facing a real and not-too-distant threat of downgrades, how willing banks would be to use this facility to lend to debt mutual funds remains to be seen. The Centre may need to be ready to step in with direct intervention if the RBI's gambit fails to ease the pressure on mutual funds.
- Commercial banks have borrowed ₹2,000 crore from the liquidity window that was offered by the Reserve Bank of India for mutual funds (MFs), so far, latest data released by the central bank showed.

Quick Nod Likely for China Investments

- The Centre plans to fast track the review of some investment proposals from neighbouring countries such as China following concerns new screening rules could hit plans of companies and investors, three sources told Reuters on Saturday. **To avoid opportunistic takeovers during the coronavirus outbreak, India said this past week that all foreign direct investment from countries sharing a land border would require prior government clearance, meaning they can't go through a so-called automatic route.** Advisers to Chinese firms have said they are concerned the process could take several weeks and hit deals and investment timelines. Auto firms such as SAIC's MG Motor and Great Wall, and investors Alibaba and Tencent have placed major bets on India. The Chinese Embassy in New Delhi has called the new screening policy discriminatory. A senior Indian government source who is involved in policymaking told Reuters that New Delhi will try to approve any investment proposal in a non-sensitive sector within 15 days when the stake being bought is not significant. The official declined to elaborate on which sectors would be considered sensitive and what threshold of investment would be deemed significant.

'\$26 bn in Investments'

While the fast track mechanism would be open to all India's neighbours with a land border, China would be the main beneficiary. It has major existing and planned investments in India, which the Brookings research group estimated at \$26 billion. Dipti Lavya Swain, a partner at Indian law firm HSA Advocates which advises Chinese companies, said sectors such as telecom, financial services and insurance were likely to be deemed more sensitive than others such as automobiles and renewable energy.



The new screening rules are designed to prevent fire sales of corporate assets during the COVID-19 outbreak but government sources have said **they will also apply to greenfield investments, as well as investments from Hong Kong.**

\$1.5 Billion ADB Loan to Fund COVID Response

- The Government of India has taken a \$1.5 billion loan from the Asian Development Bank (ADB) to fund its immediate response to COVID-19, both in terms of the health and socio-economic impacts. The bank is also in talks with the government to fund further stimulus measures, including support for Micro, Small & Medium Enterprises and for extending health services through public-private partnerships. The money, translating to more than ₹11,000 crore, will be spent to implement the containment plan and rapidly ramp up the test-track-treatment capacity.

Coronavirus Is Pulling Millions Back into Poverty

- The World Bank says that for the first time since 1998, global poverty rates will rise. By the end of the year, 8% of the world's population – half a billion people – could be pushed into destitution, largely because of the wave of unemployment brought by virus lockdowns. While everyone will suffer, the developing world will be hardest hit. The World Bank estimates that sub-Saharan Africa will see its first recession in 25 years, with nearly half of all jobs lost across the continent. South Asia will likely experience its worst economic performance in 40 years.

Informal Sector

Most at risk are people working in the informal sector, which employs 2 billion people who have no access to benefits like unemployment assistance or health care. In Bangladesh, 1 million garment workers – 7% of the country's workforce – lost their jobs because of the lockdown. The financial shock waves could linger even after the virus is gone; experts warn. Countries like Bangladesh, which spent heavily on programmes to improve education and provide health care, which help lift families out of destitution, may now be too cash-strapped to fund them. These stories, of women entering the workplace and bringing their families out of poverty, of programmes lifting the trajectories of families, those stories will be easy to destroy," said Abhijit Banerjee, a winner of the 2019 Nobel Prize for economics. "There will be groups of people who climbed up the ladder and will now fall back," he added. "There were so many fragile existences, families barely stitching together an existence. They will fall into poverty, and they may not come out of it." The gains now at risk are a stark reminder of global inequality and how much more there is to be done. In 1990, 36% of the world's population, or 1.9 billion people, lived on less than \$1.90 a day. By 2016, that number had dropped to 734 million people, or 10% of the world's population, largely because of progress in South Asia and China. Some of the biggest gains were made in India, where 210 million people were lifted out of poverty from 2006 to 2016, according to the UN. Since 2000, Bangladesh lifted 33 million people – 10% of its population – out of poverty. Famines that once plagued South Asia are now vanishingly rare, the population less susceptible to disease and starvation. But that progress may be reversed, experts worry, and funding for anti-poverty programmes may be cut as governments struggle with stagnant growth rates or economic contractions as the world heads for a recession.

- Epidemics continue to affect survivors long after they are over. Studies on populations exposed to tropical diseases and poor nutrition in-utero or during early childhood have found that the effects of the disease continue into later years of life by affecting cognitive ability, educational achievement, and income as adults. A study on the long-term effects of the Spanish flu, **"Is the 1918 Influenza Pandemic Over? Long-Term Effects of In Utero Influenza**



Exposure in the Post-1940 U.S. Population”, by Douglas Almond, reported that children born to infected mothers were 15% less likely to graduate from high school, the wages of men were 5%-9% lower because of infection, and the disability rate 20% higher compared to birth cohorts not affected by the flu. Importantly, these effects were greater in socially vulnerable populations. There is no reason why COVID-19 will not have such long-term intergenerational effects on economically vulnerable populations. As such, relief programmes need to have a long-time horizon.

- The Central government and several State governments have announced a range of important measures to address the economic hardship faced by vulnerable households. They promise to provide free or subsidised food to low-wage households, and direct cash transfers to vulnerable groups such as senior citizens, farmers, rural workers, construction workers and widows. The effectiveness of these safety nets will depend on the adequacy of the relief package, how well they reach the neediest groups, and efficiencies in the delivery system. It is important to note that these are one-off measures intended only for a short period of time. However, the economic and health deprivation caused by COVID-19 will have long-term effects. More challenging is addressing the long-term health and economic effects of COVID-19. It will require extending current relief measures for a longer duration, to a few years. To prevent human capital deprivation in the future, both long- and short-term relief measures will need to target specific populations like pregnant women and young children. Recent government actions in this direction are helpful but they are focused on the short term. As such, governments need to take a long-term view of mitigating the many economic and human capital effects of COVID-19 and its control measures.

Life & Science

First Merger of Two Black Holes with Unequal Masses Detected

- For the first time since it started functioning, the gravitational wave observatories at LIGO scientific collaboration have detected a merger of two unequal-mass black holes. The event, dubbed GW190412, was detected nearly a year ago, and this is almost five years after the first ever detection of gravitational wave signals by these powerful detectors. Subsequent analysis of the signal coming from the violent merger showed that it involved two black holes of unequal masses coalescing, one of which was some 30 times the mass of the Sun and the other which had a mass nearly 8 times the solar mass. The actual merger took place at a distance of 2.5 billion light years away. This study has been published in preprint server ArXiv, and is pending peer review. The detected signal's waveform has special extra features in it when it corresponds to the merger of two unequal-sized black holes as compared with a merger of equal-sized black holes. These features make it possible to infer many more things about the characters in this celestial drama, namely, a more accurate determination of the distance from the event, the spin or angular momentum of the more massive black hole and the orientation of the whole event with respect to viewers on Earth. While the mass of the black hole bends the space-time close to it, the spin or angular momentum of this inscrutable object drags the nearby space-time, causing it to swirl around, along with it. Hence both these properties are important to estimate.

Stop Villainising Bats, Say Scientists, Conservationists

- Unverified news and social media posts linking bats to the COVID-19 outbreak have led to widespread antipathy and there have been increasing incidents of the public destroying bat



roosts and smoking them out. To raise awareness, 64 chiropterologists (those who study bats) from six South Asian countries have released a document clarifying the myths about bats and strongly affirming that bats do not spread COVID-19. They also clarify that the **bat coronaviruses (BtCoV) found in two species of Indian bats (in a recent Indian Council of Medical Research study) are not the same as SARS-CoV-2 and cannot cause COVID-19.** "Human activities and encroaching upon wildlife habitats put us at risk of encountering new viruses. We need to modify human practices to prevent the emergence of new pathogens."

Origin Unknown

The researchers write that the exact origin of SARS-CoV-2 is still unknown and it is premature to blame bats or any other animal for the pandemic. "Killing bats and destroying their habitats can be more harmful as this can lead to bats spreading out their habitat. We should remember that **all wild animals harbour viruses and it is very biased and unfair to point fingers only at bats.** If we keep destroying habitats there are changes of the spread of other viruses from other animals to humans,". The researchers and conservationists highlight that bats perform vital ecosystem services such as **pollination, pest control, and provide intangible economic benefits.** They urge the governments of South Asian countries to strengthen the legal framework to protect bats. As only two species (out of 128) are protected by law in India, the researchers ask the government to reconsider and reinforce the laws governing bat conservation. They write: "The current pandemic is an outcome of the ongoing ecological destruction, increasing intensification of livestock farming and wildlife trade. We request the media to not oversimplify scientific evidence, to emphasise the role of humans in disease outbreaks, and to highlight the importance of coexistence with bats in urban landscapes."

Did SARS-CoV-2 Begin from a Lab?

- Theories about the origins of the COVID-19 outbreak have been spreading as fast as the virus itself. Many have focused on the presence of one of China's most advanced virus research laboratories, the Wuhan Institute of Virology (WIV), to suggest SARS-CoV-2 may have originated in a lab.

What Does the Evidence Tell Us?

The first popular lab theory, put forward in a January 26 article in the *Washington Times*, **suggested COVID-19 was the result of biological warfare gone wrong.** The article, which likely spawned a million WhatsApp forwards, quoted a former Israeli military officer as saying the virus "may have originated in a laboratory in the city of Wuhan linked to China's covert biological weapons program." A March 17 study by several virologists, including Kristian Andersen of The Scripps Research Institute and Ian Lipkin at Columbia University, concluded the **evidence suggests SARS-CoV-2 was not engineered.** The study, "The proximal origin of SARS-CoV-2", concluded based on available genome sequence data, that has now been mapped in several countries, that **"it is improbable that SARS-CoV-2 emerged through laboratory manipulation of a related SARS-CoV-like coronavirus."** The virus sequence was **96% identical at the whole-genome level to a bat coronavirus.** It suggested two possible origins: "natural selection in an animal host before zoonotic transfer" and "natural selection in humans following zoonotic transfer."

- Moreover, commenting on the fact that bats and pangolins might have spread the infection, the authors said: "Given the similarity of SARS-CoV-2 to bat SARS-CoV-like coronaviruses, it is likely that bats serve as reservoir hosts for its progenitor... **Malayan pangolins illegally imported into Guangdong province, contain coronaviruses similar to SARS-CoV-2.**" While



agreeing that it was theoretically possible that SARS-CoV-2 acquired mutations in a petri dish, the Nature paper added that “the finding of **SARS-CoV-like coronaviruses from pangolins with nearly identical RBDs**, however, provides a much stronger and more parsimonious explanation of how SARS-CoV-2 acquired these via recombination or mutation”. It also posited the possibility of a “progenitor of SARS-CoV-2 that jumped into humans, acquiring the genomic features through adaptation during undetected human-to-human transmission”. The changes in the genome occurred as a part of the **natural evolutionary process**. “All SARS-CoV-2 genomes sequenced so far have the genomic features described... and are thus derived from a common ancestor that had them too.” The issue of pathogens crossing species to cause diseases is not a new concept. **According to the United Nations Environment Programme (UNEP), 60% of all infectious diseases in humans are zoonotic, and about 75% of all emerging infectious diseases are zoonotic in nature. Emerging pathogens are more likely to be viruses, than any other kind – bacteria, parasites, fungi – and are more likely to have a broad host range.**

If we can now assume the origins were natural, the source remains a mystery. **Whether the original source, presumably a bat, was being studied at a lab (we know the WIV did indeed research bat coronaviruses), sold at a market, or infected another animal that was sold at a market remains a matter of pure conjecture.** Could the virus have leaked from the lab in an accident? Some lab leak advocates have pointed to 2018 U.S. State Department cables expressing serious concerns over safety practices at the WIV. Others cite a February 6 study by Xiao Botao of the South China University of Technology, which has since been deleted. Though widely cited, the paper has not been peer-reviewed, is just one page long, and only cites circumstantial evidence, pointing to the WIV and Wuhan Center for Disease Control being 12 km and 280 metres from the first infection cluster at a seafood market. The likelihood of lab origins hinges on whether SARS-CoV-2 was one of the viruses being studied at the lab. Scientists at the WIV have denied this was the case. Opening up the lab to foreign researchers might shed some light, but even that may not quell doubts given the secrecy with which such labs operate, more so those located in China. **The Chinese government putting in place new rules that require research on the origins to be vetted has only raised more doubts. What may disprove a lab origin theory is if an intermediate host is identified, suggesting a natural spill over, but that could take years.** In a strange irony, scientists at the WIV, including top expert Shi Zhengli, published a paper in Nature in December 2018 on the “Origin and Evolution of Pathogenic Coronaviruses” warning of the **increasing dangers of spill overs of bat coronaviruses, because of human activities bringing them in close proximity to bats.** Their prior research, in fact, helped map the SARS-CoV-2 genome in record time. Now that their warnings have come true, they find themselves being blamed for the new virus. **There is no evidence to prove or disprove a lab leak. In the scientific community, new theories are usually regarded as credible based on the evidence with which they are offered; they aren't believed to be true until evidence disproves them. That isn't, however, how the rest of the world operates.** This may explain why the lab leak theory appears to be less popular with scientists than it is with politicians, journalists and foreign policy experts. Which side of the debate you stand on may have less to do with a question of science than your political beliefs, even if this still unanswered question is one perhaps best left to the scientists.

UNEP ‘One Health’

Why Are Human Beings at Risk?

The inevitable interaction between humans and livestock with wildlife exposes the human species to the risk of spill over of potential pathogens. **For many zoonotic diseases or zoonoses, livestock serve as an epidemiological bridge between wildlife and human infections.** Among zoonoses that emerged or re-emerged recently, the UNEP (UN Environment



Program) counts Ebola, bird flu, Middle East Respiratory Syndrome (MERS), Rift Valley fever, severe acute respiratory syndrome (SARS), West Nile virus, Zika virus disease, and COVID-19. The UNEP is also very clear that the drivers of zoonotic disease emergence are changes in the environment, usually as a result of human activities ranging from land use change; changes in animals or human hosts; and changes in pathogens, which are programmed to survive, and in the process exploit multiple hosts. For instance, bat-associated viruses emerged due to the loss of habitats, it argues. The Ebola outbreak in West Africa was reportedly the result of forest losses leading to closer contacts between wildlife and human settlements; the emergence of avian influenza was linked to intensive poultry farming; and the Nipah virus was linked to the intensification of pig farming and fruit production in Malaysia. A presentation by the UNEP argues, "Ecosystem integrity underlines human health and development. Human-induced environmental changes modify wildlife population structure and reduce biodiversity, resulting in new environmental conditions that favour particular hosts, vectors, and/or pathogens." Consequently, preserving ecosystem integrity can actually help regulate diseases by supporting a diversity of species so that it is more difficult for one pathogen to spill over, amplify or dominate. UNEP Executive Director Inger Andersen says: "Never before have so many opportunities existed for pathogens to pass from wild and domestic animals to people. Our continued erosion of wild spaces has brought us uncomfortably close to animals and plants that harbour diseases that can jump to humans." Changes in weather patterns, and extreme weather events affect the distribution areas of disease, pathogens and pests. Also, changes in human behaviour, including travel, conflicts, migration, wildlife trade, urbanisation, and dietary and medical preferences, can result in disease emergence, according to researchers at the UNEP.

What About the Plant Kingdom?

It is not just animal-to-human transmission we need to worry about. Peter Beetham writes in the Scientific American (<https://bit.ly/3bJ5h92>) that we must be wary of transmission from the plant kingdom as well – "The current COVID-19 pandemic underscores how unprepared we humans are in fighting zoonotic diseases: pathogens that originate in wildlife and jump to humans. Human immune systems are equally unprepared for drug-resistant diseases that jump from plants to humans. As we work to control and treat the current pandemic, we must simultaneously be thinking one step ahead – how we can avoid other pandemics in the future, without disrupting our food supply?" In pristine ecosystems, all biological systems have an inherent capacity for both resilience and adaptation, but the current pace of change may be too fast for systems to adapt and achieve resilience, the UNEP argues. So, what can be done? The UN agency pitches for 'One Health'.

What is 'One Health'?

According to the World Health Organization, 'One Health' is an approach to designing and implementing programmes, policies, legislation and research in which multiple sectors communicate and work together to achieve better public health outcomes. The areas of work in which a 'One Health' approach is particularly relevant include food safety, the control of zoonoses, and combating antibiotic resistance (when bacteria change after being exposed to antibiotics and become more difficult to treat). The concept helps practitioners understand disease determinants, manage risks and optimise interventions. Climate scientists argue and epidemiologists agree that 'One Health' is a key principle for the control of zoonotic diseases, antimicrobial resistance, food safety and vector-borne diseases.



What Lies Ahead?

It is clear is that it will be difficult to predict, with current tools, where the next outbreak will come from or when it will be. Growing evidence suggests that outbreaks or epidemic diseases may become more frequent as changes continue to have an impact on the ecosystem. But doing nothing will only let these pathogens flourish, jump hosts and make a terrible assault on humans. The UNEP calls for strong global stewardship of nature and bio-diversity. Additionally, developing sharper, reliable early warning systems (for diseases), and a 'One Health' approach may be the guides for the road ahead.

One Strain of Virus Is Most Potent

- Scientists at the National Institute of Biomedical Genomics (NIBMG), Kalyani, West Bengal, have found that the novel coronavirus has undergone mutations to form 10 different types (clades). **Of the 10, one specific type called A2a has become predominant and is fast replacing both the original type (called "O") from China and other mutated types in many countries.** The results of the study will soon be published in the Indian Journal of Medical Research. The A2a type seems to be predominant in New York, Italy, Australia, Spain, Iceland, Brazil, Congo and other countries. **It is also the dominant type in India.** In the U.S., Washington state and New York show contrasting predominance of the clades. While B1 type is predominant in Washington, A2a dominates in New York. The differences in patterns of travel contact with China and Europe could be a reason, they write.

Where Does Virus First Strike? Study Pinpoints Two Cell Types in Nose

- Scientists reported that they have identified two specific types of cells in the nose as the likely initial infection points for SARS-CoV2, the novel coronavirus that causes COVID-19. A look at how this adds to the emerging knowledge about the new virus:

Was the Mechanism of Infection Not Already Known?

Yes, previous studies have shown what happens at the cellular level. The entry of the virus takes place by means of a "lock and key" effect. Like all coronaviruses, SARS-CoV2 consists of a fatty envelope with a "spike protein" on the surface. The spike acts as the "key" to "unlock" a protein on the human cell, called ACE2, which acts as the receptor for the virus. **Once inside the cell, the virus uses a second protein, called TMPRSS2, to complete its entry. TMPRSS2 has protein-splitting abilities, which allow the virus to reproduce and transmit itself inside the cell.**

So, What Has the New Study Found?

The new study has identified the specific cells where the mechanism of entry most likely comes into play when the virus begins its attack. These are the **goblet and ciliated cells in the nose**, researchers from the Wellcome Sanger Institute (UK), University Medical Centre Groningen, University Côte d'Azur and CNRS, Nice and their collaborators have reported in the journal Nature Medicine. **Goblet cells are mucus-producing cells on the surface of organs, and are found along the respiratory tract, along the intestinal tract, in the upper eyelid etc.** Ciliated cells are hair-like cells, again occurring on the surface of various organs, and help sweep mucus, dust etc to the throat, where it can be swallowed.

How Did the Study Identify These Cells as The Likely Points of Initial Infection?

The researchers looked for areas where the two key proteins, ACE2 and TMPRSS2, express themselves most prominently. For this, they turned to the Human Cell Atlas, an international consortium that aims to create comprehensive reference maps of all human cells. They looked



at multiple datasets from more than 20 different tissues of non-infected people. These included cells from the lung, nasal cavity, eye, gut, heart, kidney and liver.

And What Did the Data Show?

Both proteins were found in multiple organs. However, **ACE2 expression was generally low while TMPRSS2 was highly expressed with a broader distribution**. This suggests that ACE2, rather than TMPRSS2, may be a limiting factor for viral entry at the initial infection stage, the researchers wrote in the paper. "We found that... ACE2 and TMPRSS2... are expressed in cells in different organs, including the cells on the inner lining of the nose. We then revealed that **mucus-producing goblet cells and ciliated cells in the nose had the highest levels of both these COVID-19 virus proteins, of all cells in the airways**. This makes these cells the most likely initial infection route for the virus," first author Dr Waradon Sungnak, from Wellcome Sanger Institute, said in a statement issued by the institute.

Does This Rule Out Other Entry Points?

The two entry proteins were also found in cells in the **cornea of the eye and in the lining of the intestine**. The researchers said this suggests another possible route of infection via the **eye and tear ducts**, and possible oral-faecal transmission. However, they note that:

- ❖ The two cell types in the nose, where the proteins were expressed at the highest levels, are located at a place that is highly accessible for the virus.
- ❖ The study also found that ACE2 production in the nose cells is probably switched on at the same time as various immune genes that would be activated when the cells are fighting the infection.
- ❖ The virus is thought to be spread through respiratory droplets produced when an infected person coughs or sneezes.

How Does the Knowledge Help?

This is the first time that these two cell types have been pinpointed as the likely points of initial entry. The researchers believe their identification could help explain the high transmission rate of COVID-19.

Can Covid-19 Hit Sense of Smell?

- The **US Centres for Disease Control and Prevention (CDC)** introduced "a new loss of taste or smell" in a list of **COVID-19 symptoms**. While loss of smell is a known symptom of several diseases, it is less common than hearing loss or vision loss, and patients become conscious of it later than they would notice a fever or body ache. In addition, it lists symptoms that include **fever, chills, repeated shaking with chills, muscle pain, headache, sore throat, and a new loss of taste or smell**. If a patient has two or more of these symptoms, the CDC says there is a chance that the person has COVID-2019 infection.

Why Is the Inclusion of Loss of Smell Important?

Rhinology, ENT and otolaryngology experts have been pushing for inclusion of loss of smell – known as **anosmia** – in the list of symptoms for some time now. These include the American Academy of Otolaryngology-Head and Neck Surgery and the British Association of Otorhinolaryngology. **Chills are associated with many other infections, such as malaria, and muscle pain and body ache are typically associated with common flu**. For these reasons, health experts have repeatedly noted that it is impossible to symptomatically differentiate between COVID-19 and the common flu. Anosmia, however, is a less common symptom. Johns Hopkins University too lists unexplained loss of taste or smell, alongside cough, fever,



shortness of breath, muscle aches, sore throat, diarrhoea, headache and also fatigue among the symptoms. Most of the other symptoms are common among the lists developed by various international health organisations. According to the **World Health Organization: "The most common symptoms of COVID-19 are fever, dry cough, and tiredness. Some patients may have aches and pains, nasal congestion, sore throat or diarrhoea.** These symptoms are usually mild and begin gradually." The WHO list of symptoms has been adopted by the Health Ministry in India.

Why Do People Lose Their Sense of Smell?

It can happen during a **severe cold**, when we say the nose is "blocked". Only, this is **hyposmia, a reduced sense of smell rather than a complete loss of it.** According to Mayo Clinic: "A stuffy nose from a cold is a common cause for a partial, temporary loss of smell. A blockage in the nasal passages caused by a polyp or a nasal fracture also is a common cause. **Normal aging can cause a loss of smell too, particularly after age 60.**" It is usually **also associated with reduced appetite because our sense of smell is part of our sense of taste.** That is why **during a cold, we seem to lack taste in our food.** In a 2017 review in the Journal Chemical Senses, researchers from Wageningen University in Netherlands wrote: "Anosmia and hyposmia, the inability or decreased ability to smell, is estimated to afflict 3-20% of the population. Risk of olfactory dysfunction increases with old age and may also result from chronic sinonasal diseases, severe head trauma, and upper respiratory infections, or neurodegenerative diseases." **Other diseases with anosmia among its symptoms include Parkinson's disease, Alzheimer's disease and multiple sclerosis. In such cases, it is permanent.**

Is This the First Time COVID-19 Has Been Linked to A Loss of Sense of Smell New?

No. There have been very early reports from various countries about some patients complaining of a loss of smell. According to ENT UK, a professional membership body, "There is already good evidence from South Korea, China and Italy that significant numbers of patients with proven COVID-19 infection have developed anosmia/hyposmia. In Germany it is reported that more than 2 in 3 confirmed cases have anosmia. In South Korea, where testing has been more widespread, 30% of patients testing positive have had anosmia as their major presenting symptom in otherwise mild cases." In a communication with Public Health England on COVID-related anosmia, ENT UK also flagged the fact that many people report only anosmia without any of the more usual symptoms like fever etc. "Iran has reported a sudden increase in cases of isolated anosmia, and many colleagues from the US, France and Northern Italy have the same experience." In an article in The Lancet Infectious Diseases, researchers from the US Medical Corps wrote: "Our multinational group, including one otolaryngologist currently infected with COVID-19 and experiencing anosmia and **dysgeusia (altered sense of taste),** suggest that physicians evaluating patients with acute-onset loss of smell or taste, particularly in the context of a patent nasal airway (i.e., non-conductive loss), should have a high index of suspicion for concomitant SARS-CoV-2 infection."

Have Patients in India Reported Loss of Sense of Smell?

Some have. In a now viral clip, a doctor in Lutyen's Delhi, who was quarantined after testing positive, talks about how he decided to get himself and his wife tested after he noticed, following a few days of cough and body ache, that he could not "smell perfume or agarbattis".

Coronavirus Spares No Major Organ in The Body

- Physicians are beginning to realise that lungs are just the ground zero for the virus while the virus spreads its lethal tentacles to multiple organs – **heart and blood vessels, kidneys, gut,**



and brain – not necessarily in one patient. While about 80% of people infected with the virus either don't display any symptoms or only mild symptoms, the remaining need hospitalisation and about 5% need ICU care. Who would need hospitalisation and even ICU care depends on how decisively the body strikes down the virus soon after infection? **If not beaten back in the initial stage of infection, the virus invades the lower respiratory tract and enters the lungs, which very soon turns into a battle ground.** A feature published in the journal Science explains how the virus tears apart the body and attacks different organs with so far unseen ferocity. The virus enters the cells by binding to receptors found on certain cells called angiotensin-converting enzyme 2 (ACE2). The lining of the nose is rich in cells with this receptor and hence is the site of entry into the body. The receptors are found in cells found in many other organs, thus leaving them too vulnerable.

The Lungs

The tiny air sacs in the lungs called the **alveoli**, where oxygen exchange between the lungs and blood vessels take place, are rich in ACE2 receptors. Once the virus enters these cells, the immune system mounts an all-out battle against the virus, disrupting the oxygen transfer and leaving the air sacs with fluid and dead cells, which makes breathing shallow and difficult and accompanied with coughing.

Blood Supply

Heart is one of the organs that gets affected after lungs. The disruption seems to extend to the blood itself, causing blood clots, which when breaks can restrict the blood supply to the brain causing stroke or artery supplying blood to the lungs causing pulmonary embolism. Infection may also lead to blood vessel constriction, causing reduced blood supply to organs. "Some patients have extremely low blood-oxygen levels and yet are not gasping for breath. The oxygen uptake is impeded by constricted blood vessels rather than by clogged alveoli," the report says. **The virus attacking the blood vessels could be one reason why patients with blood pressure, diabetes is at higher risk.**

Not at Great Risk

Surprisingly, asthmatics or patients with other respiratory diseases are not at great risk unlike those with vascular problems – diabetes, obesity, age, hypertension. Scientists are yet to understand exactly what causes damage to the heart and blood vessels. Kidneys too are very vulnerable and experience in China shows that a sizeable fraction of patients may suffer from kidney failure. **It could be due to direct infection by the virus, cytokine storms reducing blood supply to the kidneys, or pre-existing diabetes causing fatal damage to kidneys.** A small subset (5%-10%) of patients suffer from **neurological problems – seizure-like symptoms, strokes, loss of sense of smell and taste, and at times even depression of brain stem reflex, which is responsible for sensing oxygen starvation.** In rare cases, the virus finds its way into the cerebrospinal fluid causing **meningitis and encephalitis.** "No one knows when or how the virus might penetrate the brain. But one scientist speculates about a possible invasion route: through the nose, then upward and through the olfactory bulb – explaining reports of a loss of smell – which connects to the brain," the report says.

Trump's Bleach Statements Echo Claims by Pseudo-Scientists

- ➔ President Donald Trump's public statements about using disinfectants to potentially treat the coronavirus have put him in the company of pseudoscientists and purveyors of phony elixirs who promote and sell industrial bleach as a "miracle cure" for autism, malaria and a long list of medical conditions. The President's comments, at a White House briefing last week, have



already prompted widespread incredulity, warnings from health experts and **a spike in calls to poison control centres around the country**. The makers of Clorox and Lysol urged Americans not to inject or ingest their products. But some scientists fear **Mr. Trump's remarks could breathe life into a fringe movement that embraces the medicinal powers of a powerful industrial bleach known as chlorine dioxide**. Among its adherents are Alan Keyes, the conservative activist and former presidential candidate who has promoted a chlorine dioxide-based product called Miracle Mineral Solution on his online television show. The impact of Mr. Trump's words "is going to be huge, especially among people who are desperate," said Myles Power, a British chemist who works to debunk quack medical remedies. "My fear is [that] it will cause widespread harm to people who think that drinking bleach can prevent or cure COVID-19."

Letters to President

Mark Grenon, the self-described archbishop of a Florida church that sells Miracle Mineral Solution as "a wonderful detox that can kill 99% of the pathogens in the body," took credit for Mr. Trump's comments in a Facebook post. In an online radio show earlier this month, he said he and his supporters had sent letters to the President about the product he peddles. The White House did not respond to an email seeking comment after Mr. Grenon's letter was reported by The Guardian last week. A person familiar with senior administration officials said they were not familiar with him or his letter. It is unclear what inspired Mr. Trump to suggest disinfectants as a cure for COVID-19 – and he did not mention chlorine dioxide or bleach specifically in his comments during the White House briefing.

Dr. Alan Levinovitz, a professor at James Madison University who studies the relationship between science and religion, said Mr. Trump's comments about disinfectants were in keeping with **his previous support for conspiracy theorists**, agitators against the deep state and his **promotion of two antimalarial drugs to fight the coronavirus**, despite warnings from medical experts about their possible dangerous side effects. "**For a lot of people, Trump represents an alternative to pointy-headed experts in white lab coats who speak a language we can't understand**," Dr. Levinovitz said.

Plasma Therapy Is No Silver Bullet (Dr. Balram Bhargava - Director General, Indian Council For Medical Research)

- The most important principle in medical ethics is "do no harm". The transfusion of convalescent plasma is also not without risks, which range from mild **reactions like fever, itching, to life-threatening allergic reactions and lung injury**. **To recommend a therapy without studying it thoroughly with robust scientific methods may cause more harm than good**. Till date, there have been only three published case series for convalescent plasma in COVID-19 with a cumulative of 19 patients. Given the very small number of patients involved in these studies and a publication bias in medicine, **we cannot conclude the therapy will work on all patients all the time or even believe that the convalescent plasma was the only reason for their improvement**. To say with certainty whether a drug is truly effective or not, the gold standard in medicine is to conduct a randomised controlled trial, where half the patients get the experimental drug and the other half do not. Only if patients in the first half show substantial improvement over those in the second half, it indicates the drug is beneficial. Further, convalescent plasma therapy requires intensive resources, healthy COVID-19 survivors to donate, a blood bank with proper machinery and trained personnel to remove plasma, equipment to store it and testing facilities to make sure it has an adequate number of antibodies. Too much focus on one approach can take away the focus from other important therapeutic modalities like use of oxygen therapy, antivirals, and antibiotics for complicated



hospital courses. **Even these times of collective uncertainty are no reason to lower scientific temper.** While it is good to be hopeful, the fact remains there are no real silver bullets in medicine and health outcomes are a result of not just a few pills or therapies but a complex set of factors. Science should be driven by reason and evidence with hope as a catalyst but not by either fear or populism. **Pushing one or the other therapy without evidence or caution can only set back our larger fight against COVID-19.**

DCGI Nod to Glenmark For Trials of Favipiravir on COVID-19 Patients

- Glenmark Pharmaceuticals said it had received approval from the Drug Controller General of India (DCGI) to conduct clinical trials of Favipiravir antiviral tablets on COVID-19 patients. The company said it was geared to immediately begin the exercise. A generic version of Avigan from Japanese firm Fujifilm Toyama Chemical Co, Favipiravir has demonstrated activity against influenza viruses. It has been approved in Japan for the treatment of novel influenza virus infections. Multiple clinical trials have been initiated on COVID-19 patients in China, Japan and in the U.S. Glenmark said that having internally developed the active pharmaceutical ingredient (API) and the formulations for the product, it had filed for clinical trials with the DCGI. The regulator gave approval for conducting the trial on mild to moderate patients. CEO and MD R. Ananthanarayanan said Favipiravir had demonstrated positive outcomes in several studies on COVID-19 patients. The drug has demonstrated positive outcomes, including a reduction in the duration of COVID-19 and improved lung conditions for the patients.

Sewage Surveillance Can Estimate Coronavirus Spread In The Community

- Sampling sewage for viral particles is a time-tested method of environment surveillance and is routinely resorted to for understanding circulation of several viruses – wild and vaccine-derived polio, rota virus, Hepatitis E and typhoid – in the community. Now, researchers in France have found that sewage surveillance can help in understanding the circulation of novel coronavirus (SARS-CoV-2) in the human population. **People infected with the virus have been found to shed the virus in their stools.** And by studying sewage samples, it is possible to know the viral load in the community through modelling once data on how many viral particles are shed by individuals and how the viral particles get diluted in sewage are available.

Late Detection

In the case of novel coronavirus, sewage surveillance becomes particularly useful as a large percentage of infected population is either asymptomatic or show only mild symptoms. Hence, there is a greatly likelihood that circulation of the virus in the community will be detected quite late, if at all. The circulation is likely to continue undetected till such time community testing is ramped up so that many get tested, or till such time people become severely ill, requiring hospitalisation. While a few other researchers have found coronavirus in sewage samples, the study posted on medRxiv preprint server, which is yet to be peer-reviewed, has shown that the **environmental surveillance is able to pick up a spike in virus concentration in sewage much before cases show up or overload and strain the healthcare system.** The other benefit is that **sewage surveillance can be carried out independent of testing in humans and will be able to pick up early signs even when people in the community do not show symptoms.** The ability of sewage surveillance to decipher community spread even when people are asymptomatic is akin to antibody testing.



Correlation with Outbreak

The study was carried out in greater Paris for a month (March 5 to April 7), and samples were picked twice a week from 23 raw and eight treated wastewater sites. **The study found that the rise and fall in coronavirus concentrations closely matched the COVID-19 outbreak in the region.** Most interestingly, the team led by Dr. Moulin L from Sorbonne Universite, CNRS, Paris found **high concentration of viral RNA about a week before multiple deaths were recorded in Paris on March 10.** The virus concentration in wastewater had the same trend as cases and deaths. **The concentration of virus in the wastewater samples increased a few days ahead of an increase in cases and deaths in the city.** Surveillance of virus in sewage is not only easy but also good to track and monitor the spread of the virus in the community, says a senior researcher based in India who has carried out sewage surveillance for a few different viruses. "In the case of novel coronavirus, sewage surveillance is a good way to detect asymptomatic cases and those who exhibit mild symptoms, who might otherwise not be tested." According to the scientist, there are two ways to take sewage samples – pick up samples at several places to monitor the presence of the virus in a community living in upstream catchment area and/or terminal sites where the sewage of the city/town is treated or let out into water bodies. The best time and place to carry out sewage sampling in India for coronavirus is when testing of people has been sorted and in places where no cases have been reported, according to the scientist.

Do Sex Hormones Help Women Fight COVID Better?

- From trends so far, men have appeared likelier than women to die of COVID-19. While the reason remains an open question, reports from the US over the last two days have described trials that will seek to find out whether the answer lies in two sex hormones in women — oestrogen and progesterone.

The Trends & The Theories

Various studies have captured a trend that appears to prevail in many countries and regions. In mid-February, a paper by Chinese researchers analysed data from **Wuhan**, Hubei, and China as a whole and calculated a **fatality rate of 2.8% for men, as compared to 1.7% for women.** Since then, Italy, Iran, South Korea, Germany, France and the UK have released data that showed a similar trend. **Data from the UK's national statistics office, in fact, suggested that men were twice as likely as women to die of COVID-19.** And daily data from Australia's Health Department show a visibly higher death rate among men in the age groups 70-79 and 80-89. As for the cause, there have been various since the trend became obvious, including the possibility that **women's sex hormones** help them fight the infection better than men. Among other theories related to biology, one draws from the fact that a woman's genetic makeup consists of **two X chromosomes** (a man has only one of those). **Because X chromosomes contain most of the genes related to the immune system, the inference is that women are better equipped to mount an immune response.** Other theories are based on **lifestyle and perceptions** – men are likelier to smoke and take risks, which could include **not taking enough precautions against infection.**

The Hormones

Oestrogen and progesterone are the two main sex hormones that characterise a woman. **Oestrogen helps her develop female physical features and also maintains her reproductive system.** Progesterone is secreted by a temporary endocrine gland that the body produces during the **second half of the menstrual cycle**, and helps **prepare the body for possible pregnancy after ovulation.** *The male body too has oestrogen and produces progesterone, both*



in smaller amounts. Now, two teams in the US are testing the theory that these hormones help women fight COVID-19 better. One team, at Stony Brook University, New York, has **already started treating male patients of COVID-19 with mild doses of oestrogen.** The other team, at Cedars-Sinai Medical Centre in Los Angeles, **will conduct trials with progesterone on men infected with the coronavirus.** More candidates are being recruited for the oestrogen trials. "The purpose of this study is to find out if oestrogen... given as a patch placed on skin of COVID19 positive or presumptive positive patients for 7 days can reduce the severity of COVID19 symptoms compared to regular care," the US National Library of Medicine says. The New York Times quoted Dr Sara Ghandehari, principal investigator for the progesterone study of Cedars-Sinai, as saying that men are clearly doing worse than women in ICU, and that **pregnant women (who have high levels of oestrogen and progesterone) tend to have mild courses of the disease.** "So, something about being a woman is protective, and something about pregnancy is protective, and that makes us think about hormones," she told the NYT.

The Counter-Argument

Women produce the most oestrogen and progesterone during reproductive age, and the levels of both fall drastically after menopause. So, if these hormones were responsible for the lower fatality rate among women, the trend should not have shown itself among older women. However, even elderly women have shown a better survival rate than elderly men. As such, some experts who study sex differences in immunity have warned that hormones may fail to be the magic bullet that some are hoping for, The NYT report said. The disproportionate fatality rate among men shows itself very prominently among 70-89-year-olds in graphics released by the Australian government.

A Greater Impact on Women (António Guterres Is the Secretary-General of The United Nations)

- Early signs are that SARS-CoV-2 poses a greater direct health risk to men, and particularly older men. But the pandemic is exposing and exploiting inequalities of all kinds, including gender inequality. In the long term, its impact on women's health, rights and freedoms could harm us all. Women are already suffering the deadly impact of lockdowns. **These restrictions are essential, but they increase the risk of violence towards women trapped with abusive partners. Recent weeks have seen a global surge in domestic violence.** At the same time, support services for women at risk face cuts and closures. This was the background to my recent appeal for peace in homes around the world. Since then, over 143 governments have committed to supporting women and girls at risk of violence during the pandemic. Every country can take action by moving services online, expanding domestic violence shelters and designating them as essential, and increasing support to frontline organisations. The United Nations' partnership with the European Union, the Spotlight Initiative, is working with governments in more than 25 countries on these and similar measures. But the threat to women's rights and freedoms posed by COVID-19 goes far beyond physical violence. The deep economic downturn accompanying the pandemic is likely to have a distinctly female face.

Unfair, Unequal Treatment

Women are disproportionately represented in poorly paid jobs without benefits, as domestic workers, casual labourers, street vendors, and in small-scale services like hairdressing. The International Labour Organization estimates that nearly 200 million jobs will be lost in the next three months alone – many of them in these sectors. And just as they are losing their paid employment, **many women face a huge increase in care work due to school closures, overwhelmed health systems, and the increased needs of older people.** And let's not forget the



girls who have had their education cut short. Even at the best of times, women do three times as much domestic work as men. That means they are more likely to be called on to look after children if businesses open while schools remain closed, delaying their return to the paid labour force. Entrenched inequality also means that while women make up 70% of healthcare workers, they are vastly outnumbered by men in healthcare management, and comprise just one in every 10 political leaders worldwide. We need women at the table when decisions are taken on this pandemic, to prevent worst-case scenarios like a second spike in infections, labour shortages, and social unrest. Women in insecure jobs urgently need basic social protections, from health insurance to paid sick leave, childcare, and unemployment benefits. Looking ahead, measures to stimulate the economy, like cash transfers, credits, loans and bailouts, must be targeted at women. The pandemic has made it clear that women's unpaid domestic labour is subsidising both public services and private profits. This work must be included in economic metrics and decision-making. We will all gain from working arrangements that recognise people's caring responsibilities, and from inclusive economic models that value work at home. This pandemic is not only challenging global health systems, but our commitment to equality and human dignity. With women's interests and rights front and centre, we can get through this pandemic faster, and build more equal and resilient societies that benefit everyone.

Fighting COVID With Phones

- As the world and India battle the novel coronavirus pandemic, India has all but made it mandatory to download and use a mobile phone application called **Aarogya Setu** developed by the **National Informatics Centre (NIC)** under the **Ministry of Electronics and Information Technology**. Earlier in the week, all central government employees were asked to download the app and, beginning Friday, it has been made mandatory for everyone crossing the Delhi-Gurgaon border.

How Does A Mobile Phone App Help in The Control of a Viral Epidemic?

The Indian government has adopted the strategy of aggressive and elaborate 'contact tracing' (along with testing) as the key to controlling the disease and restricting its spread. Aarogya Setu is a contact tracing app that uses **GPS coordinates and Bluetooth data** to track the user's location, both on their own, as well as relative to other users, to establish whether they have come physically close to someone suffering from COVID-19, and to make an assessment of their risk of infection. Many countries are using mobile apps to track the spread and progress of the disease. **South Korea and Singapore were the early starters**. In South Korea, the app was rolled out by private developers; in Singapore, it was an initiative of the government. The use of these apps has been credited with a significant extent for these countries' success in flattening the disease curve. The outbreak in these countries began relatively early, but as of the end of April, South Korea had under 11,000 cases and 247 deaths, while Singapore had 15,000-odd cases and only 14 deaths. Their case fatality rate and deaths per 1 lakh population were very low – 2.3% and 0.48, and 0.1% and 0.25 respectively, according to data on the Johns Hopkins University pandemic tracking dashboard. China has been using health apps to ward off a potential second wave of infection. Italy, which seems to have got over the worst of its crisis, is working on an app, and Germany has backed a joint Google-Apple initiative to build a contact tracing API. The same initiative is under discussion in France, amid disagreement over the amount of data to be collected. In the UK, a Bluetooth-based contact tracing app is under testing. In Israel, the NSO group, which built the Pegasus surveillance software last year, has tested a contact tracing app, even though an initiative by the Israeli police to use mobile phone location to enforce quarantine measures has been blocked by Parliament over privacy concerns. **Several health experts have argued that a key tool at governments' disposal to**



contain the COVID-19 outbreak, and which was not around during the 1918 Spanish Flu, is the ability to harness digital technologies to track the spread. At the same time, deployment of contact tracing apps by governments or public health authorities has added to the debate on online privacy and personal data protection. While some of these apps have sought sweeping access to smartphone functionalities, others stop just short of that, collecting and uploading data without specifically obtaining the consent of users in every case.

So, Which Countries Already Have Such Apps, And What Data Do They Collect?

There are private initiatives in several countries, but the main government-backed apps are, apart from India, in Poland, Singapore, Iceland, and Australia. Each of these apps requires a specific set of permissions from users, and have different policies on how they store, maintain and share data collected from users.

India's Aarogya Setu seeks nine sets of permissions— including for network-based location, GPS location, receiving data from the Internet, running at device start-up, and preventing the device from 'sleeping'. **The number of permissions sought by Aarogya Setu is higher than only Australia's COVIDSafe app**, which does not seek permission for network-based location or for receiving data from the Internet. The reasons for seeking particular permissions range from the purpose and design of a certain app, to the data that the app's developer intends to collect. For example, the "prevent device from sleeping" permission, which all apps analysed for this report (except Australia's COVIDSafe) seek, is intended to ensure the app is able to keep the smartphone's CPU awake to complete work. **Android devices are designed to fall asleep when idle, to prevent draining of the battery. But some apps need to work in the background, and for this, they seek permission to wake up the phone's screen or CPU. Again, given that Poland's Home Quarantine app is meant to ensure those under quarantine stay that way, it periodically asks people to upload a selfie, which is geotagged. Upon failure by a user, police are notified. To make this effective, the app seeks access to camera and storage.**

How Exactly Does Aarogya Setu Work?

India's official COVID-19 contact tracing app functions in the following manner:

When someone registers on the app, their name, phone number, age, sex, profession and the countries they visited in the last 30 days are collected, and stored on a server run by the Government of India. This is stored with a unique ID, which is used to identify the user in all subsequent app-related transactions. This digital ID is also associated with any information that may subsequently be uploaded. At time of registration, the person's location details are collected from the device, and uploaded to the server. **For the app to do its job, users must keep the location and Bluetooth features switched on at all times. When two registered users come within Bluetooth range of each other, typically less than 10 metres, the apps on their respective devices will automatically exchange the digital IDs and record the time and GPS location at which the contact took place. This information collected at this point is stored locally on the devices. If one of these registered users tests positive for COVID-19, the information will be uploaded from their mobile device, and stored on the server. According to Aarogya Setu's privacy policy, the app continuously collects the user's location data and stores it on the device, creating a record of all the places visited at 15-minute intervals. Further, every time a user conducts a self-assessment on the app, tick-marking COVID-19 symptoms, the app marks this user Yellow, Orange or Green, based in a reducing order of threat, with Green meaning the person is safe.**

What About Questions of User Privacy?

One of the red flags being raised about Aarogya Setu is that it collects a single blanket consent from the user at the beginning, and the details of what this consent would be used for, is



included in the privacy policy. This is not the case with similar apps in other countries. The privacy policy of Australia's COVIDSafe notes, for example: "We cannot access any contact data stored on a device, or share this with health officials, unless and until a COVIDSafe user consents to upload the data to the data store." The COVIDSafe app is based on a source code from Singapore's Trace Together app, but differs from the original app in several ways. **Around the world, questions have also been raised about what happens to the data and the app itself once the pandemic recedes.** Policies of these apps have detailed clauses on deletion of data. Iceland's Rakning C-19 app says phone numbers it stored will be deleted when the need for contact tracing is over, and all location data will be deleted from the database 14 days after uploading. COVIDSafe gives an option to its users to request deletion of data held in its database; this is in addition to all contact data being automatically deleted after 21 days. *Aarogya Setu says that "all personal information collected. at the time of registration will be retained for as long as your account remains in existence and for such period thereafter as required under any law for the time being in force". It will, however, purge all data stored on the app that is not uploaded to the server after 30 days.* Singapore's Trace Together app says that on request, it will delete contact information and identifiers from its servers, thus rendering "meaningless all data that your phone has exchanged with other phones, because that data will no longer be associated with you".

How Many People Are Currently Using Aarogya Setu?

The Android and iOS versions of the app have been downloaded more than 75 million times, according to official data. While Aarogya Setu started off as a voluntary exercise to top the government's efforts of containing the COVID-19 outbreak, it is gradually inching towards becoming one of the mainstays in the battle. **The government has mandated all central government employees and officers to download the app. Only if they are marked "safe" or at "low-risk" by the app should they commute to work,** the government order said. This is in addition to several private companies asking employees to download the app as they prepare for lifting of the lockdown. **It is possible that a 'safe' status on Aarogya Setu could become a formal or informal 'permit' to enter public buildings and spaces in the future.** There is one important point to consider regarding penetration of the app, however – which is directly linked to its effectiveness. Officials from most of the governments rolling out these apps have pointed out that the key factor that will determine the success of these projects would be the rapid emergence of a critical mass of users. **The apps, including Aarogya Setu, must have a penetration of at least 50%. This means that unless half the population of the country downloads the contact tracing app, the intended outcome will not be achieved.** While this is a reason for governments to aggressively push for downloads, critics have argued that **this particular response to the pandemic opens out a vast space for intrusive surveillance by state agencies,** threatening the privacy of large sections of their users. The critics have said that while some of the features that do not necessarily adhere to all privacy norms are all right as long as the app is voluntary, governments may begin to make the apps mandatory in order to achieve the necessary penetration. This could mean using the app to give a safety clearance to individuals before they use public transport, enter their workplaces or even step out of their residential premises.

Why Is the Death Rate Higher in Some Countries Than Others?

- One of the ways in which the burden of any disease is measured is by seeing how many deaths it is causing. In the case of COVID-19, which has now infected over 30 lakh people in 185 countries and regions and killed close to 2.1 lakh, this burden has varied widely – countries have reported very different **case fatality ratios (CFR),** which is the **number of deaths divided**



by the number of confirmed cases. While many things about the novel coronavirus remain unknown, broadly speaking, CFR depends on **three broad factors**:

First is the **number of people tested**. Testing rates have been different in different countries – India continues to be among the countries where testing is widely seen to be inadequate. More aggressive testing identifies more asymptomatic infected persons, and people with milder, less noticeable symptoms. Since CFR relies on the number of confirmed cases (which is a specific number) and not the total number of cases (which can only be an estimate), **more testing lowers the ratio**.

The second factor is **demography**. As a general principle, any virus poses a greater threat to those with weaker immunities, and a vast majority of deaths from COVID-19 have been of people with co-morbid conditions. Older people are more vulnerable; indeed, **the virus has wreaked the greatest havoc in populations that are older**.

Finally, the **strength and capacity of healthcare systems** matter greatly. Countries like Italy or Spain saw their hospitals overwhelmed, and unable to adequately care for the flood of patients. In India, where resources are limited and critical care capacities constrained, the danger from an uncontrolled spread is that much greater. In absolute numbers, the US carries the greatest burden of COVID-19, accounting for nearly a third of all cases. Spain and Italy follow, together accounting for over 14% of global cases.

In terms of observed CFR, a different set of countries leads the chart. According to the Johns Hopkins University coronavirus resource centre dashboard, the highest mortality is in Belgium (15.4%), followed by France (14.1%) and the UK and Italy (13.5% each). The CFR of the US is 5.7%, **India has fatality rate of 3.3%**. Belgium's deaths per 1 lakh population are 62.11, the highest in the world, followed by Spain (49.63), Italy (44.09) and France (34.17).

[Coping with Today, Planning for Tomorrow \(Dr. Ramasubramanian - Consultant, Infectious Diseases, Apollo Hospital, And Director, Capstone Clinic; Dr. Aruna Mohan - Consultant Paediatric Dentist, And Director, Capstone Dental Care\)](#)

- As we tackle COVID-19, several issues continue to baffle us. One, does a negative PCR swab test rule out the infection? Even though the **PCR test is currently considered the gold standard, it has only 60-70% sensitivity in picking up the infection**. Two, can patients become re-infected? **Up to 10% of patients in China and South Korea who were discharged from hospitals after recovering from the infection subsequently tested positive by nasal swab PCR**. The implications are unclear. Three, do masks for the public help? With increasing evidence of transmission from asymptomatic persons with COVID-19 and the possibility that masks may partially help prevent viral transmission, cloth masks for all public is likely to be recommended. Four, will an early vaccine release help the pandemic? Vaccines, if effective, will be a definitive answer to the pandemic. However, vaccines need to undergo safety and efficacy studies in an animal model followed by human volunteers, which will take up to 12-18 months. Five, is plasma therapy an answer? It is too premature to expect that it will cure the infection. It appears less promising than it appeared initially.

Understanding Viral Dynamics

We need to understand that the lockdown has helped only to slow down the progression of the infection and has done precious little to eradicate it. Flattening the curve only gives the healthcare system a breather, to prepare for the onslaught of the virus. The real problems will



start when the lockdown ends. **At present, infections are doubling every eleventh day in India.** Once the lockdown is lifted and life resumes, there is bound to be a surge in the number of cases, with no indication that the exponential growth of the virus will stop. This will cease only if a significant number of the population is infected or immune. In fact, **the pandemic will end only when over 60% of the population is infected, leading to herd immunity, or if a vaccine is available, both distant options at this time.** We will be in a position to **lift the lockdown only if we have had no new cases for at least two weeks.** This would wreak havoc on the economy of any country and be detrimental to the health of infected persons, and also deleterious in the management of non-COVID health issues. What are the options? Will a partial and periodic lockdown for weeks help? Can we lock down the entire world till we stop the pandemic? Both of these will lead to massive unemployment and recession and ruin the economy. **It appears prudent to try to save lives now rather than stave off a potential future catastrophe.** Even when the ban is lifted, several industries may not show revival for up to a year. So the current lockdown, however harsh it may seem, is our best option. Discipline of the community at large, in times like this, is an enormous challenge. Unfortunately, this is a war, albeit without bombs, bullets and tanks, during which we cannot ask for freedom to do whatever we want. Only resilience and perseverance can help.

Realistic Optimism Is Key

All of us are weathering the same storm, but we are not in the same boat. The implications of this crisis vary from financial catastrophe to emotional black holes. We are on different ships looking to survive, and survive we will. **One has to be realistic, yet solid in the belief that 'this too shall pass'.** We need to face this period of turbulence with calm efficiency. **"Maturity of mind is defined as the capacity to endure uncertainty"** said John Finley, an English historian and mathematician. During a crisis like this, India needs to invest in **community education and community participation.** **Trust in the government is an important component in any emergency health response.** **An increased expenditure in a robust public health system is important to building trust and confidence.** We also need to bolster infectious diseases surveillance. The media and the public health system should ensure that the correct messages reach the common man. Whether the concern is with risk of infections from dead bodies, or the safety of groceries or newspapers, **scientific and evidence-based information needs to be disseminated.** One should realise that the cure should not do more harm than the disease. Hence, **we need to temper enthusiasm about treating COVID-19 with wishful therapies and gather evidence by scientific and randomised trials.**

Opportunities for Innovation

While the clear priority right now is to cope with the number of cases and the economic havoc that the pandemic is wreaking, it is also time for the community and the government to take steps to minimise the pain of another pandemic. **Humans cope with trauma by repressing its memory. The temptation to forget COVID-19 and move on will be overwhelming.** But India must not let that happen. These crises create opportunities for innovation. We need a vision of a post-COVID-19 economy that is not 'simply a return to normal'. A new normal can build upon what we have discovered under lockdown, about making a living and living well. **Let us work on an economy that conserves earth resources, avoids future pandemics, and enhances physical and mental well-being.** Finally, as Thomas Sowell, sociologist and economist at Stanford University, said, it is time to realise that **"there are no solutions to managing a crisis of this nature, only trade-offs"**. Our destiny is in our hands, so let us keep them sanitised, let us maintain physical distancing, and let us pray for wisdom to make wise choices in this war against the virus.



The Outline of Another Pandemic Combat Strategy

→ As the World Health Organization (WHO) had pointed out on March 25, the unprecedented measures of the shutdown can only buy time and reduce the pressure on the health-care system. But by itself, it cannot “extinguish epidemics”. Contrary to WHO’s advice of using the opportunity to carry out more precise and targeted measures to chase and contain the virus, there have been no concerted efforts to aggressively test and isolate positive cases even in hotspot and containment areas.

Weighing In

Dr. Giridhar R. Babu, an epidemiologist at the Public Health Foundation of India, Bengaluru and a member of the COVID-19 task force of Karnataka and Dr. Jayaprakash Muliyl formerly with the Christian Medical College, Vellore, say that without doubt **there will be an increase in the number of cases once the lockdown is lifted; particularly so as no effort was made to hunt the virus during the lockdown period.** But a careful, graded approach to lift the restrictions can still help prevent a huge spike in cases and create a concomitant strain on the health-care system. **Any strategy adopted for lifting restrictions should bear in mind that the actual number of people who have been infected is many times more than the laboratory-confirmed cases.** Dr. Babu estimates **the total number of infections to be around 2,50,000 while Prof. Muliyl says that for every recorded case, there are 60 people who have not been counted.** While extending the lockdown in hotspot areas appears not only prudent but also essential, there should be more focus during the remaining days of the lockdown on silent areas that have not reported any case or just a few cases. Increased surveillance of those exhibiting severe acute respiratory infection (SARI), influenza-like illness (ILI) and any COVID-19 suspect cases in the silent areas will help determine if restrictions should be eased or continued after May 3. **Sikkim, which has walled itself up has not reported a single case; some northeast States have reported only a few cases.** These States would not need a continued lockdown, once the true infection prevalence is ascertained. Most importantly, **the decision on whether to continue the restrictions or not should be taken at the local level; a centralised approach to decision making will be hugely counterproductive.** As Dr. Babu strongly advocates, it is important to segregate essential and non-essential activities and encourage more people to work from home till such time as an effective vaccine or anti-viral becomes available. Universal mask wearing, physical distancing and observing hand hygiene will help in curtailing the spread; but these will not be practical in slums and other crowded neighbourhoods.

On Herd Immunity

This brings to the fore a more natural way to slow down and bring the epidemic to an end through herd immunity that happens naturally during an epidemic. Herd immunity arises when a sizeable population gets naturally infected over a period of time so that the virus does not easily find a susceptible host to infect, thus bringing the epidemic to a halt – this is what Dr. Muliyl and virologist Dr. T. Jacob John advocate. The herd immunity that these scientists are referring to is not very dissimilar from the one practised by British Prime Minister Boris Johnson who intended using it as a strategy to end the epidemic. But the difference is that while Mr. Johnson put even the elderly and those with comorbidities at risk of infection through his approach, both these scientists have kept the interests of the elderly and those with comorbidities as top priorities. While these two categories of people who may experience serious symptoms and even death can protect themselves by self-isolation – also called as reverse quarantine – the young, who mostly exhibit only mild symptoms, can go out by following containment measures together with universal mask wearing, physical distancing and hand hygiene. **Strictly following containment measures, wearing a mask and maintaining physical distancing not only slow down the rate of infection but also the rate at which herd**



immunity is achieved naturally. But that is a small price to pay in order to avoid overwhelming the health-care system, if many require hospitalisation. In the case of H1N1, in 2009, the swine flu pandemic died out in two years when 40% of the population where the virus was spreading had been naturally infected. But it comes back each year as the **susceptible population through new birth grows beyond the threshold**. The same was true for all the previous influenza pandemics – the 1918 Spanish flu, 1957 Asian flu, and 1968 Hong Kong influenza. **Even during the pre-vaccination days, measles used to strike once in three years and German measles every seven years**. Dr. Jacob John expects at least one year for herd immunity to develop naturally for the novel coronavirus, provided shutdowns are eased. **Though other strains of coronavirus, which cause the common cold, infect people almost every winter, the same strain does not infect people twice**. But the mutations that these viruses undergo make most people susceptible to infection. **Fortunately, the novel coronavirus appears more stable (experiences fewer mutations) than other influenza viruses and so an infected person may probably be protected against future disease**, Dr. Muliyl hopes. WHO cautions that “there is currently no evidence that people who have recovered from COVID-19 and have antibodies are protected from a second infection”. Infected people may have some level of protection against the virus, but **the level and duration of protection is still unknown**. In South Korea, at least 222 people who have recovered from the disease have again tested positive. It is still not clear if it is a case of reinfection or reactivation (where infected people have not been able to completely clear the virus).



DreamIAS