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International

The Anatomy of Anti-Black Racism (Rajeev Bhargava - Professor, CSDS, Delhi)

- Racism has raised its ugly head in full public view once again. It was revolting to see an adult gasping for breath, writhing in pain as the knee of the white policeman crushed his neck, and, within minutes, dying – the umpteenth time that a black life has been barbarically taken away by police brutality in America. Despite the civil war over slavery, and the civil rights movement for dignity and equality, systemic discrimination and violence against blacks persists. Racism continues unabated. My sole focus here is coming to grips with **what racism is. In a nutshell, and with slight, only slight oversimplification, it is this: one can tell everything important about a person, his group, its past and future, by noting the colour of his skin.** Of course, noticing the physical characteristics of a person, say the colour of her skin, is not itself racist. Good writers are expected to provide a vivid description of a character's physical features, including skin-colour. This need not imply the idea of race, leave alone racism. For instance, Indian epics describe Krishna as having Shyam Varna, being the dark-skinned one. This description has no evaluative connotation. Being conscious of the colour of a person, your own or that of the other may be pretty innocent.

Idea of Race

However, when specific bodily features (colour, shape of nose, eye, lips) are permanently clumped together and human beings are classified in terms of these distinct biological clusters, and if, further, it is believed that these shared features are inter-generationally transmitted, then we possess the idea of race, i.e. a group with a common biological descent. Every single human being is not only seen then to be assigned to separate biologically-determined groups but also as born with traits directly inherited from biological ancestors. Each race is then believed to be fundamentally, permanently different from others – differences that are innate and indelible, for one can neither cease to have what one has inherited nor acquire characteristics which one does not already have. The idea of race is deeply problematic. Despite many attempts, particularly in the 1930s to demonstrate its scientific basis, race or racial classifications have virtually no scientific foundation. If anything, the only conclusion from available evidence is that the whole of humanity has the same lineage, that there are no races within humans but only one single human 'race'. Yet, while scientifically speaking, race is a fiction, a large number of people believe in the existence of races. Race is very much a cultural and social reality. **The classification of humans into different races is a necessary but far from sufficient ingredient of racism which depends on two additional, deeply troublesome features. First, a given set of biological characteristics is believed to be necessarily related to certain dispositions, traits of character and behaviour. Biological descent fixes a person's culture and ethics. Our capacity for reasoning, for 'civilization', our propensities towards sexual lasciviousness or ability to make money, can all be read off by examining our face and body. Second, these racial cultures and ethical systems are hierarchically arranged. Those**



on top are intrinsically superior to those at the bottom. Racism, then, is a systematic ideology, a complex set of beliefs and practices that, on the presumed basis of biology, divides humanity into the 'higher' us and a lower 'them'. It not only sustains a permanent group hierarchy but deeply stigmatises those designated as inferior. This sense of hierarchy provides a motive for say, whites to treat blacks in ways that would be viewed as cruel or unjust if applied to members of their own group. For instance, **contact with them is often regarded as contaminating, polluting**. It should therefore be avoided or kept to a minimum. To prevent sexual contamination through inter-marriage, the southern States of America had the severest laws sanctioning public lynching. How else could the 'colour line' be scrupulously maintained? This explains something important. Though colour-consciousness should not be problematic in theory, in reality, an acute awareness of colour is almost always a symptom of racism lurking somewhere unnoticed. Racism distinguishes even inferior races into two kinds. One inferior race is considered so much beyond the pale that it cannot be lived with, and must be exterminated. This is infamously illustrated by the virulent anti-Semitism in Nazi Germany that led to the final solution, the Holocaust. The second type of race is fit only to be controlled, subordinated, enslaved. Anti-black racism, our main concern here, is an obvious example. Closer home, some Varna-related ideologies (in the Dharmashastras from 1st ACE onwards) that stigmatised the pratiloma castes, particularly the 'Chandalas', function as virtual equivalents of racism as do the now somewhat scarce Christian anti-Judaism or contemporary Islamophobia.

An Ideology on Display

Racism naturalises a person's belief, character and culture. For example, being uneducated is seen not as socio-economic deprivation but a sign of inherited low IQ; blacks are predatory and are also seen to have an innate streak of savagery, which unless kept down by brute force from time to time, might explode and destroy civilisation. It is this ideology of anti-black racism that was brazenly on show in the 9- minute video clip of the merciless, life-extinguishing force used by the police on George Floyd. Some Americans notice and seem shell-shocked by racism only when such violence occurs. Hasn't the civil rights movement been successful in damaging racism, they ask? Is it not difficult now to justify any act by explicit reference to race? Is this not good reason to believe that racism will disappear from America by good laws, education and rational argument? Alas, the very success of the movement that helped develop a motivated blindness to how open discrimination of blacks has been displaced by another system of hidden discrimination. A systematic constraint on avenues for improving the quality of life forces their descent into pretty crime, incarceration, stigma attached to imprisonment and the severe discrimination and exclusion that follows the charge of felony. All these, as scholars such as Jane Hill have shown, have made the criminal system produce results as vicious as generated by colour-based slavery and racial segregation. For example, in a number of southern States in America, once declared a felon, a person is disqualified from voting. So, once the criminal justice system labels people of colour as "criminals", whites have the sanction to engage in all the practices of subordination that they had apparently abandoned. The United States now has the highest rate of incarceration in the world, surpassing those in highly repressive regimes such as China and Iran. The figures related to African-Americans are shocking. In several States, they are 10 times more likely to go to prison than whites. According to the Death Penalty information Centre of the U.S., between 1976-2019, black defendants sentenced to death for killing whites numbered 291, while white defendants killing blacks were only 21, a staggering figure close to 14 times more! (For a quick overview, also see the Netflix film, "13th").



Racialised Criminal System

It is amply clear that the feel-good anti-racism of some Americans that views racism as an aggregate of mistaken beliefs held by individuals that can be dissipated by education and rational argument simply does not work. True, good education helps in dismantling racism but the fact remains that much of it lies hidden within the social structure, in habits, practices and institutions. Vulnerabilities amassed over centuries of anti-black racism leave African-Americans facing multiple, intersecting hurdles to a good life. As mentioned, the current criminal system that awards unfair advantage and privilege to whites, while inflicting unmerited and unjust disadvantages on blacks exemplifies this invisible monster. Only a peaceful movement to end institutionalised racism, with both blacks and white participants, quite like the recent protests after Floyd's murder, can break the back of this evil. But can such a movement be sustained? Will it be allowed to?

Everything You Need to Know About the Hactivist Group

- As racial tensions in the US continue to make headlines, the 'hactivist' group **Anonymous** is back in focus with social media handles believed to be associated with its promising retribution for the death of George Floyd. On May 28, in a video posted on an unconfirmed Facebook page, a speaker wearing Anonymous signature Guy Fawkes mask accused the Minneapolis police of having a "horrific track record of violence and corruption" and threatened to "expose" its "many crimes", TIME reported. Since then, the group has been accused of carrying out a cyberattack on the websites of the city of Minneapolis and its police department, making them temporarily inaccessible. The webpage of a United Nations agency was also defaced, and replaced with a memorial carrying an Anonymous symbol that read "Rest in Power, George Floyd!"

Who Are the Anonymous?

The group has been described as a **decentralised online collective with no particular political affiliation, that rallies around causes such as opposing censorship and government control and promoting freedom of speech**. In the past, it has expressed support for the Occupy movement and Julian Assange's WikiLeaks. The worldwide group is believed to include anyone who wants to join; **its members being referred to as 'anons'**. A **signature characteristic of Anonymous is the Guy Fawkes mask, portrayed in the dystopian novel and film 'V for Vendetta', in which an anarchist anti-hero wearing the mask fights against a fascist, white supremacist government**. Even beyond the internet, sympathisers of the movement have sported the Guy Fawkes at rallies around the world. Another attribute of the group is the **use of voice changers or text-to-speech programmes that let anons mask their voice in video messages**. Anonymous does not use any verified social media handles, with multiple factions using portals such as the 'AnonNews' website and Twitter account for disseminating the group's motives and campaigns.

Major Activities

The movement is believed to have started on imageboard websites such as 4chan in the early 2000s, and first became famous in 2008 when it unleashed cyberattacks on the Church of Scientology after the latter sought to remove from the internet a controversial video of film star Tom Cruise—an outspoken Scientologist—speaking about his religious beliefs. In 2010, **Anonymous was believed to be responsible for cyberattacks on Visa, MasterCard, and PayPal, after the financial services firms blocked donations to the**



controversial whistle-blower WikiLeaks. In 2011, Anonymous launched a tirade against the Westboro Baptist Church, a denomination known for its extreme opposition to homosexuality. Also, that year, the group was alleged to have sabotaged electronics giant Sony's PlayStation network, after anons accused Sony of backtracking from providing an advertised feature. During the 2011 Arab Spring, it went after government websites in Egypt and Tunisia. A year later, after the US banned the popular file-storage website Megaupload, Anonymous shut down the websites of the Federal Bureau of Investigation (FBI) and the Department of Justice. **In April 2012, Time magazine named Anonymous in its World's 100 Most Influential People list.** Also, in 2012, the hacking movement called for protesters across India to oppose what it considered growing government censorship of the internet after a Chennai court demanded 15 service providers to block access to file-sharing websites such as Pirate Bay. **Over the years, the group has targeted child pornography websites and recruiting portals for the Islamic State.** It has also gone after government agencies such as the Central Intelligence Agency (CIA) and the Pentagon in the US and the Scotland Yard in the UK. This is not the first time that Anonymous has taken part in protests against racial discrimination in the US. In 2014, anons attacked the City Hall website of Ferguson, Missouri, after the fatal shooting of Michael Brown, and threatened cyberattacks against police and local government if protesters were harmed.

Tactics

Anonymous is known to primarily employ what is known as Distributed Denial of Service (DDoS) attacks, in which hackers swamp a website's server with data that causes it to crash, making the website inaccessible. Another tactic that it uses is defacement- when the target website's pages are replaced with the hacktivists' messages and graphics. A related method is redirection- in which a change in the chosen web site's addressing causes its users to be redirected to another page. The group also uses more serious methods such as **doxing**, in which private or sensitive information is stolen, destroying data using computer viruses, and "phishing" for extracting personal data. Anonymous members have had **several run-ins with the law, with government agencies making arrests for computer hacking, fraud, and cyber-stalking.** In 2017, American hacktivist James Robinson was sent to prison for six years after being convicted for carrying out DDoS attacks. Another hacker, Deric Lostutter, was sentenced to two years in prison after infiltrating the website of a high school sports team for exposing the alleged coverup of a 2012 rape case.

Why Hollywood Classic 'Gone with The Wind' Is in Controversy, Again

- ➔ Since the death of George Floyd in Minneapolis in the US, Black Lives Matter protests have broken out in several countries, sparking off a renewed debate on racism in everyday life, including the portrayal of black people in popular culture. **This week, the online streaming service provider HBO Max announced it had temporarily removed from its collection the 1939 movie 'Gone with the Wind', over what it described were "racist depictions".** In a statement, an HBO Max spokesperson said, "'Gone with the Wind' is a product of its time and depicts some of the ethnic and racial prejudices that have, unfortunately, been commonplace in American society... These racist depictions were wrong then and are wrong today, and we felt that to keep this title up without an explanation and a denouncement of those depictions would be irresponsible."



What Is The 'Gone with The Wind' About?

Based on a 1936 novel of the same name by Margaret Mitchell, 'Gone with the Wind' tells the story of Scarlett O'Hara, the enterprising daughter of a plantation owner in the Southern US. Set during the American Civil War (1861-65), it follows O'Hara's romance with Rhett Butler, sometimes lapsed, sometimes born-again 'Southern gentleman'. The film, released in 1939, won a slew of honours at the 12th Academy Awards, including Best Picture. Among its 9 Oscars included Best Supporting Actress for Hattie McDaniel, the first African American woman to win the award. McDaniel played the role of Mammy, a slave close to O'Hara. The film propelled Vivien Leigh (who played O'Hara), and Clark Gable (as Rhett Butler) to lifelong stardom. 'Gone with the Wind' is the highest-grossing film in history (adjusted for inflation), and has been re-released on several occasions over the decades. In 1989, the film was selected for preservation at the USA's National Film Registry.

Why Is the Film Problematic?

This is not the first time the film has stirred debate. For several years, commentators have denounced the film for its rosy depiction of slavery before the Civil War, while downplaying its horrors. Some cinema halls in the US have already removed the film from their rotations in recent times. Critics have lambasted the film for portraying slaves as happy and content while being loyal to their owners, thus obscuring the brutal conditions in which enslaved people lived, and for painting black people as naive and simple-minded. The film is also attacked for perpetuating Lost Cause myths propounded by white supremacists.

What Are the Symbols of The Confederate States in the US?

- ➔ On June 10, Trump tweeted, "It has been suggested that we should rename as many as 10 of our Legendary Military Bases, such as Fort Bragg in North Carolina, Fort Hood in Texas, Fort Benning in Georgia, etc. These Monumental and very Powerful Bases have become part of a Great American Heritage... Therefore, my Administration will not even consider the renaming of these Magnificent and Fabled Military Installations."

Who Has Demanded That the Military Bases Be Renamed?

Amid these protests, some of the participants have demanded the removal of statues or monuments that can be perceived as symbols of racism, including Confederate monuments. This week, protestors tore down a statue of Jefferson Davis in Richmond, Virginia. Davis was the president of the Confederate States of America during the Civil War. Not only in the US, but in the UK as well, the statue of noted slaveholder Robert Milligan was removed from outside the Museum of London Docklands. Similarly, anti-racism protestors removed the statue of slave trader Edward Colston in Bristol on Sunday. Further, the BBC reported that during a BLM protest in Central London on Sunday, a statue of Sir Winston Churchill was sprayed with graffiti. Before Davis's statue was removed on Wednesday night, American auto-racing company NASCAR announced it will prohibit the display of the confederate flag from all NASCAR events and properties.

What Are Confederate Symbols?

The Confederate States of America or the Confederacy refers to the government of 11 Southern slaveholding states that seceded from the Union in 1860-61 in the American Civil War, after they felt threatened by the election of Republican candidate Abraham Lincoln as the US President in 1860. These pro-slavery states operated under the presidency of Jefferson Davis and vice president Alexander Stephens. Soon, the Confederacy acquired



symbols such as the Confederate flag and their own stamps. These states carried out all their affairs separately until they were defeated in 1865. States that were a part of the Confederacy included South Carolina, Mississippi, Florida, Alabama, Georgia and Texas, among others. On July 10, 2015, South Carolina state troopers ceremonially lowered the Confederate flag after 21-year-old white supremacist Dylann Storm Roof, who massacred nine African Americans at a black church in Charleston in June 2015, was seen holding the flag. The flag, which is used to honour the Confederates who died in the Civil War, is seen by many white supremacists as a symbol of Southern pride. Confederate names and symbols can be found on commemorative licence plates, public schools, statues, military bases, parks, roads and counties. According to a report in Politico, there are over 220 Confederate symbols in the state of Virginia alone, which include three military bases named after Confederate war heroes. According to the Southern Poverty Law Centre, there are more than 1,700 such symbols across the US, including more than 700 Confederate statues.

[#Blacklivesmatter: 'There Has Never Been A Reckoning For \(American\) Policing's Slave-Patrol Origins' \(Dr Connie Hasset-Walker - Assistant Professor of Justice Studies and Sociology at Norwich University. She Was Interviewed by Devyani Onial About the Roots of US Police Atrocities Against African-Americans, And the Way Ahead for America After the Extraordinary Events That Followed the Murder of George Floyd.\)](#)

- At the time of the American Civil War (1861-1865), there were only 34 states at the time (now there are 50); 15 of those 34 states were slave states. As the slave population grew in the slave states, there was concern among the white landowners, as well as the rest of those states' population, that there could be slave revolts and escapes. (And there were.) So, the states began to pass slave laws or codes. These facilitated the creation of the slave patrols, sometimes also known as paddy rollers. Members of the slave patrols were typically white men. Their job was to capture escaping slaves and return them to the plantations/slave owners; as well as terrorise and discipline any slaves that slave owners said were misbehaving. Their tactics were brutal, similar to actions that plantation overseers would use. The Carolina Colony (which would later become North and South Carolina) was the first to create slave patrols in 1704; by 1837, South Carolina slave patrols had more than 100 members – larger than the police forces of some northern cities. By the end of the 1700s, every American slave state had slave patrols. They lasted for about 150 years, ending with the South's loss in the Civil War and the passage of the 13th Amendment to the US Constitution, which outlawed slavery. After that, the former southern slave patrols morphed into police departments that technically were different from slave patrols, but were basically still charged with controlling the freed former slaves (Black people). About 30 years after the end of the Civil War, we start to see the passing of what are called Jim Crow laws. These laws basically kept segregation – separation of whites and blacks – in place legally until the late 1960s. A key factor in bringing Jim Crow to an end was the passage of the Civil Rights Act (1964). So, 150 years of slave patrols (in the southern states; in the northern states, policing evolved differently) and about 80 years of Jim Crow laws, all enforced by police – this is 230 years of structural racism and violence in policing versus only about 50 years of post-Jim Crow policing. I am of the opinion that people cannot just flip 'off' the switch and forget about structural racism, discrimination and violence. It takes generations to evolve beyond that, and a commitment to do so.



African American community are wary of police, more so in some communities than others. While George Floyd's death as seen on widely available video (YouTube) is particularly terrible, there have been many others: Eric Garner, Mike Brown, Ahmaud Aubrey (recent), Breonna Taylor (recent), Walter Scott, Freddie Gray, Tamir Rice, and on and on and on. The difference nowadays, to me, is that everyone seems to have a smartphone and knows to pull it out and start video recording a citizen-police encounter once they see it; and then they upload it to their social media for the world to see. If you know about the police beating of Rodney King back in Los Angeles, California, in 1991, Mr King was certainly not the first Black man to be beaten up by police, but it was the first time that someone video-recorded the beating. That video validated what many African Americans knew at that time – that Los Angeles police were very brutal towards Black people. The frequent lack of consequences in the justice system for police that beat up and sometimes kill African Americans – that was a leading cause of the start of the #Blacklivesmatter movement. What is different about the murder of George Floyd is how quickly the police officer, Derek Chauvin, who kneeled on his neck, was charged with third-degree murder. (The charge has since been upgraded to second degree murder. The other officers who were present but did not intervene when Mr Floyd was killed have also been charged) Whether Mr Chauvin will ultimately be convicted... we'll see. But the swift arrest and issuing of a charge – that's important, and unusual.

Arresting/policing and corrections are two different branches of the justice system. They're related obviously, but there are differences. Much of the current disproportion of Blacks and people of colour in jails and prison – both men and women – stems from the "war on drugs" that was launched in America around the 1970s. Lots of get-tough-on-drugs laws were passed (e.g., three strikes laws, truth-in-sentencing laws). Fast forward to 2020, most criminologists would agree that the "war on drugs" was basically a failure. It didn't stop people from buying or using drugs, but it did put lots of people of colour, African Americans particularly, in prison. This has more to do with modern racial disparities stemming from the war on drugs than the country's history of slavery and Jim Crow laws. There's no quick fix for systemic racism in policing, but my suggestions would be:

- ❖ Acknowledgement that the origins of American policing (slave patrols, enforcers of Jim Crow laws) still echo today
- ❖ Agreement that there cannot be another murder like what happened to George Floyd
- ❖ Continued hiring of more officers of colour & women, including in supervisory positions
- ❖ Have officers live in the communities they police
- ❖ Consequences for bad behaviour (arrest, charging)
- ❖ Proper training emphasising techniques to use and not use force, when to stop using force (i.e., when a citizen is adequately subdued and no longer a threat)
- ❖ Police unions should take ownership of this issue

[Why A Statue of Belgium's King Leopold II Was Removed After 'Black Lives Matter'](#)

Protests

- The protests following the death of George Floyd in the US have spread to several other countries in Europe. In places like the UK and Belgium, the movement is making people re-engage with the violent colonial histories of their own nations. This past week, **protesters in the UK pulled down the statue of Edward Colston in Bristol and threw it into a nearby river. Winston Churchill, whose colonial policies devastated the Indian subcontinent, was**

[Shatabdi Tower, Sakchi, Jamshedpur](#)



defaced in London. In Belgium, protestors have been calling for the removal of statues of King Leopold II, whose violent, exploitative policies in the Congo were used to enrich Belgium. On June 9, a statue of the king in Antwerp was defaced and removed.

Who Was King Lepold II?

Belgium's longest-reigning monarch King Leopold II, whose reign lasted between 1865 and 1909, was notorious for his treatment of the Congo Free State in the African continent, which he owned. During his reign and ownership of the Congo Free State, today known as Democratic Republic of the Congo, countless Congolese were subjected to atrocities and brutal killings, as the Belgium kingdom exploited Congo's wealth and natural resources. After Leopold II sold the Congo Free State to the Belgian government in 1908, the territory became a colony of the Belgian government and was called the Belgian Congo. The Democratic Republic of the Congo achieved its independence in 1960. Although it is difficult to estimate the exact number of Congolese who perished due to colonial violence, researchers peg the number at approximately 10 million. Some say the figures could be higher. According to researchers, like in other nations that engaged in colonial plunder, in Belgium, the wealth and resources looted from the Congolese people can still be witnessed in its public buildings and spaces across the country. Several cities and towns, including the capital Brussels, were largely built and developed using funds that Leopold II looted from the Congo.

Is Controversy Surrounding King Leopold II's Statues New?

The Belgian monarchy has never apologised for atrocities committed during its years of colonisation. Campaigners have been trying for years to get statues of Leopold II and other commemorations of the country's colonial history removed from various public places in Belgium. Now, the Black Lives Matter movement has brought these issues to the forefront. According to researchers and historians, many believe the situation in the Congo Free State under Leopold II was different from that under the Belgian government – some say it was worse, while others disagree. Yet others are critical of Belgium's colonial policies altogether. This lack of consensus, researchers believe, is one reason why Belgium's violent colonial history has not been more severely and widely criticised in the country.

Why Do People Want King Leopold II's Statues Removed?

In Belgium, according to conversation on social media, there are people who believe his statues should be removed because of his own actions and role in the brutal murders and violence against the Congolese, including against children, and the sexual violence perpetrated on women. Others believe that the statues should be removed because Leopold II was representative of the country's violent colonial past. On June 9, a statue of Leopold II in Antwerp was removed. The ongoing protests may lead to other statues of the king being removed from public spaces and cities across the country. There are some in Belgium who do not agree with the attempts to remove Leopold II's statues. Anti-racism activists have told Belgian media that these oppositions are mainly coming from people whose ancestors may have socio-economically and politically benefitted from Leopold II's colonial policies. Activists and researchers say that attempts to project colonisers in a more favourable light are usually made by people who are unwilling to fully acknowledge the inherently violent nature of colonialism. Leopold II's statue in Kinshasa, the capital of the Democratic Republic of the Congo, was removed after the country's independence in 1960. In 2005, however, the country's culture minister Christophe Muzungu decided to reinstate the statue, generating controversy, especially for justifying the actions by



implying that Leopold II's policies, when the country was still called the Congo Free State, brought in economic prosperity – a view rejected by many in the country. **Till 1966, the capital Kinshasa was called 'Leopoldville' after Leopold II, when it got its present name. Following the defacement and removal of Leopold II's statue in Antwerp, some Belgians began criticising the protestors.** Several other users on social media platforms have supported the removal of Leopold's statue and have also suggested that statues of other colonisers across Europe and the UK – of Winston Churchill for instance – be removed in similar ways.

Why Has Edward Colston Become A Target of Anti-Racism Protests?

- As anti-racism protests spread across Europe, in solidarity with the death of George Floyd in the United States of America, the protestors decided to attack their own local brand of racism. **In the English port city of Bristol, on Sunday, a group of 10,000 demonstrators pulled down a 125-year-old statue of 17th century slave trader Edward Colston and dragged it through the city's streets into the harbour of river Avon.** A petition seeking a reassessment of Colston's contribution to the city of Bristol has been doing the rounds for the last three years. "Whilst history shouldn't be forgotten, these people who benefited from the enslavement of individuals do not deserve the honour of a statue. This should be reserved for those who bring about positive change and who fight for peace, equality and social unity," reads the petition that asks for the removal of his statue from the city centre. In the last week alone, the petition gathered about 7000 signatures. The recent incident of the 18-foot statue of Colston being pulled down has caused a stir in the city, with residents divided over his exact role in history. While some would like to remember him as a philanthropist who devoted his fortunes to the development and prosperity of Bristol, others are wary of the exploitative nature of his work that brought in the same fortunes.

Why Is Edward Colston Seen as A Racist?

Colston was born in 1636 to a merchant family that had been living in Bristol since the 14th century. While he grew up in Bristol till the English Civil War of 1642-51, his family later moved to London, where Colston began his professional life. At the initial stage of his career, Colston was involved in the trading of cloth, oil, wine, fruits with Spain, Portugal, Italy and Africa. In 1680, however, he joined the **Royal African Company (RAC), which had a monopoly in England on the trade of gold, silver, ivory, and slaves, along the west coast of Africa.** The RAC was established by King Charles II along with his brother James, the Duke of York. "Many of the enslaved Africans were branded with the initials 'DY', standing for Duke of York. They were shipped to Barbados and other Caribbean islands to work on the new sugar plantations, as well as further north to England's American colonies," they add. Colston rose up to the company's board quite rapidly, taking on the position of Deputy Governor in 1689. During the period of his involvement with RAC till 1692, the company is believed to have transported about 84,000 slaves, out of which close to 20,000 are known to have died.

Why Is Edward Colston Seen as A Philanthropist?

Bristol, Liverpool, Glasgow, and London were the key ports for British companies trafficking African slaves across the Atlantic. The merchants, shipbuilders, sailors involved in the trade were a major source of income and wealth for these cities. Colston was one such slave trade magnate, who funded a wide range of charitable projects in Bristol and London, including schools and alms-houses for the poor of the city, thereby developing the



reputation of a philanthropist. He briefly served as a Tory MP for Bristol before dying in Mortlake, Surrey, in 1721. The exhaustive five-volume work, 'The History of Parliament: the House of Commons, 1690-1715,' describes Colston thus: "In his day he was revered by Bristol's corporation as 'the highest example of Christian liberality that this age has produced, both for the extensiveness of his charities and the prudent regulation of them.'" Colston's image as that of a philanthropist is dotted across the length and breadth of Bristol. Apart from the statue that was torn down recently, his name is enshrined upon an independent school, a high-rise building called Colston Tower, Colston Street and Colston Avenue, as well as the Colston Hall.

Russia Oil Leak: What Is Permafrost, And Why Does Its Thawing Pose Risk to The World?

- The principal reason that led to the recent 20,000-tonne oil leak at an Arctic region power plant in Russia that is now being recognised is the **sinking of ground surface due to permafrost thaw**. The **thermoelectric plant at Norilsk**, 3,000 km northeast of Moscow, is built entirely on permafrost, whose weakening over the years due to climate change caused the pillars supporting a fuel tank at the plant to sink, leading to loss of containment on May 29. Concerned by the incident, Russian officials on Friday ordered the inspection of "particularly hazardous sites" located in permafrost areas, the state-owned TASS news agency reported.

What Is Permafrost?

Permafrost is ground that remains completely frozen at 0 degrees Celsius or below for at least two years. It is defined solely based on temperature and duration. The permanently frozen ground, consisting of soil, sand, and rock held together by ice, is believed to have formed during glacial periods dating several millennia. These grounds are known to be below 22 per cent of the land surface on Earth, mostly in polar zones and regions with high mountains. They are spread across 55 per cent of the landmass in Russia and Canada, 85 per cent in the US state of Alaska, and possibly the entirety of Antarctica. In northern Siberia, it forms a layer that is 1,500 m thick; 740 m in northern Alaska. At lower latitudes, permafrost is found at high altitude locations such as the **Alps and the Tibetan plateau**. While permafrost itself is always frozen, the surface layer that covers it (called the "active layer") need not be. In Canada and Russia, for example, **colourful tundra vegetation carpet over permafrost for thousands of kilometres**. Its thickness reduces progressively towards the south, and is affected by a number of other factors, including the Earth's interior heat, snow and vegetation cover, presence of water bodies, and topography.

How Climate Change Is Eating Away at These Grounds

The Earth's polar and high-altitude regions – its principal permafrost reservoirs – are the most threatened by climate change. According to the USA's National Oceanic and Atmospheric Administration, **Arctic regions are warming twice as fast compared to the rest of the planet**, its current rate of temperature change being the highest in 2,000 years. In 2016, Arctic permafrost temperatures were 3.5 degrees Celsius higher than at the beginning of the 20th century. **A study has shown that every 1-degree Celsius rise in temperature can degrade up to 39 lakh square kilometre due to thawing**. This degradation is expected to further aggravate as the climate gets warmer, putting at risk 40 per cent of the world's permafrost towards the end of the century– causing disastrous effects.



The Threat to Infrastructure

Thawing permafrost is also ominous for man-made structures overhead. In May, when the Russian oil leak occurred, the Copernicus Climate Change Service recorded temperatures in Siberia at more than 10 degrees Celsius above average, and called them “highly anomalous” for the region where the power plant is located. As temperatures rise, the binding ice in permafrost melts, making the ground unstable and leading to massive potholes, landslides, and floods. The sinking effect causes damage to key infrastructure such as roads, railway lines, buildings, power lines and pipelines that serve more than 3.5 crore people that live in permafrost regions. These changes also threaten the survival of indigenous people, as well as Arctic animals. Soil subsidence is a major cause for concern in Siberia, where ground levels have collapsed by more than 85 metres in some parts. In Canada and Alaska, the costs of repairing public infrastructure are escalating. As per an Arctic Council report from 2017, melting ice would make infrastructure foundations unable to withstand loads that they were able to during the 1980s – a finding that has been corroborated by the owners of Russia’s oil leak site, who said after the incident that the fuel tank’s supporting pillars had held it in its place “for 30 years without difficulty”.

A Ticking Time Bomb

Beneath its surface, permafrost contains large quantities of organic leftover from thousands of years prior – dead remains of plants, animals, and microorganisms that got frozen before they could rot. It also holds a massive trove of pathogens. When permafrost thaws, microbes start decomposing this carbon matter, releasing greenhouse gases like methane and carbon dioxide. Researchers have estimated that for every 1-degree Celsius rise in average temperature, permafrost grounds could release greenhouse gases to the tune of 4-6 years of emissions from coal, oil, and natural gas – becoming a major factor of climate change in themselves. Along with greenhouse houses, these grounds could also release ancient bacteria and viruses into the atmosphere as they unfreeze. In 2016, a melted 75-year-old anthrax-infected reindeer carcass led to an outbreak of the disease, causing the death of a child and hospitalising 90 people.

Who Is Cynthia Ritchie, The Mysterious American Woman Who’s Roiling Pakistan’s Politics?

- It all began on Twitter, on May 28, when Cynthia D Ritchie, an American national who has lived in Pakistan for nearly a decade, tweeted alleging that Benazir Bhutto would order her guards to “rape” women with whom her husband Asif Ali Zardari had affairs. Since then, the matter has spiralled, and drawn in more top-rungers in the Pakistan People’s Party (PPP). On Saturday, Ritchie accused former Interior Minister Rehman Malik of raping her, and former Prime Minister Yusuf Raza Gilani and another Cabinet Minister of groping her. Both Malik and Gilani have denied the allegations. The PPP, the ruling party in Sindh province, despite the massive setback in the 2018 parliamentary election, is shaken and has demanded that the Federal Investigation Agency (FIA) investigate Ritchie and the terms of her stay in Pakistan for her “very derogatory and slanderous remarks” about Benazir and Zardari. Sherry Rehman, a PPP representative in the Senate, the upper house in Pakistan’s parliament, posted on Twitter: “I usually don’t dignify such garbage, but this is libellous, heinous slander based on malicious lies. Attributing such filth to a champion for women’s rights, a martyred prime minister degrades the writer of this bot-handle more than anything else.” Even as Pakistan grapples with a surge in novel coronavirus infections,



many Pakistanis are finding l'affaire Cynthia Ritchie more riveting at the moment. There are plenty of PPP-haters who are savouring the moment, but an equal number are asking: who is Cynthia Ritchie?

So, Who, Indeed, Is Cynthia D Ritchie?

From reports in the Pakistani media, it appears that she has been a resident of Pakistan for close to a decade. She has been described as a blogger, a filmmaker, and “a social media enthusiast”. Her Facebook page says she is from Louisiana, “has a Master’s degree from Louisiana State University and additional graduate training at University of Houston School of Law, Pepperdine University and George Washington University in the faculties of mass communications, criminal justice, conflict resolution, clinical & behavioural psychology and strategic public relations”. Her bio says she works at “A Different Lens Production”, a filmmaking company. The Facebook page of this company has short videos from the Swat Valley in December 2019. Her blog does not show up in Internet searches, and although she has said many times over the past 10 years that she is making a documentary, she does not seem to have one made yet. In an interview to a Pakistani magazine called “Thexpatt”, titled “Chronicles of an Adventuress”, **Ritchie said she had been visiting the country since 2010 “in the wake of the floods” of that year.** Her visits, she said, were funded by Pakistani-Americans.

However, some Pakistanis smell something fishy in the story of the “pagal gori”, as “Thexpatt” described her, who is in love with the country. On social media, they describe her as “close to the establishment”, and ask how she has managed to get a visa to live and stay in the country year after year, with access to places that can only be given after clearance at the highest level of the militabishment that rules Pakistan. Her Facebook page shows she is active in the lobbying efforts against India on Kashmir, but that is not what is riling those who suspect that this a broader design. Some believe she is a CIA mole who has developed deep contacts in the security establishment. **Others think that she has been co-opted by the Pakistan military, and this is their latest hit job against civilian politicians, especially the PPP.** “I can’t say whether or not she had the experiences she’s gone public about. That is something that remains to be investigated. Meanwhile, her accusations, coming at this time, divert attention from the main threat the country faces, the health and economic crisis arising from the coronavirus pandemic. **The PPP-led Sindh government has taken the lead in trying to stop the spread, that the federal government has been opposing it tooth and nail,**” Beena Sarwar, a journalist and human rights and India-Pakistan peace activist, said. “These allegations put pressure on political parties, make them lose face publicly, probably to divert attention from other issues such as the lack of governance,” said Ayesha Siddiq, a Pakistani military and political analyst. Pakistan has nearly a lakh Covid-19 positive cases, and 2,000 deaths. It may be also purely coincidental that the allegations have come at a time when the 10th National Finance Commission has just been constituted. In post-Covid Pakistan, its allocations will be extremely vital for the four provinces. **The PPP, which brought in changes to the way resources were distributed among the provinces when it was in office 10 years ago, has resisted attempts by the present government, prodded by the military, to change the criteria, as well as a planned rollback of the progressive 18th amendment to the Constitution under which devolution to the provinces was increased.** Ritchie has also dragged in the Pashtun Tahafuz Movement (PTM), a group with wide support in what used to be the Federally Administered Tribal Areas (FATA) of Khyber Pakhtunkhwa province, in particular in South and North Waziristan, the geographical centre of Pakistan’s Afghanistan policy. In a purported letter to the FIA following the PPP’s complaint against



her, she has said that she is investigating the PTM's links with the PPP. The PTM is a strident critic of the Pakistan Army's proxy war policy through jihadist groups and its extension, the shadow wars within the country. Just two years old as a political party, it is the only organised political force that now challenges the Pakistan Army openly. PTM members and supporters have questioned Ritchie's interest in the party – one on whose activities the Pakistan Army has tried to keep a lid on, and whose members it describes as terrorists.

If this entire episode is indeed a plot against the PPP, it seemed to go awry when a well-known transTV celebrity, Ali Saleem, famous for his portrayals of Begum Nawazish Ali, made the claim that Ritchie had confided in him that Imran Khan had propositioned her. Ritchie hit back saying Ali Saleem's history of substance abuse was well-known, and that he was not in the best of health. On Twitter, where the battle is playing out most intensely, Ritchie's supporters are denouncing all those who question her as traitors and anti-Pakistan, while her detractors are raising questions about her visa, work, and who is paying her.

Why Has North Korea and South Korea Stopped Talking?

→ **Pyongyang announced it was cutting off all communication with Seoul** in a tersely-worded statement, calling South Korea the “enemy” and warning that this was the first of several similar actions. According to experts, **these moves may have been a result of North Korea's frustrations at South Korea's inability to revive, under US pressure, inter-Korean economic projects that had been beneficial to Pyongyang.** Some other experts believe this break in communication may be because of **anti-DPRK propaganda being launched into North Korea from activists in South Korea.**

Has Communication Stopped Between Pyongyang & Seoul Before?

This is not the first time that communication between North Korea and South Korea has temporarily ceased. Despite conflict between the two countries, over the years, according to a Reuters report, **at least 49 hotlines have been established between Seoul and Pyongyang to facilitate diplomatic talks, reduce tensions and military conflict, to coordinate air and sea traffic as well as to engage in cross-border economic projects etc.** According to Reuters, these lines of communication were **first established in the 1970s and have been updated since with modern technology.** When relations deteriorate between the two countries, these lines of communication are stopped between the two countries, till the situation improves. **The lines were last cut in 2016 after diplomatic relations between Seoul and Pyongyang deteriorated, coinciding with Donald Trump becoming the US president.** During this time, Trump sent a volley of verbal attacks North Korea's way and Pyongyang engaged in a string of nuclear tests along with testing ballistic missiles. The lines of communication were only restored in 2018.

What Recent Incidents Angered Pyongyang?

Researchers and analysts spend hours trying to understand the state of affairs in Pyongyang through dispatches in North Korean state media. Most recently, the focus of Pyongyang's ire appears to be **projects of activists and North Korean defectors in South Korea who send anti-DPRK leaflets across the border to North Korea. Along with these propaganda leaflets, other items such as rice, medicines and Bibles have also been sent across by activists using balloons.** For several days before the lines of communication were cut, Pyongyang had expressed its anger at these actions and threatened to close an



inter-Korean liaison office and other inter-Korean projects if Seoul did not stop the activists and defectors. North Korea followed on its threats by closing communication lines in its inter-Korean liaison office and the hotlines between the South Korea's presidential office and North Korea's leader. Communication lines between militaries of the two counties were also stopped. South Korea's defence ministry confirmed that daily calls had gone unanswered on North Korea's side. On Monday, South Korea announced that for the first time in two years, North Korea did not answer the liaison office line in the morning, but an afternoon call had been answered. There was no clarity on the subject of discussion during this phone call.

What's Next for Seoul And Pyongyang?

Long-time observers of the Korean Peninsula believe this recent development may just be about economic pressures that Pyongyang is facing, particularly at a time when the coronavirus outbreak that impacted the world economy.

The South Korean government's Unification ministry recently announced that it will press charges against two activists who had been sending propaganda and launching rice-filled balloons into North Korea. South Korea's President Moon Jae-in has been consistently working to improve relations with North Korea and some critics believe preventing activists and defectors from launching propaganda into North Korea and charging activists may be an infringement of their democratic rights and an attempt to curb their freedom of speech. These inter-Korean tensions come at a time when North Korea and the US have reached an impasse on negotiations on nuclear capabilities of North Korea, discussions that had been aided by South Korea.

An Unravelling of The Group of Seven (Jayant Prasad, A Former Diplomat, Served as Director General of The Institute for Defence Studies and Analyses)

- The G7 emerged as a restricted club of the rich democracies in the early 1970s. The quadrupling of oil prices just after the 1973 Arab-Israeli War, when members of the Organization of the Petroleum Exporting Countries (OPEC) imposed an embargo against Canada, Japan, the Netherlands, and the United States, shocked their economies. Although the French were spared the embargo, the chill winds of the OPEC action reverberated around the world. French President Valéry Giscard d'Estaing invited the Finance Ministers of five of the most developed members of the Organisation for Economic Cooperation and Development, the United States, Germany, Japan, Italy, and the United Kingdom, for an informal discussion on global issues. This transformed into a G7 Summit of the heads of government from the following year, with the inclusion of Canada (1976), and the European Commission/Community (later Union) attending as a non-enumerated member, a year later. On the initiative of U.S. President Bill Clinton and British Prime Minister Tony Blair, the G7 became the G8, with the Russian Federation joining the club in 1998. This ended with Russia's expulsion following the annexation of Crimea in 2014.

Economic Circumstances

When constituted, the G7 countries accounted for close to two-thirds of global GDP. According to the 2017 report of the accountancy firm, PwC, "The World in 2050", they now account for less than a third of global GDP on a purchasing power parity (PPP) basis, and less than half on market exchange rates (MER) basis. The seven largest emerging



economies (E7, or “Emerging 7”), comprising Brazil, China, India, Indonesia, Mexico, Russia and Turkey, account for over a third of global GDP on purchasing power parity (PPP) terms, and over a quarter on MER basis. India’s economy is already the third largest in the world in PPP terms, even if way behind that of the U.S. and China. By 2050, the PwC Report predicts, six of the seven of the world’s best performing economies will be China, India, the United States, Indonesia, Brazil, and Russia. Two other E7 countries, Mexico and Turkey, also improve their position. It projects that India’s GDP will increase to \$17 trillion in 2030 and \$42 trillion in 2050 in PPP terms, in second place after China, just ahead of the United States. This is predicated on India overcoming the challenge of COVID-19, sustaining its reform process and ensuring adequate investments in infrastructure, institutions, governance, education and health.

The Limitations of G7

The success or otherwise of multilateral institutions are judged by the standard of whether or not they have successfully addressed the core global or regional challenges of the time. **The G7 failed to head off the economic downturn of 2007-08, which led to the rise of the G20.** In the short span of its existence, the G20 has provided a degree of confidence, by promoting open markets, and stimulus, preventing a collapse of the global financial system. **The G7 has not covered itself with glory with respect to contemporary issues, such as the COVID-19 pandemic, climate change, the challenge of the Daesh, and the crisis of state collapse in West Asia.** It had announced its members would phase out all fossil fuels and subsidies, but has not so far announced any plan of action to do so. The G7 countries account for 59% of historic global CO₂ emissions (“from 1850 to 2010”), and their coal fired plants emit “twice more CO₂ than those of the entire African continent”. Three of the G7 countries, France, Germany, and the U.K., were among the top 10 countries contributing volunteers to the Daesh, which had between 22,000-30,000 foreign fighters just two years ago. West Asia is in a greater state of turmoil than at any point of time since the fall of the Ottoman Empire, leading to a migrants crisis that persuaded many countries in Europe to renege on their western liberal values, making the Mediterranean Sea a death trap for people fleeing against fear of persecution and threat to their lives.

Foreign Affairs

Pincer Provocations? (Mohammed Ayoob - University Distinguished Professor Emeritus of International Relations, Michigan State University)

- Although the latest news on the Ladakh front suggests that Chinese and Indian forces have begun to disengage in select areas, this does not detract from the reality that in the past few weeks Beijing and Islamabad are making coordinated efforts to challenge India’s presence in the Kashmir-Ladakh region. There is stepped-up activity on Pakistan’s part to infiltrate terrorists into the Valley. China has undertaken provocative measures on the Ladakh front to assert control over disputed areas around the Line of Actual Control (LAC).



Overlapping Interests

In Pakistan's case the intensification in its terrorist activities is related in part to the dilution of Article 370 that it perceives as undercutting its claims on Kashmir with finality. China seems to have calculated that the division of Ladakh from Jammu and Kashmir, that delinks Ladakh from the Kashmir problem, allows India a freer hand in contesting China's claims in the region. Increasing road-building activity on India's part close to the LAC augments this perception. In addition to bordering on China's most restive provinces of Xinjiang and Tibet, Ladakh is contiguous to Pakistan-occupied Kashmir (PoK), Gilgit and Baltistan, where the Chinese have invested hugely under the China-Pakistan Economic Corridor (CPEC) project. When completed, the CPEC will connect Xinjiang with Gwadar port in Balochistan. External Affairs Minister S. Jaishankar's remark last year that India expects to have "physical jurisdiction over (POK) one day" has alarmed Beijing which sees any such Indian move as threatening the CPEC project. These factors demonstrate the overlapping interests that Beijing and Islamabad have regarding India in this region. Both would like India to be so preoccupied with taking defensive measures in Kashmir and Ladakh as to have little time and energy left to attempt to alter the status quo in POK or in Aksai Chin. However, there are major differences in Pakistani and Chinese objectives regarding India that are related to their divergent perceptions of their disputes and their different force equations with India. For China, Ladakh is primarily a territorial dispute with strategic ramifications. China also believes it is superior to the Indian militarily and, therefore, can afford to push India around within limits as it has been attempting to do in the recent confrontation. For Pakistan, its territorial claim on Kashmir is based on an immutable ideological conviction that it is the unfinished business of partition and as a Muslim-majority state is destined to become a part of Pakistan. Islamabad also realises that it is the weaker power in conventional terms and therefore has to use unconventional means, primarily terrorist infiltration, to achieve its objective of changing the status quo in Kashmir. China is a satiated power in Ladakh having occupied Aksai Chin and wants to keep up the pressure on New Delhi to prevent the latter from trying to change the situation on the ground.

Changing The Status Quo

It is true that China is agitated about the recent vociferous revival of India's claims on PoK but its primary concern with regard to Kashmir is to prevent any Indian move from threatening the CPEC project. It does not challenge the status quo in Kashmir. Pakistan, on the other hand, is committed to changing the status quo in Kashmir at all cost. It has been trying to do so since Partition not only through clandestine infiltration but also by engaging in conventional warfare. Therefore, while it is possible to negotiate the territorial dispute with China on a give-and-take basis this is not possible in the case of Pakistan which considers Kashmir a zero-sum game. India should, therefore, distinguish the different objectives on the part of Beijing and Islamabad and tailor its responses accordingly without conflating the two threats to its security. Lumping the two threats together because of a tactical overlap between them makes it difficult to choose policy options rationally.

The Strategic Road To DBO

- Of the possible triggers cited for the People's Liberation Army's (PLA) targeting of Indian territory along the Line of Actual Control (LAC) in eastern Ladakh, the construction of the 255-km long Darbuk-Shyokh-Daulat Beg Oldie (DSDBO) all-weather road is possibly the



most consequential. Running almost parallel to the LAC, the DSDBO road, meandering through elevations ranging between 13,000 ft and 16,000 ft, took India's Border Roads Organisation (BRO) almost two decades to construct. Its strategic importance is that it connects Leh to DBO, virtually at the base of the Karakoram Pass that separates China's Xinjiang Autonomous Region from Ladakh. DBO is the northernmost corner of Indian territory in Ladakh, in the area better known in Army parlance as Sub-Sector North. DBO has the world's highest airstrip, originally built during the 1962 war but abandoned until 2008, when the Indian Air Force (IAF) revived it as one of its many Advanced Landing Grounds (ALGs) along the LAC, with the landing of an Antonov An-32. In August 2013, the IAF created history by landing one of its newly acquired Lockheed Martin C-130J-30 transport aircraft at the DBO ALG, doing away thereafter with the need to send helicopters to paradrop supplies to Army formations deployed along the disputed frontier. Defence Minister Rajnath Singh has acknowledged that "large numbers" of Chinese troops had massed along the LAC, and had "come a little further than they used to earlier", making the situation "different" this time from earlier incidents between the two sides in the same region. The Chinese build-up along the Galwan River valley region overlooks, and hence poses a direct threat to the DSDBO road. The token mutual de-escalation of the two armies, ahead of a series of bilateral consultations between senior military and other officials, is expected to be completed over an extended period. The withdrawals are subject to reciprocal endorsement. The DSDBO highway provides the Indian military access to the section of the Tibet-Xinjiang highway that passes through Aksai Chin. The road runs almost parallel to the LAC at Aksai Chin, the eastern ear of erstwhile Jammu and Kashmir state that China occupied in the 1950s, leading to the 1962 war in which India came off worse. The DSDBO's emergence seemingly panicked China, evidenced by the 2013 intrusion by the PLA into the nearby Dapsang Plains, lasting nearly three weeks. DBO itself is less than 10 km west of the LAC at Aksai Chin. A military outpost was created in DBO in reaction to China's occupation of Aksai Chin, and is at present manned by a combination of the Army's Ladakh Scouts and the paramilitary Indo-Tibetan Border Police (ITBP). Both forces regularly patrol the LAC. There are additional strategic considerations in the area. To the west of DBO is the region where China abuts Pakistan in the Gilgit-Baltistan area, once a part of the erstwhile Kashmir principality. This is also the critical region where China is currently constructing the China-Pakistan Economic Corridor (CPEC) in Pakistan-Occupied Kashmir (PoK), to which India has objected. As well, this is the region where Pakistan ceded over 5,180 sq. km of PoK to China in 1963 under a Sino-Pakistan Boundary Agreement, contested by India. What makes the DSDBO an "all-weather" road is the 37 prefabricated military truss bridges along it. Previously an old road, largely a track, existed along the same alignment as the pucca road, but was practically unusable during summer due to the flooding of the snow-fed Shyok river – or River of Death – and its tributaries, including the Chip Chap, Galwan, and Chang Chenmo that crisscross it. The Shyok river itself is a tributary of the Indus, flowing through northern Ladakh and Gilgit-Baltistan. It eventually re-joins the Indus at Keris, east of Skardu. In October 2019, Defence Minister Singh inaugurated a 500-m-long Bailey Bridge on the road. The bridge is named after Colonel Chewang Rinchen, an Indian Army hero from Ladakh. Located at 14,650 ft, it is believed to be the world's highest such bridge. An alternative route exists from Leh to Daulat Beg Oldie through the 17,500-ft-high Sasser Pass that was part of the ancient Silk Route connecting Leh to Yarkand. It leads from the Nubra Valley into the Upper Shyok Valley en route to China's Karakoram Pass, indicating the topographical and strategic interlinking of the entire disputed region between India and China and to a lesser extent, Pakistan. For most of the year bar a few summer months, Sasser La – or pass – is snow-



bound and inaccessible. The BRO is currently building a “glaciated road” between Sasoma (north of Leh, near the Nubra river) to the Sasser Pass, but it could take several years to complete. But even when it is, the alternate DBDSO will remain critical to the Army and its defences in the region.

A Case for Quiet Diplomacy

- On June 9, sources in the Indian Army said Indian and Chinese troops began a partial disengagement from some of the stand-off points along the Line of Actual Control (LAC) in eastern Ladakh, which has seen tensions since early May. That was the first official confirmation that there were ongoing multiple stand-offs along the LAC. The government has come under fire from the Opposition for its silence on the month-long stand-offs. “The Chinese have walked in and taken our territory in Ladakh,” Congress leader Rahul Gandhi tweeted on June 10. “Meanwhile, the PM is absolutely silent and has vanished from the scene.”

Strategy in Dealing with China

The picture that emerged on June 9 indicated we are at the beginning of the process to resolve the situation, and not at the end. Both sides have agreed on a broad plan to defuse four of the five points of discord. The situation at the fifth, Pangong Lake (in photo), remains uncertain, as also in Galwan valley and north Sikkim. At Pangong Tso, the Chinese have entrenched their positions with tents and remain on India’s side of the LAC. There is a major point of difference which will not be easy to resolve. The pattern of resolution of past stand-offs underlines the key role played by quiet diplomacy in unlocking complicated stand-off situations. Both the United Progressive Alliance (UPA) and National Democratic Alliance (NDA) governments have followed an approach that has coupled quiet diplomacy with a strong military posture, while at the same time allowing the adversary a way out. This has been the broad strategy in dealing with challenges from China across the LAC. And this strategy has generally worked. Consider 2013, when Chinese troops pitched tents on India’s side of the LAC on the Depsang plains, similar to Pangong Tso. The UPA government was under fire, both for being weak on China and for its reticence. Former National Security Adviser Shivshankar Menon recently explained how the stand-off was resolved. While the government was being publicly attacked for doing nothing, it had privately conveyed to China that if the stand-off didn’t end, an upcoming visit by Premier Li Keqiang would be off. If that demand had been made public at the time, China would have only dug in its heels, even if the government may have won the headlines of the day. “The key to arriving at a successful outcome,” Mr. Menon wrote in Choices: Inside the Making of India’s Foreign Policy, “was keeping public rhetoric calm and steady, displaying strength, and giving the adversary a way out, which was our preferred solution.” The NDA government adopted a similar strategy during the 2014 stand-off at Chumar, which coincided with President Xi Jinping’s visit to India. Prime Minister Narendra Modi then was criticised by the Opposition for sitting on a swing with Mr. Xi in Gujarat while Chinese troops had crossed the LAC. Mr. Xi’s visit went ahead, while India quietly but forcefully stopped the Chinese road-building and deployed 2,500 soldiers, outnumbering the People’s Liberation Army (PLA). The PLA withdrew, and as then Northern Army Commander Lt. Gen. D.S. Hooda (Retd) explained recently, both sides disengaged and followed a moratorium into patrolling into contested areas, which was observed for many months thereafter. If the government had publicly announced in 2014 it was following a moratorium on patrolling up to India’s LAC to ease tensions, there would have likely been



an uproar, just as there was in 2013 after Depsang. Then, Mr. Modi, who was the Gujarat Chief Minister, slammed the government, asking at the time: “What are the reasons we have pulled back from our own land?” Ultimately, in both cases, the objective was achieved. China, faced with firm resistance, was prevented from changing the status quo. In 2017, the government came under particularly intense fire because it stayed studiously silent through a 72-day stand-off at Doklam, amid a barrage of threats from Beijing. Indian troops crossed over into Bhutan to stop a Chinese road construction on territory India sees as Bhutanese but China claims. By extending the road, India argued, China was unilaterally altering the India-Bhutan-China trijunction. Beijing demanded an unconditional withdrawal. When both finally disengaged, neither divulged the terms. It would later emerge that the deal struck involved India withdrawing first. China then stopped construction, and the status quo at the face-off site was restored. Politics over border stand-offs is not new. One only needs to go back to the intense public debates in the early 1960s. The Opposition and the media are certainly right to hold the government to account. Indeed, neither the Opposition nor the media would be doing its job if they weren't. As Mr. Modi's comments from 2014 remind us, this is par for the course. And if questions weren't being asked last month, perhaps we may still be in the dark.

Coming to Terms with Reality

The tensions on the LAC are neither the first nor likely to be the last. With every incident, they are, however, getting increasingly politicised in an environment where there is a 24/7 demand on social media for information – and unprecedented capacity for disinformation. Rather than wish away this reality – and adopt a stand that it is above questioning – the government needs to come to terms with it. First, it needs to keep the Opposition informed, which it is clear it hasn't. Second, it needs to proactively engage with the media, even if that may be through low-key engagement as was the case on June 9, that does not escalate into a public war of words. The media cannot be muzzled. India, after all, is not China. So it is in the government's own interests to ensure what's reported is well-informed, and not speculative or exaggerated. At the same time, expectations of having a public debate about the intricacies of every border stand-off – or for the Prime Minister to weigh in even while negotiations are ongoing – need to be tempered. This will only risk inflaming tensions, and reduce the wiggle room for both sides to find an off-ramp. The broader objective shouldn't get lost in political debates. That objective is to ensure India's security interests remain protected – and that the status quo on India's borders isn't changed by force. Past incidents have shown that quiet diplomacy, coupled with strong military resolve that deters any Chinese misadventures, has been more effective than public sabre-rattling, even if we may be inhabiting a media environment that misconstrues loudness as strength, and silence as weakness.

Back from The Brink

- ➔ An agreement reached between India and China on June 6 for a partial disengagement of troops from some of the points of stand-off along the Line of Actual Control (LAC) is a step in the right direction. It is, however, just the first step. Both sides face what is likely to be a long road ahead to restore the status quo ante prior to China's multiple incursions that began one month ago. On June 9, Indian Army sources presented a measured appraisal of what had been agreed to at the Corps Commander-level talks, as well as of the challenges that remain. Both sides identified five locations of conflict in the western sector in Ladakh – a separate ongoing stand-off in Naku La in Sikkim was not on the



agenda. The five spots include Patrolling Points 14, 15 and 17, Chushul, and the north bank of Pangong Lake. A broad plan has been agreed to hold a series of talks at lower ranks of Colonel, Brigadier, and Major General at four of those points in the coming week to take forward the disengagement process. There, however, appear to be serious differences on Pangong Lake, which may require another round of higher-level talks at the Corps Commander level. Chinese troops have dug in at the Finger 4 area on the lake's northern bank, and still remain present on India's side of the LAC, which runs at Finger 8. The Fingers 1 to 8, running from west to east, refer to mountain spurs on the north bank. By erecting tents, China has unilaterally changed the status quo.

India has made clear it will accept nothing less than restoring the status quo ante, and will not dilute its build-up in the area until and unless China draws down the artillery, bombers, rocket forces, air defence radars and jammers that it has amassed behind the frontlines on its side of the LAC. The demands made at ground-level talks suggest China's moves may, in part, be motivated by its insecurities at India's recent improvements in infrastructure on the Indian side of the LAC, which have helped reduce the enormous asymmetry that China has enjoyed, and now wants to preserve. India has correctly made clear it will not stop construction activity on its side of the LAC, which it is entirely entitled to. One important takeaway from the June 6 talks that could have a long-lasting impact is a proposal that the Corps Commanders have formal meetings once or twice a year for better interaction between the two armies at a higher level. If there is one thing that the recent tensions have made clear, it is the urgent need for better communication to address the strategic mistrust that prevails on both sides of the LAC. China's actions over the past month, have, unfortunately, only deepened it. Ill-advised posturing at the top political levels of the Indian leadership with threats last year to reclaim Aksai Chin didn't help either. Both sides must now look ahead at what can be done, with lessons from the mistakes of the recent past.

- During the Doklam incident, even after a meeting between the leaders on the sidelines of a G-20 summit, it had taken several high-level engagements to ensure a drawdown to the 73-day stand-off. Given the differences between the situation now and previous incidents, it would be naive to assume that this stand-off can be resolved quickly through talks. **The stand-off is at more than one location, including the Finger areas of the Pangong Tso, Galwan Valley and Gogra post in Ladakh and the Naku La pass in Sikkim, and it will require careful study to decide how to de-induct soldiers. Furthermore, a "status quo ante" will require that Chinese soldiers vacate areas where they have dug in for weeks now. Nothing short of their full withdrawal should satisfy India, which means that more than talks on the ground and by diplomats, there is a need for strong political direction from Beijing to the PLA to do that. Otherwise, India must prepare for a long-drawn stand-off, and manoeuvres aimed at ensuring China's pull back. In addition, even as the government tries to analyse the reasons for China's aggressive action, it must introspect on signals it misread and warnings that went unheeded across its strategic command. If such skirmishes normally follow the melting of snowlines, for example, then why was the LAC not adequately manned in April-May? Serious notice should have been taken of China's protests on the redrawing of the Jammu-Kashmir and Ladakh maps, as well as the impact of the Home Minister's vow in Parliament to "take back" Aksai Chin.** The Defence Minister has said that Chinese troops arrived in "heavy numbers" and therefore the government must also study what intelligence was received ahead of such movement, and when action was taken upon it. Finally, why has the stand-off emerged at all, after the intense summit-level conversations in Wuhan and Mamallapuram to discuss building trust at the LAC? Given



the government's silence on events thus far, it is unlikely that it will put out answers to these questions publicly, but in any event, they must be sought.

Resume Dialogue with Nepal Now (Yashwant Sinha Is Former Minister of Finance and Minister of External Affairs; Atul K. Thakur Is A Policy Professional and Columnist)

- The time of a pandemic is not the time to have a hostile neighbourhood. At this moment, India should ideally lead in creating momentum for deeper regional and sub-regional cooperation in South Asia. Ironically, the recent developments with Nepal have been the opposite of that. India and Nepal have reached a new low in bilateral relations when both countries are facing a humanitarian crisis.

Official Statements

On May 8, the Defence Minister of India tweeted: "Delighted to inaugurate the Link Road to Mansarovar Yatra today. The BRO achieved road connectivity from Dharchula to Lipulekh (China Border) known as Kailash-Mansarovar Yatra Route. Also flagged off a convoy of vehicles from Pithoragarh to Gunji through video conferencing." The announcement and its timing surprised even the keen observers of India-Nepal relations. No one thought that a road project in this territory would get inaugurated so urgently and through video conferencing. The announcement immediately put the Nepal government, the people and political players there on high alert. The Oli government's sharp reaction was unexpected – the road was being built for years, so for it to pretend that it was unaware of this development and therefore surprised at its inauguration defies logic. In a statement, the Nepalese Ministry of Foreign Affairs expressed regret at India's move. It said, "As per the Sugauli Treaty (1816), all the territories east of Kali (Mahakali) River, including Limpiyadhura, Kalapani and Lipu Lekh, belong to Nepal. This was reiterated by the Government of Nepal several times in the past and most recently through a diplomatic note addressed to the Government of India dated 20 November 2019 in response to the new political map issued by the latter." It cautioned the Indian government against carrying out "any activity inside the territory of Nepal". It stated that "Nepal had expressed its disagreement in 2015 through separate diplomatic notes addressed to the governments of both India and China when the two sides agreed to include Lipu Lekh Pass as a bilateral trade route without Nepal's consent in the Joint Statement issued on 15 May 2015 during the official visit of the Prime Minister of India to China." Nepal said it believed in resolving the pending boundary issues through diplomatic means. It said that Kathmandu had proposed twice the dates for holding the Foreign Secretary-level meeting between the two countries. There was a long-awaited response to this from the Ministry of External Affairs (MEA). Without giving any specific date, the MEA assured Nepal that talks would begin after the lockdown was lifted. The delay is not understandable. Why can't discussions take place over video conferencing? India's response to Nepal's note said: "The recently inaugurated road section in Pithoragarh district in the State of Uttarakhand lies completely within the territory of India. The road follows the pre-existing route used by the pilgrims of the Kailash-Mansarovar Yatra. India and Nepal have established mechanism to deal with all boundary matters. The boundary delineation exercise with Nepal is ongoing. India is committed to resolving outstanding boundary issues through diplomatic dialogue and in the spirit of our close and friendly bilateral relations with Nepal." **Nepal's Foreign Minister Pradeep Kumar Gyawali asked why talks on this important matter could not take place**



under lockdown when the 'inauguration' of the road could take place during the COVID-19 crisis. We also believe that it should take place without wasting even a day. The strain in ties also reflects the tensions in Nepal's politics. Prime Minister K.P. Sharma Oli stepped out of diplomatic nicety when he indulged in reactionary nationalism and termed the "Indian virus" as more damaging than the "Chinese virus". He also questioned India's faith in 'Satyameva Jayate'. On India's part, the problem lies in overlooking the past realities of Lipulekh region. The Army Chief's statement that "there is reason to believe" that Nepal's recent objection was "at the behest of someone else", hinting at China's possible role, was eminently avoidable. This too drew sharp reactions from Nepal.

A Unique Relationship

India and Nepal enjoy a unique relationship that goes beyond diplomacy and the governments of the day. Both countries are interdependent through shared social, cultural, economic and other civilizational links. Here, **the ties are not between the governments alone. Over three million Nepalese live in India and lakhs of Indians live in Nepal. The Gurkha Rifles, known for the best in warfare, are incomplete without the Nepalese.** They fight to keep India secure, so where is the scope for conflict? The people of Nepal fought for India's independence. B.P. Koirala and many more Nepalese made enormous sacrifices during the freedom struggle. Both countries have open borders and unique ties. This reminds us that both countries have shared interests while respecting each other's' sovereignty. There is no place for a 'big brother' attitude. The regimes in New Delhi and Kathmandu have to exercise caution and restraint. The boundary controversy on Lipulekh, Kalapani and Limpiyadhura should be seen in retrospection. It must be admitted that Nepal's kings had neglected this territory for decades. The area attained prominence only with Nepal's tryst with parliamentary democracy beginning in 1990. The consistent neglect for the area is evident in the fact that the last official record of any government work that happened there was in 1953. A census was conducted in this area by the royal regime of Nepal and the land records from there were archived at the Darchula district office. Article 8 of the India-Nepal Friendship Treaty, 1950 says, "So far as matters dealt with herein are concerned, this Treaty cancels all previous Treaties, agreements and engagements entered into on behalf of India between the British Government and the Government of Nepal", though the treaty does not define the India-Nepal boundary. **On the issue of defining the boundary, the Treaty of Sugauli (1816) and the 1960 agreement between India and Nepal on the four Terai districts prevail.**

The Boundary Committee constituted in the year 2000 failed to resolve the issue. There is a need to renew it to end the cartographic tussle between the two countries. It is time to repose faith in constructive dialogue with empathy to resolve any matter that disturbs the calm between the two countries. In good and bad times, India and Nepal have to live together. Diplomatic dialogue should be resumed at the earliest possible. Embassies on both sides should be allowed to function freely. Nothing of the sort that happened in 2015 should be repeated now. India should not shy away from a dialogue even during the COVID-19 crisis. The MEA's latest statement should materialise in action and restore trust and confidence through constructive dialogue.

The E-Diplomacy Experiment (Sreeram Sundar Chaulia - Dean at The Jindal School of International Affairs)

- ➔ The first India-Australia **virtual leaders' summit on June 4** had a lot on the menu, ranging from military interoperability to jointly tackling COVID-19. The two countries upgraded their

[Shatabdi Tower, Sakchi, Jamshedpur](#)



relations to a 'comprehensive strategic partnership'. The summit was noteworthy for its novel modus operandi. Mr. Modi has engaged in a few multilateral 'e-diplomacy' rounds since the COVID-19 outbreak. He convened the SAARC leaders' video conference on March 15, joined the Extraordinary G20 Leaders' Summit via video link on March 26, and made his maiden appearance at the Non-Aligned Movement virtual summit on May 4.

The British scholar Ernest Satow dubbed summits "a permanent feature of diplomatic topography". The formal negotiations during summits, the closed-door restricted sessions, the fireside chats, the walks in the woods, the photo-ops and the outreach to live audiences in the host and home countries are all part of the package. But now without all the protocols and structured dialogues in cozy settings, it is doubtful if major breakthroughs or deals requiring direct intervention of leaders can happen. **There is a danger that 'e-diplomacy' will become less productive in terms of deliverables**, especially where crucial sticking points need ironing out. While the backroom legwork and minutiae of agreements can be hashed out by lower-level bureaucrats communicating remotely, online summits will simply not satisfy the broader political goals and bigger objectives that heads of state carry with them.

Threat to Cyber Security

Another threat to virtual summits comes from **cyber insecurity**. In pre-COVID-19 times, summit venues used to be thoroughly sanitised and debugged to prevent sensitive foreign policy content from being spied upon or leaked. E-diplomacy is riskier and could be subject to hacking of classified content, making the leaders warier. This **could reduce the spontaneity and candour of their conversations**. It is arguable **whether new ideas or proposals which entail geo-strategic alignments can emanate out of e-summits**. Yet, having some summit is better than no summit at all. However artificial and unsatisfying the video conferencing medium is, key partners like India and Australia have to get on with it and hold high-level meetings as part of their strategic signalling. With Australia and India trying to forge coalitions of middle powers in sustaining the balance of power in the Indo-Pacific, gaps in diplomatic summits can convey weakening of collective resolve. For those missing the drama and the trappings of a 'real' summit, social media-savvy politicians might generate visuals to cherish in spite of the limits of virtual diplomacy. In-person summits will restart one day. But the online interlude has to go on because diplomacy has to go on.

U.S. Report Takes Note Of CAA, NRC

- The U.S. State Department has released its annual International Religious Freedom (IRF) Report, a survey of the state of religious freedom across the world, submitted to the U.S. Congress. The country report for India, which looks back on the developments in 2019, takes note of the change in the status of Jammu and Kashmir, the Citizenship (Amendment) Act (CAA) and the National Register of Citizens (NRC). It discusses in detail mob lynchings and anti-conversion laws, and related issues. "Issues of religiously inspired mob violence, lynching and communal violence were sometimes denied or ignored by lawmakers," according to NGOs and media outlets, the report says. "Some officials of Hindu-majority parties, including from the Bharatiya Janata Party (BJP), made inflammatory public remarks or social media posts against minority communities," it says. It details incidents of "cow vigilantism" and other types of mob violence – such as the attack last year on Tabrez Ansari in Jharkhand. **The report also takes note of the Babri Masjid decision by the Supreme Court and the challenges to the 2018 reversal of a ban on**



some women entering the Sabarimala temple. It outlines the U.S. engagement with India on the issues. The U.S. Commission on International Religious Freedom (USCIRF) – an independent bipartisan commission and separate from the State Department's Office of International Religious Freedom – had, in April, recommended to Secretary of State Michael Pompeo that the State Department downgrade India's religious freedom to the lowest grade – Country of Particular Concern (CPC). The Secretary of State is not obliged to accept the recommendation and has not always done so. As per law, the CPC and the Special Watch List (one level less severe than CPC) designations have to be made by the administration no later than 90 days after the publication of the IRF Report.

Negative Examples

Unveiling the report at the State Department on Thursday, Mr. Pompeo listed countries for positive developments in religious freedom and negative examples (India was not cited in either list). Nicaragua, Nigeria and China were cited as negative examples. Mr. Pompeo said Uighurs, Tibetans, Falun Gong followers and Christians were being repressed by China. To a question on the handling of domestic protests in response to the death of George Floyd, an unarmed black man at the hands of a white police officer, Mr. Pompeo denied there was a moral equivalence between countries that “repress” and “bludgeon” their people, “burn down their religious facilities” and “deny journalists ...the chance to ask a question to a Secretary of State”.

Nation

Gujarat Rajya Sabha Elections: The Field of Candidates, Where Things Stand, And

What Is at Stake

- Elections to 18 Rajya Sabha seats, which were postponed after the global Covid-19 outbreak, will be held on June 19. Gujarat and Andhra Pradesh have four seats each to fill; Madhya Pradesh and Rajasthan three seats each; and Jharkhand two. Elections will also be held for a seat each from Manipur and Meghalaya. Ahead of the vote, political activity has picked up pace in Gujarat, and three Congress MLAs have resigned in the past few days, adding to the desertions seen earlier in March. The Congress now has 65 MLAs in the 182-member House, 12 fewer than the 77 seats it won in the 2017 elections to the state Assembly. These 65 MLAs were on Saturday (June 6) packed off to three resorts in Ambaji, Rajkot, and Vadodara to secure them from BJP attempts at “poaching”.

The Return of Political Activity

Elections to four Rajya Sabha seats in Gujarat were due on March 26. Due to retire on April 9 were Chunibhai Gohel who belongs to Junagadh district, Shambhuprasad Tundiya from Ahmedabad, and Lalsinh Vadodia from Anand district (all from the BJP), and the veteran Congressman and AICC general secretary Madhusudan Mistry. Ahead of the elections, five Congress MLAs resigned from the Assembly, and the Congress herded the remaining 68 to a resort, Hotel Shiv Vilas in Jaipur in Congress-ruled Rajasthan, to protect its votes. But then the coronavirus struck, the country went into a national lockdown on March 24, and all elections were postponed. After the Election Commission announced June 19 as the fresh date for the election, the Congress's problem of desertions returned. Two MLAs – Akshay Patel from Karjan in Central Gujarat and Jitu Chaudhary from Kaprada in South



Gujarat – resigned on June 3, reducing the party’s Assembly number to 66. More were rumoured to be quitting – and on June 5, a third MLA, Brijesh Merja, tendered his resignation to Speaker Rajendra Trivedi, and also gave up his primary membership of the Congress party. The resignations from the Assembly matter in the Rajya Sabha election because with the total number of MLAs coming down, the number of votes needed for a candidate to win also comes down, as per the formula.

The Votes Both BJP And Congress Want

The Gujarat Assembly, whose strength is 182, is currently left with 172 MLAs (not counting the Speaker) – of which 103 are from the BJP, 65 Congress, 1 Nationalist Congress Party (NCP), 1 Independent, and 2 Bharatiya Tribal Party (BTP). Each candidate needs 35 votes to win. As of now, the Congress is four votes short of winning two seats, while the BJP needs two more votes to retain its three seats – assuming that both parties are able to get their entire flock to vote for the official candidate. There are four votes in the Assembly which both parties are eyeing to bridge the shortfall.

Why the Rajya Sabha Election Is Important

Of the seven seats Gujarat has in Rajya Sabha currently, four are held by the BJP, and the rest by the Congress. The Congress delivered its best performance in Gujarat in years in 2017, when it won 77 seats, the most since 2002. The party had hoped to leverage this tally to increase its numbers in the Upper House, but it has been losing both MLAs and ground to the BJP ever since.

Congress leaders feel that after North Gujarat and Saurashtra, the BJP has now turned to break the party in Central Gujarat. “They are preparing for the upcoming local body polls which are due later this year. It is not just about the RS seat but also the fact that many of these MLAs have a rural stronghold, and the BJP has performed dismally in the local polls in 2015. For Rajya Sabha, the BJP obviously aims to ensure that the Congress has as few seats as possible to even contest. So, with only one seat to fight for the Congress now, the BJP will also try to have as many MLAs within the Congress who are willing to vote against the party. It is about prestige and numbers,” a senior leader said. Central Gujarat has been a Congress bastion, where the party has comfortably won in Assembly elections. However, the BJP has been gaining ground here, and would like to capitalise on its poaching of three Congress heavyweights in 2017 following Vaghela’s exit. The BJP’s not-so-unknown closeness to the NCP, which has a small presence in the state but has a significant role when voting numbers matter, is also a factor at play. The party is looking at a stronger hold on Anand district, which has been a Congress bastion and is home to Bharatsinh Solanki as well as GPCC President Amit Chavda, and feels the NCP’s support can help its cause, which could also be a reason why the NCP replaced Vaghela as its state unit president to appoint former MLA from this district Jayant Patel alias Boskey. The Congress party has seen the district slowly slip away over the last three years. The BJP has also been wishing for complete control over Amul Dairy, which had been under Congress control for several years, until former Congress MLA from Thasra Ramsinh Parmar, the chairman of Amul, defected to the BJP ahead of the 2017 RS polls.

Desert Clouds

- A political upheaval appears to be in the making in Rajasthan. The ruling Congress has accused the opposition BJP of trying to unsettle the Ashok Gehlot government. The BJP State President has denied the allegations, and said the accusation was an outcome of an



internal tussle in the Congress and an attempt by Mr. Gehlot to spruce himself up as a battle hero. **The Congress has 107 MLAs in the 200-strong State Assembly, and the support of at least a dozen independent MLAs. The BJP has 76.** The Congress and the BJP both are snarled up in internal tussles. State Congress chief and Deputy Chief Minister Sachin Pilot always believed that the top post was unfairly denied to him when the party won the State in 2018; Mr. Gehlot has the support of more party MLAs and wants Mr. Pilot to wait for his turn. In the BJP, the current central leadership of Prime Minister Narendra Modi and Home Minister Amit Shah do not share much common ground with Vasundhara Raje, the former CM. The BJP has turned up the heat in the State by fielding a second candidate for elections to three Rajya Sabha seats on June 19 of which it can win only one with its current strength. The BJP has used Rajya Sabha elections to engineer defections from other parties in other States, and its second candidate is more than just political signalling.

The recent history of the BJP's behaviour in comparable situations does not inspire confidence in its claim that it has no plans to usurp power in Rajasthan through engineered defections. Within the last year the BJP wrested power in Karnataka and Madhya Pradesh, States that it did not win in elections, through a now familiar pattern of engineering resignations of MLAs. The only reasonable explanation for such mass resignations of legislators is that they were either lured or threatened. Earlier, the BJP gate-crashed its way to power in Goa and Manipur, through questionable means. **Every party has its share of disenchantment within its ranks, but using that as a facade to dismantle a popular mandate is not in the spirit of democracy.** The upending of the Kamal Nath government in Madhya Pradesh in the early days of the COVID-19 outbreak, in March, was an ugly humiliation of democracy. If the BJP has plans to traverse the same path in Rajasthan, it would be a clear statement of its priorities for a second time in three months. Political instability contributed to Madhya Pradesh's chaotic response to the pandemic. Rajasthan is badly affected. The State's response has been reasonably robust so far but political uncertainty at this moment could spin the pandemic out of control. There is no good to time to seize power through unethical means, but this is a particularly inopportune moment.

Upper Hand

- The BJP won two consecutive majorities in the Lok Sabha but still stands short of one in the Rajya Sabha. But it is, along with its partners, making a gradual upward climb, though the halfway mark is still some distance away. A string of losses in State elections in recent years slowed down its pursuit and there are more State polls in the near future that will influence its fortunes. **The BJP is currently the single largest party in the Rajya Sabha with 75 members. Together with its allies, including the nominated and independent members, the tally hovers around 102 in a house of 245. The Congress is perhaps at its lowest tally, with 39 members. The Congress and its friendly parties count to 73, which includes Left parties (6), TMC (13), SP (8), NCP (4) and one each of JD (S), IUML and Kerala Congress (Mani).** These numbers are fluid as parties have hopped sides depending on issues. Another cohort of parties that largely favour the ruling dispensation include the Biju Janata Dal, Bahujan Samaj Party (BSP), TDP and TRS. **On June 19, elections will take place for 24 Rajya Sabha seats – only part of existing vacancies – across 10 States, and the ruling party appears to be on an overdrive to maximise its numbers.**

The lack of a majority in the Rajya Sabha was considered a hindrance for the BJP in the first term, particularly for economic reforms. The party devised a dubious route to bypass



the Upper House in law making by arbitrarily labelling bills as money bills that need approval only by the Lok Sabha. The constitutional validity of this blatant approach was challenged in the Supreme Court, where the case is now lingering. The BJP has managed to muster the numbers in the Rajya Sabha for controversial laws that advance its social and political agenda in its second term. Last July, the Muslim Women (Protection of Rights on Marriage) Bill was passed despite opposition to some of the provisions from NDA allies, the JD(U) and AIADMK. The Triple Talaq Bill as it is popularly known, sailed through as parties such as the BSP conveniently went missing during the vote. The government could also get the numbers to pass the Citizenship (Amendment) Bill. The BJP has been relentlessly chiselling away at the Opposition ranks, meanwhile. **On August 5 last year, as the Centre moved the Jammu and Kashmir Reorganisation Act, Congress chief whip Bhubaneshwar Kalita was nowhere to be seen. He resigned and has since found his way back to the Rajya Sabha on the BJP ticket. The TDP lost four of its six members and Samajwadi Party, three over the last year.** The BJP also has a younger bench in the house of the elders compared to the Congress. It is not that the lack of a majority has stopped the BJP from doing what it was determined to. Still, the party is leaving no stone unturned to win a majority for itself and partners.

IFLOWS-Mumbai: How It Works, And How It Will Benefit the Maximum City

- ➔ Maharashtra's Chief Minister Uddhav Thackeray and Union Minister for Health and Family Welfare, Science and Technology, Dr Harsh Vardhan launched an **Integrated Flood Warning System called 'IFLOWS-Mumbai'**. A joint initiative between the **Ministry of Earth Sciences (MoES) and Brihanmumbai Municipal Corporation (BMC)**, the warning system will be able to relay alerts of possible flood-prone areas anywhere between six to 72 hours in advance. **Mumbai is only the second city in the country after Chennai to get this system. Similar systems are being developed for Bengaluru and Kolkata.**

What is 'IFLOWS-Mumbai'?

IFLOWS is a monitoring and flood warning system that will be able to relay alerts of possible flood-prone areas anywhere between six to 72 hours in advance. The system can provide all information regarding possible flood-prone areas, likely height the floodwater could attain, location-wise problem areas across all 24 wards and calculate the vulnerability and risk of elements exposed to flood.

How Will It Work?

The primary source for the system is the amount of rainfall, but with Mumbai being a coastal city, the system also factors in tidal waves and storm tides for its flood assessments. In the last two years, researchers have been conducting studies to provide real-time weather information by measuring the city's rainfall, how much water drained out, topography, land use, infrastructure development, population, lakes, creeks and data on river bathymetry of all rivers namely Mithi, Dahisar, Oshiwara, Poisar and Ulhas. The system has provisions to capture the urban drainage within the city and predict the areas of flooding. The system comprises seven modules- Data Assimilation, Flood, Inundation, Vulnerability, Risk, Dissemination Module and Decision Support System. The system incorporates weather models from the National Centre for Medium Range Weather Forecasting (NCMRWF), India Meteorological Department (IMD), field data from the rain gauge network of 165 stations set up by Indian Institute of Tropical Meteorology (IITM), BMC and IMD.



Why Was This System Needed in Mumbai?

Mumbai, the financial capital of India, has been experiencing floods with increased periodicity. The recent flood on 29 August 2017 had brought the city to a standstill. Last year, post-monsoon and unseasonal rainfall as late as October, two tropical cyclones in the Arabian Sea had caught authorities off guard and left a trail of destruction. The flood during 26th July 2005, when the city received a rainfall of 94 cm, a 100 year high in a span of 24 hours had paralyzed the city completely. **Urban flooding is common in the city from June to September, resulting in the crippling of traffic, railways and airlines.** As a preparedness for floods before they occur, the system will help in warning the citizens so that they can be prepared in advance for flooding conditions.

How Will It Be Beneficial For Mumbai?

Based on the amount of rain recorded, time, location, topography and forecast, the system is designed to generate flood warnings for specific geographical areas of the city. All this information will then be routed to authorities. The early warning forecast would include alerts on rainfall information, tide levels, storm surge for low-lying areas anticipated to be affected, thereby minimizing the damage from cyclones and heavy rain events in Mumbai by evacuating people to safe areas. **The system, initially only to be accessed by the civic body will enable them to issue alerts for citizens who can then avoid such zones.**

Names and Places

→ Spelling and pronunciation are not “first cousins” in English. This holds good for other languages, including Tamil, a surviving ancient language. Perhaps, this aspect has not been fully taken into account by the Tamil Nadu government in its decision to change the spelling of names of 1,018 cities, towns and localities in the State. The gazette notification of April 1, 2020, which was made available only recently, is **an outcome of two years of labour put in by District Collectors and a committee headed by Minister for Tamil Official Language and Culture K. Pandiarajan.** It is now for the Revenue and Disaster Management Department, which handles land records in the State, and the respective rural and urban local bodies to take the notification forward. **The idea is to make the anglicised names sound closer to the root of the original Tamil names.** As a matter of principle, this is welcome, but it is also advisable to discover the root of the name. This does not mean that other factors such as confusion among the public and cultural or social sentiments, can be ignored. Also, without making it look like change being made for the sake of change, the exercise should be based on logic and convention.

No one would object to “Sivaganga”, a constituency that had sent former Union Minister P. Chidambaram several times to the Lok Sabha, being called “Sivagangai” or “Tirumalai”, a village in the Sivagangai taluk, as “Thirumalai”. But, the process of de-anglicisation should not be taken to an illogical extreme. For instance, when “Coimbatore” becomes “Koyampuththoor” or “Vellore” turns into “Veloor”, it defies both convention and logic and can cause much confusion. Likewise, Srirangam and Srivilliputtur, centres of religious importance, have been changed into “Thiruvarangam” and “Thiruvillipuththur”. Tamil purists may argue that “Thiru” is the equivalent term for “Sri” but what should not be overlooked is that **it is because of religious sensibilities that neighbouring Andhra Pradesh has seldom attempted to give Telugu flavour to “Tirupati”, which is a Tamil name.** Apart from the initial confusion over the new spellings, people in the areas concerned have started becoming anxious about getting crucial documents of identification changed once



the gazette notification is implemented. It is not the first time that name changes have happened in Tamil Nadu. In fact, the State was known by the name of its capital – Madras – till January 1969, and the capital’s name was changed to Chennai 27 years later. But, the need for pragmatism was not lost on the governments in the past. Despite being called “Thiruperumbudur” in Tamil, the spelling of the town in English was retained as “Sriperumbudur” in official documents. After all, the term, Tamil Nadu itself is an anglicised name. Changes to the name or spelling of places should not disrupt public equilibrium during a difficult time.

Samples from Lonar Lake Sent for Testing

- A day after the colour of water in Lonar lake in Buldhana district turned pink, the State Forest Department has sent samples to National Environmental Engineering Research Institute in Nagpur and Agarkar Research Institute in Pune. State Forest Minister Sanjay Rathod on said the samples were collected and sent for testing after the phenomenon was observed on June 9.

Geo-Heritage Monument

Formed after a meteorite hit the Earth some 50,000 years ago, Lonar lake has saline water and is a notified national geo-heritage monument. Located around 500 km from Mumbai, it is a popular tourist hub and also attracts scientists from all over the world. As Lonar lake is located within a sanctuary, the Forest Department is responsible for its maintenance. The change in colour of the lake, having a mean diameter of 1.2 km, has not only surprised the locals, but also nature enthusiasts and scientists. Mr. Rathod said some experts have attributed the change to the mixing of **dunaliella algae** with **halo bacteria**, forming a **beta carotene** pigment and turning the water pink. He said, “There have been such instances in other parts of the world. In a lake in Iran, the water turns reddish due to increase in salinity. We are still studying the phenomenon, but it is certain that no artificial occurrence resulted in the change in colour.”

Why Delhi Earthquakes Aren’t A Signal

- An earthquake of magnitude 2.1 was detected near Delhi. It was the eleventh minor earthquake recorded in and around Delhi since May, the most powerful of which happened to be of magnitude 3.4. These recent earthquakes have triggered discussions on the possibility of increased seismicity around Delhi, and fears of an impending big earthquake sometime soon. None of these apprehensions have any scientific basis.

Is It Unusual for Delhi To Experience So Many Earthquakes in Such A Short Time?

Scientists are unequivocal in asserting that no unusual seismic activity is taking place around Delhi in the last few months. “There is absolutely nothing happening in Delhi that can be called unusual or abnormal,” said Vineet Gehlot, former head of the National Centre for Seismology in Delhi, who is now at the Hyderabad-based National Geophysical Research Institute (NGRI). “If you look at the earthquake catalogue, Delhi and its surrounding areas, and this would extend till Jaipur, Ajmer, Mount Abu and the Aravallis, usually experience between two and three earthquakes of magnitude 2.5 and above every month. But there are monthly and annual variations as well. Geological and seismological processes are not very smooth. So sometimes you would expect to see higher number of earthquakes as well. I am pretty sure nothing special has happened in Delhi in the last



couple of months,” he said. Detection of earthquakes, especially those of smaller magnitude, being recorded in an area also depends on the number of seismic recorders installed in that area. The area around Delhi has the densest concentration of seismometers anywhere in the country, even more than the Himalayan region which is seismically much more active. Out of the 115 detectors installed in the country, 16 are in or around Delhi. As a result, even the earthquakes of smaller magnitude, those that are not even felt by most people, are recorded, and this information is publicly accessible.

Do These Small Earthquakes Foretell A Bigger One?

Earthquakes of magnitude four or below hardly cause any damage anywhere and are mostly inconsequential for practical purposes. Thousands of such earthquakes are recorded around the world every year, and most of them are uneventful. And, they certainly do not signal any big upcoming event. “The concept of foreshocks is something that is largely applied in hindsight. When a big event happens, all the smaller earthquakes that have occurred in that region in the near past are classified as foreshocks. **Foreshocks are post-event definitions.** The description does not exist before any big earthquake has happened. So, all this talk of these being foreshocks of a big earthquake in Delhi have no basis at all,” said Harsh Gupta, one of India’s foremost experts on earthquakes and a former director of NGRI. “A big earthquake might still occur. No one can rule it out. But they cannot be predicted. So, to say that these small earthquakes are precursors to the big one is totally unscientific,” he said.

What, Then, Is A Signal to An Upcoming Earthquake?

Scientists have been working for years to identify “precursors” to an earthquake, but have so far met with no success. Some special earthquakes, the ones that are triggered by volcanic activity, can be predicted to some extent – Gehlot calls them “much more well-behaved” than others – but nothing else. **Predicting earthquakes in a region like Delhi is all the more difficult because the place does not lie on any faultlines.** “I would say we still understand a little bit about the tectonics in the Himalayan region, where two tectonic plates are meeting each other. But **Delhi does not lie on a plate boundary. It is located on a single plate, and the seismic activity is generated by internal deformities.** Here, we understand even less. Therefore, predicting earthquakes in advance is out of the question,” Gehlot said. The Himalayan region, extending from the Hindu Kush to the Northeast and going south to Southeast Asia, is seismically one of the most active regions in the world. The region has experienced several big earthquakes in the past, most recently in 2015 in Nepal.

Is A Big One Is Coming to The Region?

Scientists say that the Himalayan region is due for a big earthquake, of magnitude 8 or even higher. That is because they have been able to measure the energy that is getting trapped under the surface as a result of one tectonic plate trying to move beneath the other one. But even here, scientists have no idea when this big earthquake will occur. The prediction about the big one is based only on the estimate of the energy that is ready to be released. **A magnitude 6 earthquake is typically associated with the kind of energy that was released by the atom bomb in Hiroshima. Since the magnitude of earthquakes are measured on a logarithmic scale, a magnitude 7 earthquake is about 32 times more powerful than a magnitude 6 earthquake. Accordingly, a magnitude 8 earthquake would be almost 1,000 times more powerful than a magnitude 6 event.** Gupta said even the argument that the smaller quakes are helping release the energy bit by bit so that a big one



would not be necessary also does not hold. "Delhi area has experienced earthquakes of magnitude between five and six, but fortunately not in the last 50-60 years... You would need 1,000 earthquakes of magnitude 4 to release the energy equivalent of a magnitude 6 earthquake. These arguments have no basis," he said.

So, Is A Big One Coming to Delhi?

No one knows, but a more relevant question, Gupta said, is what even if we knew. "Supposing we know that a magnitude 6 earthquake is going to occur in Delhi at 11 am tomorrow. What can we do after that? Can we get the entire city evacuated? Is that possible? **Prediction is not going to make us safe against earthquakes. What is important is that we need to make our structures earthquake resistant, we need to follow prescribed drills when an event happens, everyone must know what is the best place to run to when we are in office, or at home, or in open spaces.** It is these kinds of discussions that are meaningful. Instead, what we see is speculation, rumours and half-baked information in public discussions," he said. So, a big earthquake is very much possible in Delhi. No one is ruling out that possibility. But they would occur when they have to. **Earthquakes still like to come unannounced. They do not like to knock on our doors with foreshocks.**

Why Uttarakhand Will Have A Second Capital in Gairsain

→ With Governor Baby Rani Maurya giving her assent for declaration of **Bhararisen (Gairsain) in Chamoli** district as the summer capital of Uttarakhand Monday, a two-decade-long wait of the hill region came to an end. It is expected that the declaration of a summer capital in the region will expedite development of the hilly areas. The development came three months after Chief Minister Trivendra Singh Rawat announced in the Budget Session of the Assembly held in Gairsain that the town will become summer capital of the state. **Gairsain, a tehsil in Chamoli district, is located nearly 270-km from existing temporary capital of Dehradun.** Even when Uttarakhand was carved out as a separate state from Uttar Pradesh on November 9, 2000, statehood activists had contended that Gairsain was best suited to be the capital of the mountainous state since it was **between both Kumaon and Garhwal regions.** But it was Dehradun in the plains that was named the temporary capital. The issue is largely political. In its Vision Document, released before the 2017 Assembly elections, the BJP had promised to equip Gairsain with top-class infrastructure and consider declaring it as a summer capital with the "consensus of all". Officials in the government recall that former CM Vijay Bahuguna (then as Congress leader) had held first cabinet meeting in Gairsain in the local block office building in 2012. It was then announced that Gairsain will host at least one session in a year. Bahuguna had also laid foundation stone of a Vidhan Sabha building in Gairsain in January 2013. Hence, the Congress seeks credit for taking the first steps in anointing Gairsain as summer capital of the state. Harish Rawat and the present BJP government too have held Assembly sessions in Gairsain. Developed in an area of 47-acres, the Vidhan Sabha complex in Bhararisen stands at a height of 2380-metre from the sea level, making it a cold location for the entire year. Sources in the government said the complex has been developed at a cost of around ₹150 crore. The building is opened only for a few days a year and is kept closed for the remainder. When a session is convened, files as well as officers and staff from Vidhan Sabha and Secretariat in Dehradun make the 10-hour journey here and return as soon as the proceedings end. Now, with the announcement of Gairsain as the summer capital, there is a lack of clarity on the status of Dehradun. In fact, the recently published directory



of the state Information department still mentions this colonial town as the temporary capital.

At Their Infotaining Best

- A recent TV news clip of a journalist reporting from the midst of a cyclone shows him buffeted by strong winds and swept off sideways at one point, as a prim voiceover asks viewers to note how powerful the storm is. It's a dramatic moment, but somewhat spoilt by the fact that **the camera unwittingly catches another person just behind the reporter, walking normally, clearly unaffected by the gale.** A cyclone is a cyclone, its strength measurable, its effect obvious, its damage assessed after it passes over. So why did the TV reporter feel the need to enact a fake drama to "show" viewers the strength of the winds?

An Eyewitness Accounts

At its inception, the chief thrill of television was that it provided an "eyewitness" account of events happening far away, making news authentic, intimate, and real-time. In a strange volte face, television today is increasingly taking away the authenticity of the eyewitness account by adding artifice, **as if it were not 'news' it deals with any longer but creative narratives, the domain of entertainment.** When a skirmish breaks out on the borders, **TV studios become war rooms and anchors wear military fatigues.** They **recreate the surface of the moon to report space missions.** They **pretend to report while wading in flood waters while held aloft on someone's shoulders.** They **smudge eye makeup to suggest tearfulness.** Television has **turned the idea of reporting about events on its head by itself becoming a participant, a bit player in the political, medical or weather drama unfolding on screen.** The reportage is no longer about the incident alone, but also about itself, as actor-director-producer. When news is recast as 'performance', the borders between truth and fiction get more and more blurred. The phenomenon has been spawned by what Professor Jean M. Twenge called the era's "narcissism epidemic", which has made the news anchor more important than the news. **Acquiring popstar status means the anchor now markets himself or herself and, as a subset of that, markets the news as well.** Thus, even **cyclones have to be 'packaged' and sold.** The **parallel between TV news and WWE wrestling is unmistakable.** In a **WWE match, the wrestlers enact elaborate spectacles of blood, gore and broken limbs but the whole thing is fake, scripted to the last detail.** French philosopher Roland Barthes wrote: "The function of the wrestler is not to win; it is to go exactly through the motions which are expected of him." Similarly, one might say of anchors today that presenting news is no longer their job – their function is playacting. **Their carefully orchestrated performances are meant to provoke suitable responses of anger, revenge or sentiment from viewers. If WWE was built on the premise of entertainment masquerading as sport, what we have today is entertainment masquerading as news.**

Following A Script

A rocket launch or the introduction of a ₹2,000 note can no longer simply be reported but must be scripted into a show with the anchor in a metallic faux spacesuit or waving a magnifying glass at a giant currency note, contortions that don't necessarily present more information for the viewer but certainly produce spectacle. What former BBC chief John Birt spoke of as a weakness of television, the "bias against understanding", because its inherent format – show rather than tell – prevents it from properly establishing context or deep-diving into background, has been exacerbated by television now smudging facts and



fantasy into one messy thing called infotainment. It is, as Barthes said of WWE, a “spectacle of excess”. It is no coincidence that the **two most visible formats on Indian television today are reality TV and news programmes, both of which titillate by claiming to be a ringside view of real life but are, in fact, aggressive showbiz.** By mimicking reality TV, news shows **challenge the credulity of viewers and implicate them in the make-believe,** thus succeeding in neutralising all content.

Streamed Education Is Diluted Education (Ashwin Jayanti - Assistant Professor At IIT-Hyderabad)

- There are broadly two kinds of helmets, namely, one which protects your head and the other which protects your wallet. These two kinds capture the difference between two artefacts which look the same and go by the same name, but cannot be more dissimilar. So what then is the difference between the two? The most significant is that of design intentions. One is designed keeping safety in mind, made of durable, impact-absorbing material that has been thoroughly tested to be so. The other, on the other hand, is designed to get by and is made of quality-compromising, low-cost material. What we have here is a dilution in our conception of a helmet from its original meaning from being a gear to protect us in the case of an unfortunate accident to being a gear to protect us from being fined. Intriguingly, the act of fining riders without helmets has translated something valuable (an end-in-itself, in the service of safety) into the merely functional or instrumental (a means-to-an end, in the service of trickery). This captures the conundrum facing the contemporary: all that is of value is diluting into the functional, and there seems to be no vocabulary to capture this dilution of meaning. Our conception of value itself has been diluted to mean just exchange ‘value’. Here, I will relate this to the meaning of education.

The UGC Scheme

Recently, in the wake of the COVID-19 pandemic, the University Grants Commission had issued a circular to universities encouraging them to adopt **massive open online courses (MOOCs) offered on its SWAYAM platform** for credit transfers in the coming semesters. This sounds like a benevolent act during the national lockdown. However, it poses great danger since it is also being seen as an instrument to achieve the country’s target Gross Enrolment Ratio (GER) in higher education (envisioned to be 30% by 2021; it was 25.8% in 2017–18). Here is yet another instance of a conspicuous dilution of meaning and subsequent flattening of the learning curve. **Instead of expanding the network of higher educational institutions across the country and increasing seats, the government plans to make online degree programmes available for students to enrol and graduate from and add to GER.** ‘Education’ is now being peddled as a combination of content and consumption, and this diluted meaning is being put to the service of achieving increased GER. MOOC-based e-learning platforms tend to reinforce a top-down teacher-to-student directionality of learning whereby the teacher ‘creates’ and the student ‘consumes’. This misses the point that teaching and learning are skills that are always in the making. The teacher is after all “an intellectual midwife” who facilitates in the birth of students’ ideas and insights through engaging in critical dialogue. In a conducive classroom environment, this role is often switched and the student plays intellectual midwife to the teacher’s ideas. Moving to a MOOC-based degree system would rob young teachers and students of these essential lessons in teaching and learning from each other.



Sacred Spaces

Taking higher education online is much like taking up a sport such as cricket, football or boxing online. One has not actually learnt the sport unless one has engaged with it in one's gully, stadium, field, or ring. **In education, the classroom acts as a space where skills such as dialogue, debate, disagreement, and friendship are learnt and practised.** It is intriguing to see that the policymakers behind the SWAYAM platform have left out courses in engineering, medicine, dental, pharmacy, nursing, architecture, agriculture, and physiotherapy on the grounds that they involve laboratory and practical work. Although this move makes sense, **it seems to suggest that the pure sciences, the arts, the social sciences, and humanities curricula are largely lecture- and theory-based, and, therefore, readily adaptable to the online platform.** Nothing can be farther from such a misconception. Implicit in every curriculum is the tacit assumption that the classroom is a laboratory for hands-on testing of ideas, opinions, interpretations, and counterarguments. A diverse and inclusive classroom is the best litmus test for any theory or insight. **Multidisciplinary happens more through serendipity – when learners across disciplines bump into each other and engage in conversations. Classroom and campus spaces offer the potential for solidarity in the face of discrimination, social anxiety, and stage fear, paving the way for a proliferation of voluntary associations that lie outside the realm of family, economy, and state.** In the absence of this physical space, teaching and learning would give way to mere content and its consumption. **Without a shared space to discuss and contest ideas, learning dilutes to just gathering more information.** This could also dilute norms of evaluation, whereby a “good lecture” might mean merely a lecture which “streams seamlessly, without buffering”. This is not an argument from tradition. One could think of greater value-sensitive and socially just architectures and technologies that further foster classroom engagement and make it accessible for students of various disabilities and challenges, thereby adding more value to the existing meaning of education. **But public education modelled on social distancing is a functional reduction and dilution of the meaning of education. It could add value only as an addendum to the classroom. Such platforms must be seen only as stop-gap variants that help us get by under lockdown situations and complement classroom lectures.** They will help us get by with the pandemic just as a “helmet” would help us get by with traffic police waving penalty slips. Our vocabulary has many terms for the loss of function – failure, malfunction, dysfunction, breakdown, etc. – but hardly any for the loss of value. ‘Malpractice’ is the closest that comes to mind. This malpractice of the dilution of education must be resisted, else we are asking for multiple concussions.

Ugly Run

- A year ago, her story moved many. When Gomathi Marimuthu spoke about her struggle following the death of her father and coach in succession, the 800m gold she won then at the Asian Championships in Doha appeared to have a lot of sparkle. But all that changed when reports emerged a month later about the middle-distance runner from Tiruchirappalli testing positive for a banned substance twice, both at Doha and the Federation Cup in Patiala, an event prior to the Asian Championships. The latest verdict from the International Disciplinary Tribunal which has punished the 31-year-old with probably a career-ending four-year ban, will also strip her of the Asian gold. It should not come as a surprise as four of her urine samples had the presence of **19 Norandrosterone (19-NA)**, a metabolite of nandrolone, which is prohibited at all times. **However, what remains strange is the two-month delay by the National Dope Testing Laboratory, which is now suspended**



by the World Anti-Doping Agency, and the National Anti-Doping Agency in bringing out the results of Gomathi's sample taken during the Federation Cup. Had it come earlier, she would not have gone to Doha and it would have saved the country a lot of embarrassment. Meanwhile, Gomathi has claimed innocence and suggested that the steroid may have been accidentally imbibed through some non-vegetarian food she had consumed.

Sport is beautiful only when clean athletes compete. However poor an athlete is, a sprint loses its charm when a dubious candidate walks away with the gold. It is also unfair to clean athletes and their years of sacrifice. Every time a big fish is caught, it spreads awareness about the perils of taking illegal drugs and goes a small way in cleaning up sport. The temptations to cheat, especially in India, are many, with government jobs, promotions and heavy cash prizes on offer for medallists in major Games.

Gujarat's Pride Grows as It Now Hosts 674 Gir Lions

- The Gujarat Forest Department announced the population of Asiatic lions in the state – 674, up from 523 in a Lion Census five years ago. Unlike in previous years, this count was estimated not from a Census, but from a population “observation” exercise called **Poonam Avlokan**.

Why Was the Lion Census Not Conducting This Year?

Conducted once every five years, the Lion Census was due on June 5-6 this year, but was postponed after the lockdown was announced on March 24. Over 1,500 forest guards, foresters and range forest officers were deputed on policing duty to enforce the lockdown. The Forest Department invites NGOs, experts and wildlife enthusiasts to join the Census for transparency and augmenting manpower, but this time, Forest Minister Ganpat Vasava said on June 3, it was not advisable to send so many people inside the forest as the Bronx Zoo in New York had reported a case of transmission of novel coronavirus from a human to a tigress.

So, How Were the Numbers Estimated?

Through Poonam Avlokan, which is a monthly in-house exercise carried out every full moon. Field staff and officers spend 24 hours assessing the number of lions and their locations in their respective jurisdictions. It was a mechanism developed by the Forest Department in 2014 as part of preparations for the 2015 Lion Census. This time, the exercise was undertaken from 2 pm Friday to 2 pm Saturday. It covered 10 districts where lion movements have been recorded in recent years, and 13 forest divisions. All these divisions, save Surendranagar and Morbi, were part of the 2015 Lion Census too.

How Is This 'Observation' Different from A Regular Census?

The Lion Census involves larger participation. Around 2,000 officers, experts and volunteers were involved in the 2015 Census. That makes the Census more transparent. The lion 'observation' this month was conducted by around 1,400 forest staff and a few experts. The Lion Census usually runs for more than two days, including a preliminary census and a final census. It is done using the block counting method – in which census enumerators remain stationed at water points in a given block and estimate abundance of lions in that block, based on direct sighting of lions who need to drink water at least once in 24 hours during the summer. A 'lion observation' is an in-house exercise, conducted only by forest staff. The methodology too is different as, instead of remaining stationary at



water points, teams keep moving in their respective territories and make their estimates based on inputs provided by lion trackers and on chance sightings.

Has the Lion Census Ever Been Postponed Before?

The first Lion Census was conducted by the Nawab of Junagadh in 1936; since 1965, the Forest Department has been regularly conducting the Lion Census every five years. The 6th, 8th and 11th Censuses were each delayed by a year, for various reasons. The 2020 count is particularly important. The 2015 Census had counted 523 lions, up from 411 in 2010. But 12 lions were killed in a flash flood in Amreli just a month after the 2015 census, followed by deaths of more than two dozen lions in an outbreak of **canine distemper virus (CDV)** and **babesiosis** in 2018. A babesiosis outbreak was reported in Gir (east) this summer too, and around two dozen lions are reported killed.

- ➔ As per Forest Department data, there are 161 male, 260 female, 45 sub adult male, 49 sub adult female, 22 unidentified and 137 cubs. Experts said the male-female ratio was healthy in the Gir region with 161 male's vs 260 females.

Addressing the Elephant in The Room (Tarsh Thekaekara - Post Doctoral Fellow at The National Centre For Biological Sciences)

- ➔ The news about a pregnant elephant having her mouth blown caused outrage on social media. It's impossible not to empathise with the pain of the elephant, which stood impassively in a river and died a slow death. But the wide narrative about the death of humanity is oversimplified. While people are demonising the farmer responsible for the incident, it is important to note that the elephant was an unintended target. **Most crackers are aimed at wild boar that destroy small farmers' crop.** A major failing of conservation in India is that the needs of farmers and wild animals do not go hand in hand.

Problems with The Narrative

With the absence of large predators outside forests and the huge availability of easily accessible food crops, deer, monkeys, boar and other species inevitably fill this space. In almost all developed nations these species are kept in control so they don't destroy large crop areas. In less developed countries, local people take matters into their own hands. Studies show this "reciprocity" – boars eating crops, people eating boar – is what allows farmers tolerate these otherwise problematic animals. **India does not allow rural people to hunt animals, but neither does the government cull animals regularly despite their numbers shooting up.** While the government has the provision to declare overabundant animals' "vermin", and **cull them under the Wildlife Protection Act, it very rarely does this.** Vocal urban wildlife activist groups generally create a social media storm when such decisions are taken and challenge the order in court. **These groups have no empathy for the farmers who struggle to make their ends meet while growing food for all of us.** Kerala had declared boar "vermin", but very few have been killed over the years. Given the widespread destruction of crop by these animals, farmers urgently need a safety net. Compensation schemes are one part of the solution, but in India this is always only a fraction of the market value of the crop, which is already precariously low. Poor farmers spend a lot of time navigating bureaucratic processes to get it. And there is no end to this process – some animal numbers just keep going up, linked to the availability of agricultural food crops, and the government cannot sustain an exponential growth in compensation.



Second, this incident is far from new. The start of the monsoon is when animals move into human habitation more, partly on account of jackfruit and other crops/fruits. **Incidents like this take place as it is notoriously hard to identify the culprits, since the event occurs much before the injured elephants are found.** While there are dozens of calls to charge the culprits, it is far from easy for the forest department and police to do this.

The third problem with the narrative around this incident is that all humans are grouped together. While some people are indeed over-exploiting the planet, everyone is far from being equally culpable for the ecological disaster that we are now in. Modern, developed, urban humans are in fact disproportionately responsible since we consume infinitely more resources. **It is our greed that has destroyed vast tracts of forests and thousands of elephants and other animals over the last few decades.** The poor farmer who inadvertently kills one elephant in an attempt to feed us while making enough money for himself is much less responsible. If arresting the person responsible is not going to be the solution, what can we do? This is best answered at two levels: one, how do we make sure that elephants don't die in this way, and two, how do we reduce negative human-elephant interactions?

The first problem is relatively simpler to solve: **we should control the population of wild boar to minimise the impact they have on farmers.** This is untenable to most people, since conservation in India is arguably mixed up with animal rights. **Boars are classified "least concern", and are in absolutely no danger of going extinct. If they are causing the death of much more threatened species like elephants, that gives us all the more reason to control their numbers.** The modalities of this have to be worked out carefully to ensure there is no over-hunting and local extinction in some areas that have governance or enforcement problems. But the inability to enforce rules should not be used as an excuse for not taking decisive action about the expanding boar population.

What can we do about the problem of elephants destroying crops, damaging property and killing people in accidental encounters? The modern conservation movement aims to separate human and wildlife spaces. When there is an overlap, there is a mistaken assumption that "conflict" is inevitable. This is arguably at odds with the reality in India, where the majority of animal range is outside protected areas. **For elephants only about 25% of their range is within protected areas. The extent of distribution of other species is not even fully known. One study in central India by Majgaonkar and others found that only 2.6% of the range of leopards, hyenas and wolves in central India was within protected areas.** So, animals and people, particularly elephants, have always been interacting with each other. While there have always been problems, most interactions are peaceful, and **there is a deep cultural tolerance not found in other parts of the world.** However, **as animals and human numbers grow and there is more pressure on land, the challenges of living together will also increase.**

The Way Forward

At a policy level, a good starting point would be to reorient the forest department to do away with the wildlife-territorial dichotomy of management that currently exists, especially since nobody has managed to inform animals that they are only allowed to stay in wildlife divisions. Beyond that there are no universal solutions. Solutions vary based on the context, the kinds of crops grown, density of people, socioeconomic status, etc. **Farmers should be empowered and subsidised to better protect their land rather than wait for compensation or be forced to resort to these extreme, illegal measures out of desperation.** India has done well in saving nature given its high population density. But as it continues to develop, there is going to be huge pressure on the natural world. While it is heartening to see everyone get upset about the death of the elephant, the hope is that there will also



be large-scale protests about the large-scale destruction of the environment. The National Board for Wildlife and the Forest Advisory Committee are meant to scrutinise and minimise the large-scale diversion of forest land for development projects, but they have been reduced to rubber-stamping bodies. Even a coal mine inside an elephant reserve in Assam was recently cleared. The government is easing up environmental clearances and opening up forests for destruction to boost a post-COVID economy. When industrialists like Ratan Tata, who are angry and easily condemn the farmer, also start to protest about these bigger concerns on Twitter, we can pat ourselves on the back for being a truly environmentally conscious society.

GM Seeds: The Debate, And A Sowing Agitation

- Shetkari Sanghatana – the farmers’ union founded by the late leader Sharad Joshi – announced fresh plans in its agitation for use of genetically modified seeds. In the current kharif season, farmers would undertake mass sowing of GM seeds for maize, soyabean, mustard brinjal and herbicide tolerant (Ht) cotton, although these are not approved. Farmers had carried out a similar movement last year, too.

What Are Genetically Modified Seeds?

Conventional plant breeding involves crossing species of the same genus to provide the offspring with the desired traits of both parents. Genetic engineering aims to transcend the genus barrier by introducing an alien gene in the seeds to get the desired effects. The alien gene could be from a plant, an animal or even a soil bacterium. Bt cotton, the only GM crop that is allowed in India, has two alien genes from the soil bacterium *Bacillus thuringiensis* (Bt) that allows the crop to develop a protein toxic to the common pest pink bollworm. Ht Bt, on the other, cotton is derived with the insertion of an additional gene, from another soil bacterium, which allows the plant to resist the common herbicide glyphosate. In Bt brinjal, a gene allows the plant to resist attacks of fruit and shoot borer. In DMH-11 mustard, developed by Deepak Pental and colleague in the South Campus of University of Delhi, genetic modification allows cross-pollination in a crop that self-pollinates in nature. Across the world, GM variants of maize, canola and soyabean, too, are available.

What Is the Legal Position of Genetically Modified Crops in India?

In India, the Genetic Engineering Appraisal Committee (GEAC) is the apex body that allows for commercial release of GM crops. In 2002, the GEAC had allowed the commercial release of Bt cotton. More than 95 per cent of the country’s cotton area has since then come under Bt cotton. Use of the unapproved GM variant can attract a jail term of 5 years and fine of ₹1 lakh under the Environmental Protection Act, 1989.

Why are Farmers Rooting for GM Crops?

In the case of cotton, farmers cite the high cost of weeding, which goes down considerably if they grow Ht Bt cotton and use glyphosate against weeds. Brinjal growers in Haryana have rooted for Bt brinjal as it reduces the cost of production by cutting down on the use of pesticides. Unauthorised crops are widely used. Industry estimates say that of the 4-4.5 crore packets (each weighing 400 gm) of cotton sold in the country, 50 lakhs are of the unapproved Ht Bt cotton. Haryana has reported farmers growing Bt brinjal in pockets which had caused a major agitation there. In June last year, in a movement led by Shetkari Sanghatana in Akola district of Maharashtra, more than 1,000 farmers defied the



government and sowed Ht Bt cotton. The Akola district authorities subsequently booked the organisers. Environmentalists argue that the long-lasting effect of GM crops is yet to be studied and thus they should not be released commercially. Genetic modification, they say, brings about changes that can be harmful to humans in the long run.

What Is the Movement About?

The Sanghatana has announced that this year they are going to undertake large-scale sowing of unapproved GM crops like maize, Ht Bt cotton, soyabean and brinjal across Maharashtra. Farmers who plant such variants will put up boards on their fields proclaiming the GM nature of their crop. Anil Ghanwat, president of the union, has said this action will draw attention to the need for introduction of the latest technology in the fields. He said farmers will not be deterred by any action taken against them by the authorities.

Assam Gas Leak: Why It's Tough to Plug, And What Threat It Poses to The Area

- ➔ Since the morning of May 27, natural gas has been continuously flowing out of a gas well in Assam following a blowout – or a sudden, uncontrolled release of gas/oil. With authorities unable to control it, experts from a Singapore firm reached Assam today. Meanwhile, people from surrounding villages have been evacuated, while a variety of fish and an endangered Gangetic dolphin have died.

Where Is the Oil Rig?

The Baghjan 5 well is a purely gas-producing well in Tinsukia district, and is at an aerial distance of 900 metres from the Dibru-Saikhowa National Park. It was drilled by Oil India Limited (OIL) in 2006. It produces around 80,000 standard cubic metres per day (SCMD) of gas from a depth of 3,870 metres. As per officials, the current discharge is at 90,000 SCMD at a pressure of 4,200 PSI, far higher than the normal producing pressure of around 2,700 PSI. "It's a very good reservoir, one of the most prolific gas reservoirs owned by OIL," said Tridiv Hazarika, spokesperson of OIL.

Why Do Blowouts Happen?

Sometimes, the pressure balance in a well may be disturbed leading to 'kicks' or changes in pressure. If these are not controlled in time, the 'kicks' can turn into a sudden blowout. "The force with which a pressure cooker releases steam is understandable. Imagine a situation where one million pressure cookers do the same in an uncontrolled manner," said geologist Siddhartha Kumar Lahiri of Dibrugarh University. He cited many possible reasons behind blowouts, "from simple lack of attention, poor workmanship, bad maintenance, old age, sabotage to morpho-tectonic factors". A device called a blowout preventer is usually installed in wells. The gas well at Baghjan was being serviced, and a new sand was being tested at another depth in the same well. "We were also repairing the existing well-head (the exposed top portion)," said Hazarika. "To repair the well-head, you need to temporarily 'kill the well' or shut down the producing zone," said Hazarika. "The blowout preventer was also removed, since we were in the process of repairing the well-head. But suddenly, gas started to ooze out of the exposed well. Before anyone could do anything, it broke through our cement barrier," he said. "How and why it happened, how the gas came out of the 'killed zone' is what we are inquiring into." In the recent past, two comparable blowouts have happened in Assam: at an OIL-owned oil well in Dikhom (Dibrugarh) in 2005 and an ONGC-owned oil well in Rudrasagar in the 1970s. The latter took three months to contain.



What Is Being Done?

A crisis management team from OIL and ONGC intend to create a water umbrella to protect workers while they hook up the blowout preventer. "With very limited space and non-availability of open space above the well head, placement of the BOP is a huge challenge and entails a huge risk. It is planned to place the BOP on the well head through a hydraulically driven mechanical transporter," OIL said in a release on Sunday. Drilling mud will have to be pumped in immediately after capping the well by the BOP. About the water umbrella, Hazarika said: "For that we have had to build a temporary reservoir, channel cables or temporary pipelines from the Dangori river nearby". OIL has reached out to Singapore-based firm Alert Disaster Control, whose experts arrived in the state. OIL said that they will carry out the first inspection of Baghjan gas well.

How Serious Is the Impact to The Neighbourhood?

As many as 1,610 families with 2,500-3,000 people have been evacuated to relief camps. There are reports of deaths of a river dolphin, and a variety of fish. While the administration has kept an ambulance with paramedical staff on standby, locals have complained of symptoms such as burning of eyes, headache etc. As per Assam Pollution Control Board chairman, Y Suryanarayana, the gas – which is a mix of **propane, methane, propylene** and other gases – is flowing with the wind, towards the northeast. "That is a radius up to 5 km and condensate is mostly falling on bamboo, tea gardens, banana trees and betel nut trees," he said. While the well is outside the Eco Sensitive Zone of the park, Tinsukia's divisional forest officers (wildlife), Rajendra Singh Bharti said the boundary does not matter since the gas is moving through the air. "Condensate is falling into **Dibru-Saikhowa National Park** too," he said. Also close is the **Maguri-Motapung wetland** –an Important Bird Area notified by the Bombay Natural History Society. "The park is famous for its birds, butterflies, wild cats, and feral horses," said Bharti. "The impact is visible in the sense that you can see traces of condensate on the water bodies, the numbers of birds have decreased," said Bharti, "Not because they have been killed but because they have flown away."

Swarms of Extremism (T. R. Raghunandan - Former Secretary, Rural Development and Panchayat Raj, Karnataka, And Former Joint Secretary, Ministry of Panchayat Raj, Government of India)

- As if the COVID-19 crisis were not enough, we now have swarms of locusts invading us. Clouds of locusts have overrun western India. As with COVID-19, country borders and barriers put up by proud sovereign nations have been crossed without difficulty, as the locusts have travelled from Africa to South Asia.

Swarm Intelligence

Are locusts intelligent? Individual locusts are not. However, their swarms are swift, focused, responsive to stimuli and dangerously effective in their depredations. **Biologists call this phenomenon 'swarm intelligence', where the individuals that make up a colony of living creatures are singularly unintelligent and are driven by programmed instinct, but their collective actions make their entire colony intelligent as an entity by itself.** Swarm intelligence is common amongst insects; bees, ants and locusts demonstrate it amply. Yet, it is not unknown amongst higher animals as well. Migrating birds and shoals of fish



display high degrees of swarm intelligence too. How does swarm intelligence work? An important point to note is that they are leaderless. A queen bee is not a royal in our human sense; she is just a vast progeny-producing machine. It is fascinating to see how a shoal of fish, without a 'king or queen' fish, when attacked at one flank by a predator, almost instantly displays an avoidance reaction. How did the fish furthest away from the attacked flank know that the shoal was in danger in less than a microsecond and veer away from the predator? Scientists put it down to the fact that within a swarm, individuals are constantly communicating with each other through actions, signals or otherwise, in a binary manner. Through binary communication, the fact that the swarm is in danger reaches all individuals in an instant and thereby, the instant response. Millions and billions of binary communications add up to a sum larger than the whole. This phenomenon is no biological curiosity. It is the very essence of the logic behind understanding brain function, as also the design of artificial intelligence. If the human brain was considered a colony of independently alive neuron cells, then it can be imagined that all its nuanced thought emerges from simple, binary synapse-mediated conversations between individual neurons. The atomisation of complex thinking as emerging from binary signals also lies at the foundation of computer science. So, what does all this have to do with the peculiar effectiveness of extremist political movements, whether of the right or of the left? They combine swarm intelligence with the more conventional leadership models shown by higher-level animals. **We see all around us, for example, the resurgence of powerful right-wing movements, all fuelled by leaders who provide the focus of attention, then upscaled by swarms of followers, engaged in binary conversations. A leader signals something, whether it is the need to distort history, create a false sense of assurance in a faltering economy, fuel hate against somebody, or signal success when strategies fail. From then on, the swarms take over the creating of simple messages, fake news, sloganeering and hate. Individuals down the ladder, shorn of individual capabilities for critical thinking, share messages, amplify them and make hashtags trend. Is there any political future for the critical, thinking mind then? At first sight, liberals who are ruggedly individualistic are especially unsuited for being a part of any swarm. They reject binary communications, and see their proximate supporters as competitors rather than as part of a larger, coordinated order. Yet leaderless movements are not unknown in the liberal, freedom-loving world either. Think Hong Kong, the Arab Spring, and you have the elements of swarm intelligence backing the flowering and upscaling of pro-freedom movements. Eliminating political locusts is neither practical nor desirable. What we need are more compassionate, thinking and inclusive locusts.**

India's Solar Ferry Sails into Global Contest

- India's **first solar-powered ferry, Aditya**, which became an icon on the Vaikom-Thavanakadavu route in Kerala, is among 12 such ferries that have been shortlisted for the Gustave Trouvé Award. It is the sole entrant from Asia. There are three award categories: one for electric boats up to 8m in length, electric boats more than 8 m long and electric ferry boats (passenger boats), the category in which Aditya is in the fray. **Gussies Electric Boat Awards were instituted in memory of Gustave Trouvé, a French electrical engineer and pioneer in electric cars and boats. Trouvé was a prolific inventor with over 75 patents. Back in 1881, he developed a 5-m-long prototype electric boat.**

Built in Kochi

Operated by the Kerala State Water Transport Department (KSWTD), the vessel was **built by Navalt Solar and Electric Boats, Kochi**. Buoyed by the success of the ferry and its rock

Shatabdi Tower, Sakchi, Jamshedpur



bottom operating cost, the department is expected to roll out more such vessels in the future. The per km energy cost of Aditya is low, and the ferry normally operates 22 trips a day, covering a total of 66 km, carrying 75 passengers per trip. **It needs just ₹180 per day in energy cost, compared to about ₹8,000 for a diesel-run ferry of similar size.** It is unusual for a high technology product to have such a low break-even period, Mr. Thandassery said. The financial viability of the zero-pollution vessel is such that the KSWTD, in January 2020, said that it saved ₹75 lakh since its 2017 launch.

Poaching Doubled During Lockdown

→ A recent report by **TRAFFIC, a leading wildlife trade monitoring network**, has recorded a **significant increase in poaching in India** during the over two-month lockdown period. Indian wildlife amidst the COVID-19 crisis: An analysis of status of poaching and illegal wildlife trade, released earlier this week, points out that reports of **poaching for consumption and local trade have more than doubled during the lockdown**. It, however, mentions that there was no evidence of stockpiling of wildlife products for future trade.

Six-Week Period

The researchers analysed media reports of poaching incidents in a six-week period before the lockdown (February 10 to March 22) with those from six weeks during the lockdown (March 23 to May 3). Based on this, the report said: "Reported poaching incidences rose from 35 to 88." The report, however, added that it remains unknown how reporting rates in the media have changed because of the lockdown. The biggest increase in reported poaching was related to **ungulates**, where the percentage jumped from 22% of total reported cases during pre-lockdown to 44%, during the lockdown period. "Since these species are targeted mainly for meat (for self-consumption or for local trade), the increase is presumably due to those **poaching for self-consumption or those who are trying to compensate their loss of income by making quick money through poaching**," the report stated. The second group of animals where there was a marked increase was 'small mammals', including **hares, porcupines, pangolins, giant squirrels, civets, monkeys** and smaller wild cats. Cases against this group rose from 17% to 25%. Interestingly, there was a slight decrease in the incidence of bird-related seizures, which dropped from 14% to 7%. **There was less reporting of poaching and illegal trade in tortoises and freshwater turtles, with almost no seizures of these species during the period.** Even though there are reports about pangolins being linked to the COVID-19 crisis, the report states that the animal was targeted in various parts of the country.

More Arrests

The report also pointed out that 222 persons were arrested for poaching-related cases during the lockdown as compared to 85 suspects during the pre-lockdown phase. The outcome of this study indicates that "despite efforts by law enforcement agencies, wild animal populations in India are being subjected to additional threats during the lockdown period".

A Goddess Called Corona Devi

→ While the world is grappling with the COVID-19 pandemic, a small group of women from a village in West Bengal, have decided to fight it in their own way. It all began at Asansol city's Nichupara Basti, where they got together to appease Corona Mai, or Corona goddess. They did so in all good faith: a small pooja was arranged on the banks of Chinnamasta pond in the area. Women from various age groups gathered at 8 am – the rituals went on

[Shatabdi Tower, Sakchi, Jamshedpur](#)



till 9 am. They sang songs and mantras as they made their way to the spot. Earlier in the day, people in the settlement requested that every woman join in. They sat on the grassy floor in a row, and placed a line of flowers in front of them. Incense sticks were lit, and fruits, vegetables, ghee, and jaggery were offered to the devi. Said 23-year-old Nita Das, a local resident: "We hope that Corona devi ensures that the virus leaves us forever." The women even made motichur laddoos for the goddess. They carved out portions of the soil, placed all the offerings inside, and covered it. They chanted prayers as they did so – the atmosphere was heavy with the smell of incense and flowers; their eyes were closed in prayerful concentration, and mantras rent the air. "Our offerings and chants will win us some respite from the virus," added Nita. Forty-five-year-old Nilanjan Mukherjee from the nearby Rabindranagar area disagrees. Nilanjan, who runs a grocery shop at the pooja site, objects to the violation of physical distancing norms. "If things go on like this, we will soon get infected by the disease instead of recovering," he said. At the pooja, there were women in their early twenties, as well as those as old as 75. Many of them were dailywagers, and spent around ₹500 on buying the material for the rituals alone. According to them, the Coronavirus is a creation of Shitala Devi, whom some cultures consider the goddess of relief. They pray to her to be cured of diseases such as smallpox and measles. "We have decided to worship Corona devi every Monday and Friday till she becomes satisfied," said 56-year-old Sabita Prasad, as she lit an incense stick. And what does Corona devi look like? To the women of Nichupara Basti, she is formless. She can be the wind that rattles their tile-roofed houses at night, the sun, the water in the pond nearby...

Wrong Priorities

- Some things are better kept for later during a pandemic. And, public worship is certainly one of them. When epidemiologists were recently polled in the U.S. on when they would think of attending religious service, 43% of about 200 respondents said they would consider that in three months to a year, and an equal number said not for one year. Their caution on mass religious gatherings, which do not lend themselves to physical distancing and have a history of amplifying the COVID-19 pandemic in more than one country, should sober down governments that are keen to open religious places early in the unlock phase. **Even with online registration, e-passes, distance marking and use of personal protective equipment by staff, gatherings in confined spaces go against the grain of infection prevention principles.** It is heartening that some temple boards, churches and Islamic religious bodies have wisely decided to remain closed. As among the top five virus-affected nations, India cannot afford to create conditions that lead to mass transmission. **The priority today is to refloat a crippled economy safely, while postponing all optional activities to a time when there is better disease control, and prevention and treatment courses are available.** The compulsion to unlock when infections have not peaked has already placed the onus of remaining safe on people, a significant section of whom have health vulnerabilities such as diabetes. Going by ICMR-linked studies, the disease burden for diabetes alone has grown 80% since 1990, highlighting the enormous risk of virus exposure. Millions of such citizens now face aggravated community transmission. After pursuing a lockdown strategy that had low impact on the infection curve, but many negative outcomes, India needs to draw up its unlock priorities carefully. It must show the political will to enforce norms on public behaviour such as mask wearing and physical distancing. Yet, the scenes from many cities coming out of lockdown, including hard-hit ones such as Mumbai, show anxious crowding in many situations, including on public transport. Night curfews are weakly enforced. This is worrying, considering the limited



medical capacity that exists to care for a large number who might suffer the worst effects of COVID-19. Getting unlocking wrong could mean an explosion of cases, which, WHO has warned, remains a possibility in India, Pakistan and Bangladesh. **National policy should not put the cart before the horse, by prioritising activities such as worship at public places.** All available resources must be devoted towards productive and essential work. The Centre has to also explain what it is doing to assess the prevalence of infection at the community-level at a suitable scale, which is crucial to identify focus areas and decide the course of further unlock phases.

More Recoveries Than Active Cases, But How Relevant Is That

→ The number of people who have recovered from Covid-19 disease in India is now more than those who are still sick. **The Home Ministry's latest update on Thursday showed that 1.41 lakh people had recovered from the disease, while a little more than 1.37 lakh cases were active.** Apart from being an interesting milestone, this statistic has little relevance. This doesn't mark the beginning of the end of the epidemic, nor is it the arrival of the "peak". It does not mean either that the number of cases would be declining from now on. In fact, **once the number of deaths is brought into the equation, 8,102 at last count, it becomes clear that less than 50 per cent of the total infected people (2.86 lakh) have recovered so far.** The total recoveries, in fact, work out to 49 per cent of all cases. More importantly, total recoveries and the number of active cases is not comparable metrics. **Total recoveries account for everyone who has recovered from the disease since the start of the outbreak. It is an accumulated number. Active cases, on the other hand, are only those that have been infected in the last 14 days, if it is assumed that every infected person, apart from those who die, is recovering in 14 days.** So, the comparison being made is between a number that has accumulated over three months, and increasing, which is the case in India right now, and a number that has emerged in the last two weeks. Also, **Indian government revised its discharge policy, as have some other nations. No longer does a patient have to test negative twice over an interval of 24 hours; any patient who does not show any symptom over three days is allowed to go home now. And patients who were on critical care require only one negative test to be discharged. Discharge is likely to be followed up with home isolation for a period of seven days or two weeks, with restrictions on movement outside the home.**

Recovery Rate Will Keep Rising

It is no surprise that with the passage of time, the number of recoveries will progressively rise, even as a percentage of total infections in the country. As discussed earlier, about 49 per cent of everyone who has been infected have recovered. This percentage will increase progressively. In fact, if the overall fatality remains what scientists expect it to be, below one per cent eventually, then, by the time the epidemic comes to an end, more than 99 per cent of the infected would be expected to have recovered. **Right now, the fatality rate in India is about 2.8 per cent. But that is only because we are measuring the number of dead against the infections that have been confirmed through testing.** Most likely, there are many more people who are also carrying the infection, but are unknown because they have not been tested. In large population groups, like that in India, the exact number of people infected during an epidemic may never be known, because the entire population cannot be tested. But scientists have ways to reach reliable estimates through careful sampling of people who can be selected for testing. When those untested and unconfirmed infections are also accounted for, scientists expect the overall fatality to remain below one per cent.



So, by the time the epidemic is over, the recovery rate should go up to at least 99 per cent. That milestone is still some distance away.

Recoveries Vs New Cases

In the meanwhile, the metric to watch out for is the ratio of the number of daily recoveries to the number of new cases detected every day. If the number of people recovering on any given day is more than new cases being detected, it would mean that more people are coming out of the hospital than going in. If this trend holds for more than two weeks, then it can be an indication of the disease having 'peaked' and a decline having started. In India, that stage is yet to be reached. In 11th June update, the 2.86 lakh cases reflected a rise of 9,996 cases from the previous day, compared to 5,826 recoveries in the same period. As and when recoveries do begin to exceed new cases, the trend would become evident in some states before getting visible at the national level. In fact, there have already been a few instances when states have reported more recoveries than new cases. But these have mostly been in the nature of adjustments made for previously unaccounted data. Punjab, for example, had reported 1,000 recoveries in a single day, when a change in guidelines allowed the state to discharge all asymptomatic cases from institutional quarantine. Maharashtra recently reported more than 8,000 recoveries, because it counted thousands of unreported recoveries from many previous days. Last month, Tamil Nadu had reported more recoveries than new cases for two consecutive days, but that trend did not hold long enough. Tamil Nadu has had a rapid rise in cases after that.

Crossing the Line

- The decision announced by Chief Minister Arvind Kejriwal to restrict COVID-19 treatment in Delhi's private hospitals and those run by the government of NCT only to those with proof of residence in the city was ill-thought-out. As Lieutenant-Governor Anil Baijal noted in his order overruling the decision, 'Right to Health' is an integral part of 'Right to Life' under Article 21 of the Constitution. While health care is far from being universal in India, positively denying that to someone on the grounds of residency is insensitive and irresponsible. The Lieutenant-Governor has now directed that treatment should not be denied to anyone. Mr. Kejriwal depicted a scenario of "people of the whole country" overwhelming hospitals in the city as justification for his nativism. After the LG's intervention, the Chief Minister and his deputy, Manish Sisodia, reiterated the argument and pre-emptively sought to wash their hands of the worsening situation. They expect 5.5 lakh COVID-19 cases by July-end for which 80,000 beds could be needed. The 10-week lockdown was meant to ramp up health infrastructure, and if the AAP government has not done that, it has only itself to blame. In fact, it must come clean on what it has done. Restriction of movement is a crucial tool in pandemic management, but it has to be justifiable. The NCT is functionally contiguous with Gurugram in Haryana and NOIDA in Uttar Pradesh. Thousands cross these borders for work and other needs including health care. People contribute to tax revenues in three different jurisdictions. This makes Mr. Kejriwal's rhetoric unreasonable as much as Karnataka's decision to prevent residents of Kasargod in Kerala from accessing hospitals in Mangaluru earlier. The AAP government's approach is contentious for more reasons, however, as it is using it also as a diversionary tactic. While the city is recording an exponential growth in infections, the government is trying to deflect attention from its inadequacies by hiding the numbers. It has reduced testing dramatically – on June 2 it was 6,070, on June 7, 5,042, and on June 8, 3,700. The AAP government accused private labs of flouting ICMR guidelines and discouraged testing



of asymptomatic people. The high positivity rate – the proportion of positives to total tests – indicates that the NCT is not testing enough. The ICMR's May 18 strategy directed testing of direct and high-risk contacts of confirmed coronavirus individuals even if asymptomatic. The government revised this by removing "asymptomatic" from the clause, which was also overturned by the LG who ordered that guidelines must be adhered to in their entirety. Delhi is testing more than the national average for per million population but that does not say much given that it has a population density 30 times the national figure. Delhi needs to get its act together.

Needed, A Transfusion for Public Health Care (Dr. Raj B. Singh - Pulmonologist in Chennai)

→ A news channel in India alleged recently that several private hospitals in the country were "exposed" by a "sting operation" to be levying fees in excess when COVID-19 patients went to them for care. It is not clear why a "sting operation" was necessary; the high cost of medical care in the top hospitals of the country is well known. Anyone who has had major surgery or received intensive care in any of the hospitals can testify to that. The debate now is whether such exorbitant rates are justified during a pandemic such as the one we are in the midst of, or indeed, ever. Before we address this question, however, an equally important question arises: why do we have so many private hospitals in a poor country such as India. **We have more hospital beds in the private sector than in the public sector.** It is estimated that there are 19 lakh hospital beds, 95,000 ICU beds and 48,000 ventilators in India. Most of these are concentrated in seven States, Uttar Pradesh, Maharashtra, Tamil Nadu, Kerala, Karnataka, Telangana and West Bengal. Except for Tamil Nadu, Delhi and West Bengal, there are far more beds and ventilators in the private sector than in the public, according to the Centre for Disease Dynamics, Economics & Policy.

A Mirror to Public Care

The reason for this abundance of private health care is obviously the lack of adequate public health care. This situation has developed due to two main reasons. **Since Independence, India has, quite rightly, focused attention on the larger picture. The priority in a developing country would be the provision of primary care at the peripheral level, preventive measures, immunisation, maternity and paediatric care as well as dealing with common infections such as tuberculosis. We have done this well, resulting in impressive improvements in many health-care indices in the last few decades. However, not enough hospital beds and specialised facilities were provided by the public sector during this time. At the same time, the burgeoning middle class and increasing wealth produced an explosion in the demand for good quality health care. Private medicine was quick to capitalise on this demand. The second reason for the dominance of private medicine in India is the lack of adequate investment in public health. The Indian government spends an abysmally low 1.3% of GDP on public health care, which is woefully inadequate. Allocation has to be at least doubled this to address some of our pressing needs. Greater transparency and tighter administration are necessary to ensure that our resources are utilised appropriately. Specialists should be adequately compensated to obviate their need for private practice. Private medicine in India is by no means uniform. It is estimated that there are more than one million unqualified medical practitioners, mostly in the rural areas. Most of them provide basic health care, charging a modest fee. Some may have claims of expertise (often unproven) in alternative systems of medicine such as Ayurveda and homoeopathy. It is not unheard of them to sometimes venture into minor surgery. At the**



other end of the spectrum are state-of-the-art corporate hospitals, that are well equipped and well-staffed and which provide excellent service at high cost. These are often set up in metro cities at huge cost and have successfully engineered a reverse brain drain of many specialists from pursuing lucrative jobs abroad and staying back in or returning to India. Between the two extremes are a large number of private practitioners and institutions providing a wide range of services of varying quality. Some are run by trusts, charitable organisations and religious missions, often providing excellent quality at modest costs. **The wide range of quality in medical services in India reflects the wide range of income and wealth in India. It is estimated that the wealth of the top 1% in India is four times the combined wealth of the bottom 70%.** The wealthy demand, pay for, and often get, world-class health care. The middle class, seeing what is possible, is beginning to demand similar care at affordable cost. The poorer 70% are left to the vagaries and mercy of an unpredictable public health-care system and low-cost charlatans.

What Needs to Be Done

The public health-care system desperately needs higher government spending. Health care cannot be left to private medicine in a developing country, or indeed, in any country. **The United States, despite spending more than 15% of its enormous GDP on health care in the form of largely insurance-based private medicine, has poorer health-care indices than Europe, where government-funded universal health care (e.g. The National Health Service of the United Kingdom) is available, though the per capita health-care expenditure in Europe is substantially less than in the U.S.** Health-care spending by the government must be appropriate, based on evidence, and transparent and accountable. Training of doctors and health-care workers also need to be the responsibility of the government mainly. Recent reforms in the selection of medical students need to be scrutinised to see if they are having the desired result. Private hospitals and institutions will need to be regulated. Costing and auditing of care and procedures need to be done by independent bodies. This will not only ensure appropriate care at the right cost but also prevent unreasonable demands of suspicious patients and family.

The Crisis Now

No hospital, business, institution or individual should profiteer from a national calamity such as the COVID-19 pandemic. Hospitals, like any other institution, have a social responsibility to provide care in times of need. But one should be also aware of the actual costs involved which have to be met. The cost of medical care often follows the law of diminishing returns; as the treatment gets more sophisticated, further and further increments, although small, cost enormously more. Some of the drugs used in the care of severely-ill COVID-19 patients may cost more than ₹50,000 a shot, for example, and may provide only a marginally better outcome. "Capping" costs may necessitate sacrificing some of these expensive options. Private hospitals should, and will, be prepared to forego profits and even suffer losses during a national disaster. But if losses become unsustainable, they may be forced to lay off employees, close beds or even entire hospitals, like any other business. That will hardly benefit anyone.

Profit, Not Profiteering

- The role of the state as a big brother is problematic, and yet only a vigilant, just state can temper the avaricious excesses in the society it governs. The move by certain States to regulate hospital fees charged in the private sector for COVID-19 care falls square in this



category. Bombarded with reports about exorbitant bills being raised in the private sector for hospital care of persons who tested positive for COVID-19, a few States decided to get involved, rightly so, and set a cap on the tariff that can be charged by private hospitals. In some instances, the Indian Medical Association also prayed for intervention by the government to regulate this. Maharashtra was the first to fix a tariff, followed by Gujarat and Tamil Nadu, three of the States seeing a high number of COVID-19 infections. For the initial part of the epidemic, it was the State that was the primary testing agent and care giver, for all COVID-19 cases. At that stage, few private hospitals, if any, were in the front line of the battle. All tests were initially done by the government, and anyone who tested positive was shifted to a government hospital for isolation and treatment. However, as the number of cases increased, naturally calling all hands to the deck meant the significant involvement of the private sector. Complaints of overcharging followed. Media reports revealed differential rates across the country, but costs were upwards of ₹7 lakh for a minimum 14-day period of hospitalisation, even for mildly symptomatic or asymptomatic patients. If intensive care unit care is warranted, then the rates would be much higher. The state's intervention could not have been delayed any further. In fact, in retrospect, the strategy employed by the Central government to cap the price of tests for COVID-19 at ₹4,500 in private labs could have been used to regulate private hospitals' charges too. Hospitals have been graded into categories, depending on facilities provided, with reasonable rates fixed per day for each category. ICU rates are naturally higher, and States have specified that private hospitals should follow the tariff for beds or they could be charged for violations. Making it a participatory process, the private sector was also co-opted into discussions on tariff. Tamil Nadu has also fixed a separate tariff for beneficiaries under the Chief Minister's Comprehensive Health Insurance Scheme (now subsumed under the Central Insurance scheme) making it easy for patients from lower income groups to access private care treatments for COVID-19. It has also re-fixed the rate for testing in a private lab at ₹3,000 per test. Further watchfulness should continue on the part of the State, but shorn of high-handedness. Staying alive to the hardships of its people, it must ensure that the harsh times are not further exacerbated by profiteering.

Business & Economics

Gross Value-Added Numbers and The Economy

- The National Statistical Office (NSO), on May 29, released its provisional estimates of national income for the financial year 2019-20. As per the NSO, **real GDP (Gross Domestic Product) in the full fiscal year was estimated to have expanded by 4.2% from a year earlier, the slowest pace of growth in 11 years.** And GDP growth for the January-March quarter was pegged at 3.1%. The release also detailed the estimates of the Gross Value Added, or GVA, at basic prices for the four quarters of 2019 as well as the comparable quarterly data for the two preceding years. Interestingly, the GVA numbers for the first three quarters revealed significant revisions from what the NSO had shared back in February, when it had announced estimates for the third quarter. While initial estimates are routinely revised based on the updated availability of information, the extent of these revisions has come into focus since they point to a sharper and more widespread slowdown in economic activity over the course of the last financial year than had been previously revealed.



What Is Gross Value Added (GVA)?

In 2015, in the wake of a comprehensive review of its approach to GDP measurement, India opted to make major changes to its compilation of national accounts and bring the whole process into conformity with the **United Nations System of National Accounts (SNA) of 2008**. As per the SNA, **gross value added, is defined as the value of output minus the value of intermediate consumption and is a measure of the contribution to GDP made by an individual producer, industry or sector. At its simplest it gives the rupee value of goods and services produced in the economy after deducting the cost of inputs and raw materials used.** GVA can be described as the main entry on the income side of the nation's accounting balance sheet, and from an economics perspective represents the supply side. **While India had been measuring GVA earlier, it had done so using 'factor cost' and GDP at 'factor cost' was the main parameter for measuring the country's overall economic output till the new methodology was adopted.** In the new series, in which the base year was shifted to 2011-12 from the earlier 2004-05, **GVA at basic prices became the primary measure of output across the economy's various sectors and when added to net taxes on products amounts to the GDP.** As part of the data on GVA, the NSO provides both quarterly and annual estimates of output – measured by the gross value added – by economic activity. The sectoral classification provides data on **eight broad categories** that span the gamut of goods produced and services provided in the economy. These are:

- 1) Agriculture, Forestry and Fishing;
- 2) Mining and Quarrying;
- 3) Manufacturing;
- 4) Electricity, Gas, Water Supply and other Utility Services;
- 5) Construction;
- 6) Trade, Hotels, Transport, Communication and Services related to Broadcasting;
- 7) Financial, Real Estate and Professional Services;
- 8) Public Administration, Defence and other Services.

Why Are the Latest GVA Numbers Attracting Attention?

In February, the NSO announced estimates of national income and expenditure for the fiscal third quarter along with its second advance estimates of GDP for 2019-20. Those estimates had pegged year-on-year GVA growth rates in the first three quarters at 5.4%, 4.8% and 4.5%, respectively. The February estimates also suggested that manufacturing, construction, electricity and utility services and the trade, hotels and transport (another services category) sectors apart, the other four sectors were faring at about the same level or better than the comparable year earlier periods. However, last month's estimates saw significant downward revisions in the GVA data pertaining to the first three quarters for five of the eight sectors, dragging down the Q1, Q2 and Q3 GVA growth rates to 4.8%, 4.3% and 3.5%. **The revisions, combined with a lacklustre performance in the fourth quarter, including a sharp weakening in momentum at two of the largest services sectors ultimately lowered the overall annual GVA growth estimate for 2019-20 by as much as 1 percentage point to 3.9%, from the 4.9% forecast in February.** A closer look at some of the sectoral revisions point to a deeper weakness in the service sectors than had been previously factored in. Take Trade, Hotels, Transport, Communications and Services related to Broadcasting. As a sector it contributes almost 20% to GVA and is the largest GVA component after the other major services category, Financial, Real Estate and Professional Services. While in February Q1, Q2 and Q3 growth for the sector was estimated at 5.7%, 5.8% and 5.9%, respectively, in the latest estimates they have been cut to 3.5%, 4.1% and 4.3%, respectively. Similarly, the growth estimates for the largest services sector, which



contributes almost one-fourth of the overall GVA, too have been reduced sharply. Q1, Q2 and Q3 growth has been cut from 6.9%, 7.1% and 7.3%, respectively to 6%, 6% and 3.3%, respectively. The revisions, however, show two other key sectors in a more positive light. Agriculture's growth for the first three quarters has been marginally increased while Public Administration too as a category has had its numbers boosted for the second and third quarters. The latter sector's Q1, Q2 and Q3 growth have been revised from 8.7%, 10.1% and 9.7%, respectively, to 7.7%, 10.9% and 10.9%.

How Relevant Is the GVA Data Given That Headline Growth Always Refers To GDP?

The GVA data is crucial to understand how the various sectors of the real economy are performing. The output or domestic product is essentially a measure of GVA combined with net taxes. While GDP can be and is also computed as the sum total of the various expenditures incurred in the economy including private consumption spending, government consumption spending and gross fixed capital formation or investment spending, these reflect essentially on the demand conditions in the economy. From a policymaker's perspective it is therefore vital to have the GVA data to be able to make policy interventions, where needed. Also, from a global data standards and uniformity perspective, GVA is an integral and necessary parameter in measuring a nation's economic performance, and any country which seeks to attract capital and investment from overseas does need to conform to the global best practices in national income accounting.

What Are the Drawbacks in Using GVA To Measure Economic Growth?

As with all economic statistics, the accuracy of GVA as a measure of overall national output is heavily dependent on the sourcing of data and the fidelity of the various data sources in capturing the vast labyrinth of activities that constitute a nation's economic life. To that extent, GVA is as susceptible to vulnerabilities from the use of inappropriate or flawed methodologies as any other measure. In a June 2019 research paper titled 'India's GDP Mis-estimation: Likelihood, Magnitudes, Mechanisms, and Implications,' former Chief Economic Adviser Arvind Subramanian of Harvard University and the Peterson Institute for International Economics posited that the change in methodology and data sources when India switched its base year to 2011-12 had led to a significant overestimation of growth. Specifically, he argued that the value-based approach instead of the earlier volume-based tack in GVA estimation had affected the measurement of the formal manufacturing sector and thus distorted the outcome. The paper triggered much debate and prompted the Ministry of Statistics & Programme Implementation to assert in a response that the Ministry's GDP estimates were based on "accepted procedures, methodologies and available data and objectively measure the contribution of various sectors in the economy".

Who's Afraid of Monetisation Of the Deficit? (T.T. Ram Mohan - Professor at IIM

Ahmedabad)

- As the government began to wrestle with the severe downturn caused by the novel coronavirus pandemic, some economic pundits urged the government to go out and spend without worrying about the increase in public debt. They said the rating agencies would understand that these are unusual times. If they did not and chose to downgrade India, we should not lose too much sleep over it.



Rating and Fundamentals

Well, the decision of the rating agency, Moody's, to downgrade India from Baa2 to Baa3 should come as a rude awakening. The present rating is just one notch above the 'junk' category. Moody's has also retained its negative outlook on India, which suggests that a further downgrade is more likely than an upgrade. The rationale given by Moody's should especially make people sit up. **The downgrade, Moody's says, has not factored in the economic impact of the pandemic. It has to do with India's fundamentals before the onset of the pandemic and the extended lockdown with which India responded.** The message should be clear enough. **Any further deterioration in the fundamentals from now on will push India into 'junk' status.** We should not lose sleep over a further downgrade and simply borrow our way out of trouble? Anybody who thinks so is living in cloud cuckoo land. **Whatever the failings of the agencies, in the imperfect world of global finance that we live in, their ratings do carry weight. Institutional investors are largely bound by covenants that require them to exit an economy that falls below investment grade.** If India is downgraded to junk status, foreign institutional investors, or FIIs, will flee in droves. The stock and bond markets will take a severe beating. The rupee will depreciate hugely and the central bank will have its hands full trying to stave off a foreign exchange crisis. That is the last thing we need at the moment.

Work Towards an Upgrade

We have to put our best foot forward now to prevent a downgrade and bring about an upgrade instead. To do so, we need to note the key **concerns that Moody's has cited in effecting the present downgrade to our rating: slowing growth, rising debt and financial sector weakness.** These concerns are legitimate. Many economists as also the Reserve Bank of India (RBI) expect **India's economy to shrink in FY 2020-21.** The **combined fiscal deficit of the Centre and the States is expected to be in the region of 12% of GDP.** Moody's expects India's **public debt to GDP ratio to rise from 72% of GDP to 84% of GDP in 2020-21.** The **banking sector had non-performing assets of over 9% of advances before the onset of the pandemic.** Weak growth and **rising bankruptcies will increase stress in the banking sector.** The government's focus thus far has been on reassuring the financial markets that the fiscal position will not spin out of control. It has kept the 'discretionary fiscal stimulus' down to 1% of GDP, a figure that is most modest in relation to that of many other economies, especially developed economies. ('Discretionary fiscal stimulus' refers to an increase in the fiscal deficit caused by government policy as distinct from an increase caused by slowing growth, the latter being called an 'automatic stabiliser'). Keeping the fiscal deficit on a leash addresses the concerns of rating agencies about a rise in the public debt to GDP ratio. But it does little to address their concerns about growth. **The debt to GDP ratio will worsen and financial stress will accentuate if growth fails to recover quickly enough.** The government's stimulus package relies heavily on the banking system to shore up growth. But there is only so much banks can do. More government spending is required, especially for infrastructure.

Clearing Misapprehensions

We need to increase the discretionary fiscal stimulus without increasing public debt. The answer is monetisation of the deficit, that is, the central bank providing funds to the government. Mention 'monetisation of deficit' and many economic pundits will cower in terror. These fears are based on misconceptions about monetisation of the deficit and its effects. A common misconception is that it involves 'printing notes. One image that leaps to mind is the printing presses of central banks cranking out notes with abandon. But that



is not how central banks fund the government. The central bank typically funds the government by buying Treasury bills. As proponents of what is called **Modern Monetary Theory** point out, even that is not required. The central bank could simply credit the Treasury's account with itself through an electronic accounting entry. When the government spends the extra funds that have come into its account, there is an increase in 'Base money', that is, currency plus banks' reserves. So, yes, monetisation results in an expansion of money supply. But that is not the same as printing currency notes. What could be the objection to such an expansion in money supply? It could be that **the expansion is inflationary. This objection has little substance in a situation where aggregate demand has fallen sharply and there is an increase in unemployment.** In such a situation, monetisation of the deficit is more likely to raise actual output closer to potential output without any great increase in inflation. Exponents of the MMT make a more striking point. They say there is nothing particularly virtuous about the government incurring expenditure and issuing bonds to banks instead of issuing these to the central bank. The expansion in base money and hence in money supply is the same in either route. (The precise sequence of central bank transactions in these two cases and the identity in outcomes is shown in Macroeconomics by Mitchell, Wray and Watts, three economists who are among the leading exponents of MMT). The preference for private debt is voluntary. MMT exponents say it has more to do with an ideological preference for limiting government expenditure. But that is a debate for another day. Central banks worldwide have resorted to massive purchases of government bonds in the secondary market in recent years, with the RBI joining the party of late. These are carried out under Open Market Operations (OMO). The impact on money supply is the same whether the central bank acquires government bonds in the secondary market or directly from the Treasury. So why the shrill clamour against monetisation of public debt?

About Inflation Control

OMO is said to be a lesser evil than direct monetisation because the former is a 'temporary' expansion in the central bank's balance sheet whereas the latter is 'permanent'. But we know that even so-called 'temporary' expansions can last for long periods with identical effects on inflation. What matters, therefore, is not whether the central bank's balance sheet expansion is temporary or permanent but how it impacts inflation. As long as inflation is kept under control, it is hard to argue against monetisation of the deficit in a situation such as the one we are now confronted with. **We now have a way out of the constraints imposed by sovereign ratings. The government must confine itself to the additional borrowing of ₹4.2 trillion which it has announced. Further discretionary fiscal stimulus must happen through monetisation of the deficit.** That way, the debt to GDP ratio can be kept under control while also addressing concerns about growth. The rating agencies should be worrying not about monetisation per se but about its impact on inflation. As long as inflation is kept under control, they should not have concerns – and we need not lose sleep over a possible downgrade.

The Importance of India's Rising Forex Reserves Amid Covid Economic Crisis

- Unlike in 1991, when India had to pledge its gold reserves to stave off a major financial crisis, the country can now depend on its soaring foreign exchange reserves to tackle any crisis on the economic front. While the situation is gloomy on the economic front with the GDP growth in the contraction mode for the first time in 40 years and manufacturing activity and trade at standstill, there's still some reason to cheer about amidst the raging



Covid-19 pandemic: India's foreign exchange reserves are rising and are slated to hit the \$500 billion mark soon. In the month of May, forex reserves jumped by \$12.4 billion to an all-time high of \$493.48 billion (around ₹37.30 lakh crore) for the week ended May 29. The level of foreign exchange reserves has steadily increased by 8,400 per cent from \$5.8 billion as of March 1991 to the current level.

What Are Forex Reserves?

Forex reserves are external assets in the form gold, SDRs (special drawing rights of the IMF) and foreign currency assets (capital inflows to the capital markets, FDI and external commercial borrowings) accumulated by India and controlled by the Reserve Bank of India. The International Monetary Fund says official foreign exchange reserves are held in support of a range of objectives like supporting and maintaining confidence in the policies for monetary and exchange rate management including the capacity to intervene in support of the national or union currency. It will also limit external vulnerability by maintaining foreign currency liquidity to absorb shocks during times of crisis or when access to borrowing is curtailed.

Why Are Forex Reserves Rising Despite the Slowdown in The Economy?

The major reason for the rise in forex reserves is the rise in investment in foreign portfolio investors in Indian stocks and foreign direct investments (FDIs). Foreign investors had acquired stakes in several Indian companies in the last two months. After pulling out ₹60,000 crore each from debt and equity segments in March, Foreign Portfolio Investments (FPIs), who expect a turnaround in the economy later this financial year, have now returned to the Indian markets and bought stocks worth over \$2.75 billion in the first week of June. Forex inflows are set to rise further and cross the \$500 billion as Reliance Industries subsidiary, Jio Platforms, has witnessed a series of foreign investments totalling ₹97,000 crore. On the other hand, the fall in crude oil prices has brought down the oil import bill, saving the precious foreign exchange. Similarly, overseas remittances and foreign travels have fallen steeply – down 61 per cent in April from \$12.87 billion. The months of May and June are expected to show further decline in dollar outflows.

What's the Significance of Rising Forex Reserves?

The rising forex reserves give a lot of comfort to the government and the Reserve Bank of India in managing India's external and internal financial issues at a time when the economic growth is set to contract by 1.5 per cent in 2020-21. It's a big cushion in the event of any crisis on the economic front and enough to cover the import bill of the country for a year. The rising reserves have also helped the rupee to strengthen against the dollar. The foreign exchange reserves to GDP ratio is around 15 per cent. Reserves will provide a level of confidence to markets that a country can meet its external obligations, demonstrate the backing of domestic currency by external assets, assist the government in meeting its foreign exchange needs and external debt obligations and maintain a reserve for national disasters or emergencies.

What Does the RBI Do with The Forex Reserves?

The Reserve Bank functions as the custodian and manager of forex reserves, and operates within the overall policy framework agreed upon with the government. The RBI allocates the dollars for specific purposes. For example, under the Liberalised Remittances Scheme, individuals are allowed to remit up to \$250,000 every year. The RBI uses its forex kitty for



the **orderly movement of the rupee**. It sells the dollar when the rupee weakens and buys the dollar when the rupee strengthens. Of late, the RBI has been buying dollars from the market to shore up the forex reserves. **When the RBI mops up dollars, it releases an equal amount in the rupees. This excess liquidity is sterilized through issue of bonds and securities and LAF operations.**

Where Are India's Forex Reserves Kept?

The RBI Act, 1934 provides the overarching legal framework for deployment of reserves in different foreign currency assets and gold within the broad parameters of currencies, instruments, issuers and counterparties. **As much as 64 per cent of the foreign currency reserves is held in the securities like Treasury bills of foreign countries, mainly the US, 28 per cent is deposited in foreign central banks and 7.4 per cent is also deposited in commercial banks abroad, according to the RBI data.** India also held 653.01 tonnes of gold as of March 2020, with 360.71 tonnes being held overseas in safe custody with the Bank of England and the Bank for International Settlements, while the remaining gold is held **domestically**. In value terms (USD), the share of gold in the total foreign exchange reserves increased from about 6.14 per cent as at end-September 2019 to about 6.40 per cent as at end-March 2020.

Is There A Cost Involved in Maintaining Forex Reserves?

The return on India's forex reserves kept in foreign central banks and commercial banks is negligible. **While the RBI has not divulged the return on forex investment, analysts say it could be around one per cent, or even less than that, considering the fall in interest rates in the US and Euro zone.** There was a demand from some quarters that forex reserves should be used for infrastructure development in the country. However, the RBI had opposed the plan. Several analysts argue for giving greater weightage to return on forex assets than on liquidity thus reducing net costs if any, of holding reserves. Another issue is the **high ratio of volatile flows (portfolio flows and short-term debt) to reserves which is around 80 per cent.** This money can exit at a fast pace. There are some differences among academics on the direct as well as indirect costs and benefits of the level of forex reserves, from the point of view of macro-economic policy, financial stability and fiscal or quasi-fiscal impact, former RBI Governor YV Reddy said in one of his speeches.

How Fuel Price Decontrol Works – Or Why Consumers Always Lose Out

- In theory, retail prices of petrol and diesel in India are linked to the global crude prices. There is supposed to be complete decontrol of consumer-end prices of auto fuels and others such as the aviation turbine fuel or ATF. Which means that if crude prices fall, as has largely been the trend since February, retail prices should come down too, and vice versa.

Has That Been Happening?

No. Auto fuel prices were hiked for the sixth day in a row Friday since oil companies restarted revising prices starting Sunday, after an 82-day hiatus. In the last six days, the petrol price has gone up by ₹3.31 per litre and diesel by ₹3.42. This coincided with oil benchmarks heading for their first weekly declines, with Brent and US crude index (WTI) dropping about 10 per cent, breaking a rally that pushed oil off its April low as the market reconciled with the reality that Covid-19 may be far from over.



So, Why the Divergence in The Trends?

One main reason: Oil price decontrol is a one-way street in India – when global prices go up, this is passed on to the consumer, who has to cough up more for every litre of fuel consumed. But when the reverse happens and prices go down, the government – almost by default – slaps fresh taxes and levies to ensure that it rakes in extra revenues, even as the consumer, who should have ideally benefited by way of lower pump prices, is short changed and forced to either pay what she's already paying, or even more. **The key beneficiary in this subversion of price decontrol is the government. The consumer is a clear loser, alongside fuel retailing companies as well.**

How Does Decontrol Work?

Price decontrol essentially offers fuel retailers such as Indian Oil, HPCL or BPCL the freedom to fix prices of petrol or diesel based on calculations of their own cost and profits – essentially a factor of the price at which the source their inputs from upstream oil companies such as ONGC Ltd or OIL India Ltd, for whom the price benchmark is derived from global crude prices. Fuel price decontrol has been a step-by-step exercise, with the **government freeing up prices of ATF in 2002, petrol in the year 2010 and diesel in October 2014.** Prior to that, the Government used to intervene in fixing the price at which the fuel retailers used to sell diesel or petrol. **While fuels such as domestic LPG and kerosene still are under price control, for other fuels such as petrol, diesel or ATF, the price is supposed to be reflective of the price movements of the so-called Indian basket of crude oil (which represents a derived basket comprising a variety – 'sour grade' (Oman and Dubai average) and 'sweet grade' (Brent) – of crude oil processed in Indian refineries).**

Why Haven't Consumers Benefited Now Despite the Sharp Fall in Crude Prices Since February?

Crude prices nosedived from an average of about \$55 per barrel in February to \$35 in early March, and then falling to \$20 by end March as demand slumped because of the pandemic. From that point, the prices have recovered to around \$37 now. On the other hand, in India, retail prices of fuel were frozen for a record 82-days that covered much of this period, even as the excise duty on fuels was hiked by the Centre twice. While the government claimed that the impact of the hike was not passed on to consumers, the latter, however, did not benefit from this fall in crude oil prices to record low levels. **Apart from the Centre, a number of states too hiked the levies on auto fuels during this period.** The decision to raise the duties, Finance Ministry officials said, was taken in view of the tight fiscal situation and that retail prices were unchanged. So, effectively, the excise duty hikes by the centre was to be adjusted by the OMCs against the fall in oil prices. But now, the retail prices are being progressively hiked.

Are India's Taxes on Fuels High?

On May 5, the Centre announced one of the steepest ever hikes in excise duty by ₹13 per litre on diesel and ₹10 per litre on petrol, following up on another round of sharp hikes in the first week of March. All of this effectively cements India's position as the country with among the highest taxes on fuel. **Prior to the increase in excise duty (in February 2020), the government, centre plus states was collecting around 107 per cent taxes, (Excise Duty and VAT) on the base price of petrol and 69 per cent in the case of diesel. Post the first revision the government was able to collect around 134 per cent taxes, (Excise Duty and VAT) on the base price of petrol and 88 per cent in the case of diesel (as on March 16,**



2020). With the second revision in excise duty in May, the government is collecting around 260 per cent taxes, (Excise Duty and VAT) on the base price of petrol and 256 per cent in the case of diesel (as on 6th May 2020), according to estimates by CARE Ratings. In comparison, taxes on fuels as a percentage of pump prices was around 65 per cent of the retail price in Germany and Italy, 62 per cent in the UK, 45 per cent in Japan and under 20 per cent in the US. Now, as countries get their economies back on track, oil prices have been moving upwards from the lows seen in April. So, as OMCs pass these hikes on, consumers are forced to bear the increase in global crude prices and face up to the harsh reality – that every time the crude price drops sharply, the government uses the opportunity to fill up its coffers while pump prices for the consumer barely change. But when the reverse happens, consumers are forced to pay up more. So, the government gets to encash the upside while the consumers have to make good the downside.

Do OMCs also Benefit?

The only entity that benefits at the consumers expense is the government – in fact, both the Central and state governments. OMCs, interestingly, are also among the losers from the sharp downward gyrations in oil prices. The problem for companies such as IOC or BPCL is that a continuous slide in fuel prices leads to the prospect of **inventory losses** – a technical term for the losses incurred when crude oil prices start falling and companies that have sourced the crude oil at higher prices discover that the prices have tumbled by the time the product reaches the refinery for processing or the finished product is ready for selling. Including both crude oil and products, companies such as IOC keep an inventory of about 20-50 days. For oil refiners, the inventory loss was pegged at over ₹25,000 crore in the January-March quarter because of the 70 per cent fall in crude oil prices, and a likely plunge in their gross refining margins in the first quarter (April-June) of fiscal 2021 because of demand destruction, according to CRISIL estimates.

Did Other Fuels See an Impact?

Interestingly, prices of ATF were cut seven consecutive times since February. Prior to the beginning of the reduction cycle in February – when airlines had already started curtailing flights on account of low demand and travel restrictions caused by COVID-19 outbreak – the price of jet fuel stood at ₹64,323.76 per kilolitre. **Even as no airline operated scheduled passenger flights, the mainstay of their business, between March 25 and May 25, oil companies continued to pass on the reduction in crude oil rates in the form of cutting the price for jet fuel.** Starting from May 25, the Centre allowed airlines to operate commercial passenger flights on domestic routes, hitherto with a curtailed schedule. **Six days after the resumption of flights, the Centre announced a sharp 56 per cent increase in ATF prices, effectively negating any tangible benefits to airlines.**

The Fault in Our Drafts (V.V. Sivakumar And Chitranshul Sinha Are Partners in Dua Associates, Advocates and Solicitors)

- Hours after India went into lockdown, the Finance Minister announced a slew of measures to alleviate the economic crisis. This included **proposed changes to the Insolvency and Bankruptcy Code (IBC), 2016**, a law enacted to bring about smooth and quick resolutions for companies facing insolvency and bankruptcy with a view to primarily avoiding liquidation. **The government, the Minister said, was considering suspension of certain provisions of the IBC which enabled creditors to file insolvency petitions against Indian**



companies for a year's time beyond April 30. April 30 came and went without any announcement in this regard. In mid-May, the Finance Minister announced that the government was planning to bring in an ordinance to suspend provisions enabling filing of fresh insolvency cases for a period of one year. This was followed by absolute silence on the modalities or mechanism of suspension of the provisions. Banks, financial institutions (FIs), and insolvency law practitioners had no idea where they stood with these announcements. Finally, on June 5, the government promulgated an ordinance which inserted Section 10A in the IBC. The government said the ordinance was promulgated because the lockdown has caused business disruptions which may lead to default on debts pushing such companies into insolvency. Therefore, it felt that suspending Sections 7, 9 and 10 of the IBC would be the right course of action.

Clear Provision, Unclear Proviso

Towards that end, Section 10A provides that "no application for initiation of corporate insolvency resolution process of a corporate debtor shall be filed, for any default arising on or after 25th March, 2020 for a period of six months or such further period, not exceeding one year from this period, as may be notified in this behalf". This means that these provisions shall remain suspended from March 25 till September 25, unless extended for another six months, which would extend the suspension up till March 25, 2021. However, the proviso to the section states that no application for insolvency resolution shall ever be filed against a corporate debtor for any default occurring during the suspension period. While the main Section 10A suspends such applications for a limited period, the proviso enlarges the scope to provide complete amnesty under the IBC for any default occurring during such period. The role of a proviso in a statute is to restrict the application of the main provision under exceptional circumstances. However, the proviso here expands the substantive provision in the main section. Further, if the main provision is unclear, a proviso may be given to explain its true meaning. In this case the main provision appears clear, only to be obfuscated by the proviso. The proviso therefore does not appear to be legally tenable. As creditors can still approach courts, and as banks/FIs can still approach Debt Recovery Tribunals, the protection given by this proviso seems illusory. Notably, Section 10A also suspends provisions of Section 10 of the IBC which enables voluntary insolvency resolution. This is difficult to understand as such voluntary insolvency resolution should have been made easier for companies facing distress.

Nature of Default

The ordinance appears to consider every default occurring during the suspension period to be a consequence of the pandemic. There could be cases where defaults were imminent due to other reasons, but which will now still enjoy this protection. The ordinance should have protected only such defaults which may occur as a direct consequence of the pandemic or the lockdown and should have left this determination to the National Company Law Tribunal. Also, a company defaulting on its payment obligations on March 24 (a day before the lockdown started) would not be provided any relief under the IBC as compared to a company defaulting on or immediately after March 25 due to similar reasons. This makes the suspension, in the absence of definition of a COVID-19 default, prima facie arbitrary. Earlier, the government increased the minimum default amount to trigger corporate insolvency resolution from ₹1 lakh to ₹1 crore. This was purportedly done to protect MSMEs from insolvency petitions. However, this also operates against such MSMEs because they will now be forced to approach civil courts to recover undisputed debts below ₹1 crore. The suspension of these provisions would now impact even claims



above ₹1 crore for at least six months to a year. The ordinance has opened itself up to a legal challenge on grounds of arbitrariness and untenability of the proviso due to the flaw in its drafting. It is unfathomable how these flaws arose despite the government having ample time to think this through.

Why Companies Are Going for Rights Issue Amidst Covid-19 Pandemic

- Reliance Industries Limited recently concluded its rights issue, raising a total of ₹53,124 crore and witnessing an oversubscription of 1.59 times or received applications worth over ₹84,000 crore. Moreover, reports suggest that several companies, including Mahindra finance, Tata Power, Shriram Transport Finance among others plan to raise funds (aggregating to over ₹10,000 crore) through rights issue amidst the Covid-19 pandemic. While the success of RIL and the big demand shows that there is investor appetite in the market for good companies with strong credentials at a good price, it is important to note that the capital markets regulator, Securities and Exchange Board of India (SEBI), undertook certain reforms over the last one year that has made rights issue a more efficient process and has provided temporary relaxations to companies in order to ease raising of funds.

What Is Rights Issue?

A rights issue is a mechanism by which companies can raise additional capital from existing shareholders. While existing shareholders may not necessarily be able to participate in other fund-raising mechanisms like QIPs, preferential allotment etc, rights issue is a more democratic approach to raising funds as it allows the existing shareholders the right to invest first in the company.

Why Are Companies Going for Rights Issue in Current Times?

For a rights issue, there is no requirement of shareholders' meeting and an approval from the board of directors is sufficient and adequate. Therefore, the turnaround time for raising this capital is short and is much suited for the current situation unlike other forms that require shareholders' approval and may take some time to fructify. Thus, the rights issue is a more efficient mechanism of raising capital.

Has the Regulator Made Changes to Ease Rights Issue?

Over the last one year, SEBI has undertaken significant steps to reform the rights issue process. While SEBI made some permanent reforms in the process, it also provided some temporary relaxations in the wake of Covid-19 pandemic.

What Were the Temporary Relaxations Provided in The Wake of Covid-19 By SEBI?

In a bid to expand the universe of listed entities that are eligible for raising funds through fast track rights issuance and ease the process for companies to raise funds during the present crisis, SEBI relaxed certain guidelines for right issues that open on or before March 31, 2021. While it reduced the eligibility requirement of average market capitalisation of public shareholding from ₹250 crore to ₹100 crore for a fast track rights issuance, the regulator also reduced the minimum subscription requirement from 90 per cent to 75 per cent of the issue size. Also, listed entities raising funds up to ₹25 crores (erstwhile limit was ₹10 crores) through a rights issue are now not required to file draft offer document with SEBI.



What Are the Reforms Undertaken by SEBI For Rights Issue?

In November 2019, SEBI streamlined the rights issue process and the timelines for completion was significantly reduced from **T+55 days to T+31 days – a 40 per cent cut in the time**. It has also reduced the advance notice for the record date from seven working days to three working days. In a major move that makes it possible for eligible investors to subscribe and trade their **rights entitlement (RE)** and also makes it possible for interested investors to subscribe to more shares than they are eligible for, SEBI on January 22, 2020, laid down the detailed procedure of the improved rights issue process and the dematerialised REs framework. **While the previous process of trading rights entitlement entailing physical settlement was marred with low liquidity, the decision to dematerialise the REs and permitting their trading through stock exchange framework ensures higher liquidity and determination of a fair market price for REs.** Shareholders with small holdings, who were earlier not able to renounce REs for lack of an accessible platform, can renounce and trade their REs easily now. **This reform enables all shareholders to renounce-cum-trade their entitlements and obtain a fair market price for the same.** For shareholders who want to invest more, this also provides them with the opportunity to buy more shares from those who are willing to trade their REs in the market.

Life & Science

Flattening the Climate Curve (R. Sukumar Is Professor, Centre For Ecological Sciences and Divecha Centre For Climate Change, Indian Institute of Science, Bengaluru)

- Two interrelated curves began their upward trend two centuries ago with the advent of the industrial age. The first curve was the atmospheric concentration of carbon dioxide (or, more generally, all greenhouse gases, GHGs) and the second was the average global temperature curve.

An Upward Trend

Actually, the CO₂ curve began its upward march about 18,000 years ago when it was a little under 200 parts per million (ppm) and earth was much colder. By the time it reached 270 ppm about 11,500 years ago, the warmer conditions accompanying this curve made it possible for the emergence of agriculture. Over the past million years, CO₂ levels never exceeded 280-300 ppm. They always went back to 200 ppm before rising again in a cyclical fashion. They remained steady at close to 280 ppm for 10,000 years until, beginning in the mid-19th century, they began to rise again as humans burnt coal and oil to fuel the industrial revolution, and burnt forests to expand agriculture and settlements. From a mere 0.2 billion tonnes of CO₂ emissions in 1850, annual emissions increased to 36 billion tonnes by 2018. If all this CO₂ had accumulated in the atmosphere, we can say that human life would have been altered beyond recognition. Nature has been rather kind to us so far – **about one-half of all CO₂ emissions have been sanitised from the atmosphere, equally by growing vegetation on land and by absorption in the oceans.** Thus, the levels of CO₂ in the atmosphere reached 407 ppm in 2018, a level last experienced by earth some three million



years ago. The second curve of direct consequence to us is the global average temperature curve. From 1850 onwards, for over a century, the global temperature showed a slight warming trend. But there was nothing suggestive of anything serious. From 1975 onwards, the temperature graph has shown a distinct, upward trend. By 2015, the globe had heated by a full degree Celsius relative to a hundred years previously. Climate modellers unequivocally project that under the current trends of emissions the globe will heat up by 4°C by the end of the century. Climate change involves not just a change in temperature but every other component of weather, including rainfall, humidity and wind speed. Indirect effects follow, such as a rise in sea levels from melting glaciers. Globally there have been several extreme weather events such as hurricanes, heat waves or droughts. While no single event can be directly attributed to climate change, the collective trends are consistent with climate change predictions. For the sake of illustration, let us focus only on temperature change. The 2003 European heat wave killed over 70,000 people. The years 2015-19 have globally been the warmest years on record. Leave aside the Amazon fire of 2019, the bush fires of 2019-20 in Australia were unprecedented in their scale and devastation. While our attention has been on COVID-19, news has just come in that March 2020 has been the second warmest March on record. The Climate Impact Lab at the University of Chicago put out a warning for India last year that if global CO₂ emissions continue to gallop at the present rate, average summer temperatures would rise by 4°C in most States. Extremely hot days (days above 35°C), which were only five days in 2010, would increase to 15 days by 2050 and to 42 days by 2100 on average across all districts. A more moderate emissions scenario, as a result of countries largely fulfilling their commitments under the Paris Agreement, would keep average global temperature rise below 2°C compared to pre-industrial levels.

Tackling the Climate Crisis

The most common excuse is that the world cannot afford to curb GHG emissions for fear of wrecking the economy. An article in Nature in 2019 highlighted the financial dimensions of tackling the looming climate crisis. Apparently, the wealthy nations are spending over \$500 billion each year internally on projects aimed at reducing emissions. The Intergovernmental Panel on Climate Change, however, estimates that a sustained annual investment of \$2.4 trillion in more efficient energy systems is needed until 2035 in order to keep warming below the more ambitious 1.5°C relative to pre-industrial levels. To put this in perspective, that is about 2.5% of the global GDP. Some of the wrangling over money relates to the amounts that the wealthy nations, which have caused most of the GHGs resulting in global warming, agreed to pay other countries to cope with climate change. At the UN Climate Conference in 2009, the richest nations had pledged to provide \$100 billion in aid each year by 2020 to the poorer countries for climate change mitigation and adaptation. In 2017, for which data are available, only \$71 billion had been provided, with most of the money going towards mitigation and less than 20% towards climate adaptation. Such numbers had been challenged prior to the 2015 Paris Summit by many countries, including India, because much of the so-called aid provided did not come out of dedicated climate funds but, rather, development funds or simply loans which had to be repaid. It thus seems unlikely that the rich countries will deliver \$100 billion in tangible climate finance during 2020. COVID-19 has unwittingly given humanity a brief respite from the climate change curve. Carbon emissions from fossil fuels have surely reduced in recent weeks. How long this respite will last ironically depends on the extent to which the global economy has been wrecked by COVID-19. Commentators are already talking about a paradigm shift in the structure and functioning of societies once the pandemic subsides.



This is also a make-or-break moment for the climate trajectory which has to be flattened within a few years if we are to avoid dangerous climate change. Nature's kindness is not expected to last beyond a 2°C rise in temperature as the carbon sequestered into vegetation will be thrown back into the atmosphere. Also remember that earth has already warmed by 1°C and we really have only another 1°C (or 0.5°C if we are concerned about island nations) as a safety margin. COVID-19 has elicited an unprecedented response worldwide. Only cognitive psychologists can explain why the spectre of dangerous climate change impacting human civilizations has not yet evoked a comparable response. There seems to be wishful thinking that technology can be used to suck out billions of tonnes of CO₂ from the atmosphere and store this safely somewhere, but available ones are extremely slow and expensive. Hare-brained schemes to regulate solar radiation by geo-engineering are bound to bring nasty surprises. There is no substitute to reducing GHG emissions. Technologists, economists and social scientists must plan for a sustainable planet based on the principles of equity and climate justice within and across nations. It is the responsibility of leaders to alter their mindset and act on the looming climate crisis with the same alacrity they have shown on COVID-19.

What Is Challenger Deep, The Deepest Spot in The Ocean?

- On June 7, astronaut and oceanographer Kathy Sullivan, who was the first American woman to walk in space in 1984, became the first woman and the fifth person in history to descend to the deepest known spot in the world's oceans, called the Challenger Deep in the Mariana Trench, which is seven miles below the surface of the Pacific Ocean. Sullivan is now the only human who has walked in space and reached the deepest point in the ocean. She made her descent in the two-person submersible (vehicles that can be operated underwater) 'Limiting Factor' as part of Caladan Oceanic's Ring of Fire Expedition. Through the expedition, the team hopes to observe volcanic vents, identify new species and conduct the extensive mapping of the US Exclusive Economic Zone at the request of the National Oceanic and Atmospheric Administration (NOAA).

What Is Challenger Deep?

According to NOAA, the average depth of the ocean is about 12,100 feet and the deepest part is called the Challenger Deep, which is located below the surface of the western Pacific Ocean. It is approximately 36,200 feet deep. The first dive at Challenger Deep was made in 1960 by Lieutenant Don Walsh and Swiss scientist Jacques Piccard on a submersible called 'Trieste'. The British Ship HMS Challenger discovered Challenger Deep between 1872-1876. In 2012, film director James Cameron reached the bottom of the Mariana trench after a descent that lasted 2 hours and 36 minutes. Cameron reached a depth of about 10,908 metres on a dive in his submersible called the 'Deepsea Challenger' and became the first to complete a solo submarine dive to this spot.

Why Are Scientists Interested in Deep Ocean Areas?

As per NOAA, most of the existing knowledge of the oceans comes from shallower waters, while deeper waters remain relatively unexplored, even as humans are relying more on these areas for food, energy and other resources. "Ocean exploration, however, is not randomly wandering in hopes of finding something new. It is disciplined and organized and includes rigorous observations and documentation of biological, chemical, physical, geological, and archaeological aspects of the ocean," the NOAA website says. Further, finding out more about the deep ocean areas can potentially reveal new sources for



medical drugs, food, energy resources and other products. Significantly, information from the deep oceans can also help to predict earthquakes and tsunamis, and help us understand how we are affecting and getting affected by the Earth's environment.

What Does It Take to Reach the Deep Ocean?

Vehicles called Human Occupied Vehicles (HOVs) may be used that carry scientists to the deep sea. Alternatively, there are unmanned Remotely Operated Vehicles (ROVs) that are linked to ships using cables and can be steered by scientists remotely, according to an article on Smithsonian. Even so, it is difficult for most private citizens to travel more than 100 feet below the surface of the ocean. According to a blog published by the Scientific American, "most recreational divers can't explore more than about 120 feet down due to the amount of air you need to keep your lungs pressurized at depth and to nitrogen narcosis, an intoxication by nitrogen that starts to set in around that depth (most of our atmosphere is nitrogen, not oxygen)." Further, technical divers can go as deep as 500 feet or more, but with an array of tanks filled with different gas blends, as per the blog.

First Estimation Exercise of Indian Gaur in Nilgiris In Recent Years

- ➔ The first population estimation exercise of the Indian gaur carried out in the Nilgiris Forest Division in recent years, which was conducted in February of this year, has revealed that more than an estimated 2,000 Indian gaurs inhabit the entire division, with an average of eight individuals per square kilometre. Worryingly, the exercise has also revealed that the majority of the animals in "conflict-prone" areas in the division live perilously close to human habitations due to habitat loss and fragmentation, exacerbating the probability of having problematic interactions with humans.

Direct Sightings

According to statistics revealed by the Forest Department, 794 gaurs were directly sighted over a one-week period during the exercise. The direct sightings were by the Department staff and volunteers who were involved in the exercise. The Department officials said that the decision to also estimate the population of Indian gaur, alongside other major fauna in the division, especially around the major towns of Coonoor, Udhagamandalam, Kotagiri and Kundah was necessitated by an increase in the number of problematic human-gaur interactions in the Nilgiris over the last few years. In 2019, three people were killed and seven others injured by Indian gaur.

Near Human Settlements

It was noticed that a majority of the gaurs seen around Kundah, Kotagiri, Coonoor and Kattabettu, where a majority of these interactions occurred, preferred to inhabit tea estates and human settlements, while the animals largely avoided forested areas. Officials said that the reasons for this could be due to the easy availability of food in and around human settlements, the lack of threat from predators, and the spread of invasive flora into reserve forests. "Moreover, many of these 'conflict-prone' regions are witnessing changing land-use patterns, with what were tea estates being converted into resorts and buildings. This also translates to fences becoming more prominent around these properties and severely limiting traditional pathways used by the gaur to move between habitats," said a Forest Department staff from the Nilgiris division. Although there were sizeable populations of gaurs in other areas, such as in Pykara and Naduvattam, interactions with humans were comparatively less due to native forests being largely free of invasive flora, and land-use



patterns also remaining relatively stable, officials said, making it clear that increasing human pressures were leading to problems. The notion that more Indian gaur are being spotted within the towns due to a steady increase in their population over the last decade could also be misguided.

Gaur Deaths

Officials said that, on average, a total of 60 gaurs die each year in the Nilgiris Forest Division, many due to accidents related to living close to human habitations. District Forest Officer, Nilgiris division, D. Guruswamy, said that a further gaur census needs to be conducted in the coming years to accurately gauge the dynamics of the Indian gaur population in the Nilgiris division.

New Guidelines for Import of Exotic Species

- The Ministry of Environment Forest and Climate Change (MOEFCC) has issued an advisory saying people importing “exotic live species” will have to make a voluntary disclosure. The move comes as the outbreak of COVID-19 has raised global concern about illegal wildlife trade and zoonotic diseases. The advisory issued earlier this month defines “exotic live species” as animal or plant species moved from their original range (location) to a new one. Several exotic species of birds, reptiles, small mammals, fishes and even some plants are imported. The Ministry has said “exotic live species” shall be construed to mean only “the animals named under the **Appendices I, II and III of the Convention of International Trade in Endangered Species (CITES) of Wild Fauna and Flora**”. Species covered by the Wildlife (Protection) Act of 1972 cannot be traded. **Experts have welcomed the move and said it will create a process where all imports will be screened. As of now, the imports are being made through the Director General of Foreign Trade and State Forest departments are not kept in the loop.** For new “exotic live species”, the importer should obtain a no-objection certificate from the Chief Wildlife Warden (CWLW) of the State. For existing species, stocks “shall be declared by the owner/ holder (stock, as on 1 January 2020) to the Chief Wildlife Warden (CWLW) of the concerned State or UT”.

Serotonin Triggers Desert Locust Swarms

- **Insect biologists have long since known that the locust is by nature a recluse and a singleton, not mixing with others in the same group,** Yet, when the harvest season arrives, these singletons team up with others as an army of swarms to attack plants for food. What is the mystery? What is the biological mechanism by which this sociological transformation comes about? If we know this mechanism, there can be novel ways of stopping this group rampage. Stephen Rogers of Cambridge University, U.K. (and University of Sydney, Australia) is an acknowledged world expert in the study of how and why such swarms come about. In one of his papers, way back in 2003, he showed that **when solitary locusts happen to come near each other (looking for food) and happen to touch each other, this tactile stimulation, even just in a little area of the back limbs, causes their behaviour to change.** This mechanical stimulation affects a couple of nerves in the animal’s body, their behaviour changes, leading to their coming together. And if more locusts come nearby, the crowding starts, and what was once a simple looking insect becomes larger in size and shape, and its colour and morphology changes. In the next paper, his group showed **substantial changes in some molecules that modulate the central nervous system of the locust, the most important among them being serotonin, which**



regulates mood and social behaviour. And putting all these together, they came out with a publication in Science in 2009, that serotonin is indeed responsible for swarm formation. In this paper, they did a lab experiment wherein they placed locusts in a container one by one, and as the numbers increased, the coming together triggered mechanical (touch) and neurochemical (serotonin) stimulations to make crowding ('gregarisation') occur within a few hours! Interestingly, when they started adding substances that inhibit the production of serotonin (for instance, molecules such as 5HT or AMTP), the crowding was significantly less.

Stopping Swarms

Now, here is a potential way of stopping swarms from forming! Can we work with the LWOs in Jodhpur and other places, spray serotonin inhibitor molecules as the swarm begins to form? Rogers had indeed hinted this in his Science paper. Is this possible or a quixotic idea? Let the experts tell us. It is well worth a try. Finally, the insecticides (mainly malathion) sprayed on the swarms need to be looked at for side-effects. Though many studies have cleared it as not very harmful, we need to work on biopesticides which would be environmentally and animal/human health-friendly, using natural and animal products of India.

Twitter to Test Snappier 'Fleets' in India

- Social media giant Twitter said it will start testing its new feature 'Fleets' in India, allowing users to post "fleeting thoughts" that will disappear after 24 hours and cannot be retweeted or liked. This functionality is similar to the popular 'story' features offered by social networks such as Instagram, Facebook and Snapchat. "We learned from research that people don't tweet because tweets are public, feel permanent, and display the number of retweets and likes. We hope 'Fleets' will empower many more people to express themselves more freely," the company said. India is the third market globally, after Brazil and Italy, where Twitter is rolling out this feature on a test basis.

'Diversity of Usage'

Twitter will learn how adding a new mode of conversation changes the way Indians engage on Twitter. "It will also be interesting to see if it further amplifies the diversity of usage by allowing people to share what they're thinking in a way that is light-touch and light-hearted,". Followers can reply privately via DM or quickly react with an emoji, and continue the conversation privately in DMs. Their replies and reactions will appear in DMs along with the Fleet they are responding to. Fleets will be available for iOS and Android in the coming days in the updated app versions.

Your YouTube Account Is in Demand, Not Just Among Your Friends

- YouTube content creators might be in for dark times ahead, with a concerningly steep upsurge being observed in the demand for access to hacked YouTube accounts on the dark web. As of December 2019, India had more than 265 million users who had their own YouTube accounts, showcasing a wide range of content, including Do-It-yourself (DIY) tips, comedy, talk-shows, reviews and analysis. Each account has lakhs and crores of followers and the higher the number of followers, the more the income for the creators or 'influencers', as some of them are known. The risk faced by YouTubers was noticed earlier this month by New York based cybersecurity firm IntSights, which observed that YouTube



accounts are being hacked and auctioned on the dark web. Once acquired by the highest bidder, the same accounts are then used to hold the original owners to ransom and this process can be easily repeated until the victims have been milked dry. In an update put out on the IntSights blog on June 2 this year, Etay Moar, Chief Security Officer at IntSights said, "YouTube accounts from compromised computers or from logs of credentials can be of high value. While smaller channels may not be as lucrative as larger ones, YouTubers rely on them as revenue streams and might be willing to pay money to attackers to get their content and access to their channels back." The discovery, however, was only the tip of the iceberg. Researchers also discovered that a poll was run on the dark web in the last week of May, to which 80 per cent of the respondents expressed interest in buying hacked YouTube accounts. "As always with underground offerings, when there is demand the supply is soon to follow. In recent weeks, IntSights researchers have noticed an increasing number of stolen YouTube channel credentials, of varying subscriber counts, up for sale," Mr Moar added in the update. The trend is also being tracked closely by Indian cyber-crime agencies, at both State and Central level, with India emerging as one of the biggest markets for the video-hosting website. "Hackers are cashing in on the fact that YouTube accounts get monetized after hitting a certain number of followers. With the rising popularity of YouTube and Youtubers in India, it is best to follow strict cyber security practices like two-factor authentications that are not dependent on text messages and not using the same username and password combination on different platforms and accounts," Special Inspector General of Police and cyber expert Brijesh Singh said. Especially in the current scenario, with rival platform TikTok being under heavy fire from 'patriots' because of its Chinese origins, YouTube seems to be winning the war and gathering more followers than TikTok. The added cause for concern, officials said, is that while the trend is a new one, the hacking process in itself is ridiculously simple. "Hackers can send out thousands of malwares embedded in phishing emails every day seeking access to YouTube accounts. All the victims have to do is to click a link in an unverified email and malware, which are specifically designed to look for YouTube login details, will sniff them out and convey them to the hackers. The trend is just one more example of what a simple phishing email can lead to, and why intensive cyber security measures are all the more important," a Cyber Crime officer said.

Tracking Google

- A proposed class action lawsuit filed against Google alleges that the Internet search giant tracks and collects browsing data "no matter what" steps users take to safeguard their privacy. The plaintiffs, Chasom Brown, Maria Nguyen and William Byatt, have filed the lawsuit on behalf of "millions of individuals" (Google users in the U.S.) at the U.S. District Court for the Northern District of California. They allege Google has violated the federal wiretap law as well as a California privacy law.

What, According to The Plaintiffs, Is Wrong with What Google Is Doing?

The plaintiffs allege that Google tracks, collects, and identifies the browsing data of even those users who browse the Web privately via, say, the Incognito mode. Google, they claim, "accomplishes its surreptitious tracking" through near ubiquitous tools such as Google Analytics, Google Ad Manager, and other plug-ins. Google Analytics and other tools are implemented only when their code is embedded into the code of existing websites. The petitioners reckon "over 70% of online websites and publishers on the internet" employ Google Analytics. The point of Brown and others is, **when a user accesses website that**



employ these Google tools, Google automatically gets information about the user's IP address, URL of the site, and many, many more details. "Google designed its Analytics code such that when it is run, Google causes the user's browser to send his or her personal information to Google and its servers in California," the petitioners say in the lawsuit. And, they say, it doesn't matter if a user is on private viewing mode. That's not all. They also allege that Google has been misrepresenting its data collection practices.

What Does the Lawsuit Say About the Misrepresentation?

The petitioners charge Google with giving false assurances about the ability of users to control what they share with the search engine. They say that users not only don't know that Google is collecting information even when they are in a private view mode but also have no means to avoid its scrutiny.

How, According to The Petitioners, Do the Actions of Google Violate the Provisions of The Federal Wiretap Act and Privacy Laws of California?

The Federal Wiretap Act disallows any intentional interception of any wire, oral, or electronic communication. The petitioners have invoked this Act, saying the following: "Google's actions in intercepting and tracking user communications while they were browsing the internet using a browser while in 'private browsing mode' was intentional. On information and belief, Google is aware that it is intercepting communications in these circumstances and has taken no remedial action." They have also contended that the acts of Google violate the California Invasion of Privacy Act, which prohibits intentional tapping of communication. Further, they say, the right to privacy has also been violated.

What Has Google's Response Been?

Reuters has reported Google spokesperson Jose Castaneda as saying that the company will defend itself against the claims. He has been cited as saying, "As we clearly state each time you open a new incognito tab, websites might be able to collect information about your browsing activity."

The Petitioners Also Use the Example of The Recent Arizona V. Google Case to Bolster Their Arguments. What Is the Case About and How Is It Relevant?

This case against Google was filed by Arizona Attorney General Mark Brnovich in May. The allegation was one of privacy violation by Google, the specific charge being that the company was tracking user location even when the user had turned off location tracking. Brnovich had tweeted on May 28: "Today we filed a consumer fraud lawsuit against Google for deceptive and unfair practices used to obtain users' location data, which Google then exploits for its lucrative advertising business." Petitioners Brown and others referred to this case while elaborating on the "passive data collection practices employed by Android, Google applications (e.g., Chrome and Maps), Google Home, and other Google applications and services"

Has Google Been Sued in The Past for Wiretapping Law Violations?

Yes. One of the long-running cases ended last year when Google agreed to a \$13 million settlement. The allegation was its "Street View mapping project captured data from private Wi-Fi networks," according to a Bloomberg report. Later, media reports suggested that some nine States were against this settlement as it contributed to massive privacy violation. In 2016, it reportedly settled a case where it was accused of "surreptitiously



scanning Gmail messages for advertising revenues". It was reported then that it had agreed to stop the practice. Last year, it was fighting a similar case, as per reports.

Role of MicroRNA in Growth and Spread of Tongue Cancer Cells

- Researchers at the Indian Institute of Technology Madras have identified a **specific microRNA (miRNAs) called 'miR-155' that is over-expressed in tongue cancer**. The research team has shown that **knocking out miR-155 causes death of cancer cells, arrests the cell cycle and regresses tumour size in animal models and reduces cell viability and colony formation in bench top assays**. The finding could help develop molecular strategies to manipulate miR-155 expression to develop therapeutics for tongue cancer. The miRNAs affect cancer growth through inhibiting or enhancing the functions of certain proteins. "MicroRNAs (miRNAs) are short noncoding RNAs containing 20–24 nucleotides that participate in virtually all biological pathways in animals. They have been found to play important roles in many cancers, in carcinogenesis (start of cancer), malignant transformation and metastasis – the development of secondary cancer. **The miRNAs associated with cancer are called 'Oncomirs'.**" Many of the Oncomirs affect cancer by **suppressing the performance of tumour-suppressing agents**. Some of them can prevent the growth and spread of cancer cells and yet others prevent tumour growth itself, he said. miRNA manipulation is being combined with conventional cancer treatment methods such as chemotherapy, radiotherapy and immunotherapy.

Harvard Study Indicates Covid-19 May Have Been Circulating in Wuhan Since Last August

- A new study carried out by researchers from the **Harvard Medical School, Boston University of Public Health and Boston children's hospital used satellite imagery of parking lots and disease-related search engine queries** to investigate the possibility that coronavirus may have been circulating in Wuhan since August last year.

What Does the Study Say?

The authors of the study say that they observed an **upward trend in hospital traffic and search volume for disease-related terms beginning in late summer and early fall of 2019**, implying that the virus may have already been circulating before the identification of the Huanan market cluster in Wuhan late November, early December. Significantly, the study says that **while queries for the respiratory symptom "cough" show seasonal fluctuations that coincide with yearly influenza seasons, the search for the term "diarrhoea", which is a more COVID-19 specific symptom showed an association with the current epidemic only**. For the study, researchers collected over 111 satellite images of Wuhan from January 9, 2018 to April 30, 2020 resulting in 140 successful daily extractions of parking lot volume from hospitals. As per their analysis, between 2018 and 2020 there was a general upward trend of increased hospital occupancy and **a "steep increase" in volume starting August 2019**. Further, while individual hospitals have days of high relative volume in both Fall and Winter 2019, **between September and October 2019, five of the six hospitals show their highest relative daily volume, which coincides with elevated search queries for the term "diarrhoea" and "cough"**. Searches for "diarrhoea" showed elevated traffic starting in late 2019, "cough" shows yearly peaks that coincide with the influenza season. Both the search terms show a large increase approximately three weeks preceding the large spike in confirmed COVID-19 cases in early 2020. The researchers observed a "large decrease" in



hospital volume and search query data following the public health lockdown of Wuhan on January 23, 2020.

So, What Does This Mean?

Essentially, the researchers are saying that while it cannot be confirmed if the increase in the volume of hospital traffic and symptom search data in Wuhan was directly related to the coronavirus, they say that **there is some evidence to believe that the disease might have been spreading before its identification at the Huanan seafood market.** It is also possible that the initial rise in Gastro – Intestinal symptoms may have been ignored as an early signal of COVID-19 since the surveillance systems were looking for a respiratory pathogen, that are generally associated with symptoms such as fever, sore throat and cough.

Figuring Out COVID-19 Terminology

→ **COVID-19** – A term **coined by the World Health Organization (WHO)** to denote the disease that has led to a pandemic. On February 11, 2020, WHO announced a name for the mysterious disease originating in China, caused by a new coronavirus. It called it **coronavirus disease 2019**, abbreviated as COVID-19, where CO stands for corona, VI for virus, and D for disease, while the numerals – 19 refer to the year in which the first case was detected. WHO claimed it had consciously avoided naming the disease after the place of origin, to avoid stigmatising that country/area. The **International Committee on Taxonomy of Viruses (ICTV)** announced “severe acute respiratory syndrome coronavirus 2 (**SARS-CoV-2**)” as the name of the new virus, also on February 11, 2020. This name was chosen because the virus is genetically related to the coronavirus responsible for the Severe Acute Respiratory Syndrome (SARS) outbreak of 2003. While related, the two viruses are different. WHO and the ICTV were in communication about the naming of both the virus and the disease.

Epidemic – When the incidence of a **disease rises above the expected level in a particular community or geographic area**, it is called an epidemic. The outbreak started in Wuhan city in Hubei province in China, with what seemed then as a cluster of pneumonia-like cases.

Pandemic – A global epidemic. **When the epidemic spreads over several countries or continents, it is termed a pandemic.** On January 30, WHO announced that COVID-19 was a Public Health Emergency of International Concern. **On March 11, WHO decided to announce COVID-19 as a pandemic.**

R0 – R-Naught is the basic reproduction number. **This is the number of new infections caused by one infected individual in an entirely susceptible population.** It helps determine whether an epidemic can occur, the rate of growth of the epidemic, the size of the epidemic and the level of effort needed to control the infection. If R0 is 2, then one individual will infect two others. As of end May, **India’s R0 value was in the range of 1.22.**

Co-Morbidities – Several health conditions including uncontrolled diabetes and hypertension, cancer, morbid obesity, lung diseases, compromised immune systems **put patients at greater risk for contracting the infection, and also have poor clinical outcomes.** Special attention to prevent the disease and prevent mortality in these groups is the concern of health managers.



Transmission — The **method by which the disease spreads**. In COVID-19 it is through respiratory droplets, expelled while talking, laughing, coughing and sneezing. This makes mask wearing and physical distancing the main tools for protection against the virus. Washing hands with soap and water is an effective way to kill the virus.

Community Transmission — When you can **no longer tell how someone contracted the disease**, or who the source of infection was. As numbers climb, this tracing becomes next to impossible.

Contact Tracing — **Identifying and monitoring people who may have come into contact with an infectious person**. In the case of COVID-19, monitoring usually involves self-quarantine as an effort to control the spread of disease.

Super Spreader — Some individuals seem to have the capacity to cause more infections in a disproportionately large number of people, than others. The current pandemic has recorded some super spreaders who have had a huge role in the transmission.

Positivity Rate — **The percentage of people who test positive among all those who are tested**. If positivity rate is high, it is possible that only high-risk groups are being tested. A low positivity rate can also indicate that not enough testing is being done.

Infection Fatality Rate — It is the number of deaths occurring in all infected people in a particular population. **This includes those who might have the COVID-19 infection, but have not been tested for it**. Given that the number of tests is not high, experts have clarified that this is not a useful metric to have in this pandemic.

Case Fatality Rate — This is the **number of deaths occurring among confirmed cases of COVID-19**. Since these two figures are available with a certain amount of reliability, it is actually CFR that is being referred to when there is a loose reference to fatality rate.

Severe Acute Respiratory Infection (SARI) — A respiratory disease also caused by a coronavirus, and spread through the same transmission method, i.e. respiratory droplets. The symptoms (fever, cough, body ache, difficulty in breathing) are also similar. The government has begun surveillance of SARI patients as also patients with Influenza-like Illness (ILI) admitted in hospitals too.

Cytokine Storm — An immune reaction triggered by the body to fight an infection is known as a cytokine storm when it turns severe. **The body releases too many cytokines, proteins that are involved in immunomodulation, into the blood too quickly**. While normally they regulate immune responses, in this case they cause harm and can even cause death. Experts have noticed a violent cytokine storm in several individuals who are critical with COVID infection. **These cytokines dilate blood vessels, increase the temperature and heartbeat, besides throwing blood clots in the system, and suppressing oxygen utilisation**. If the cytokine flow is high and continues without cessation, the body's own immune response **will lead to hypoxia, insufficient oxygen to the body, multi-organ failure and death**. Experts say **it is not the virus that kills; rather, the cytokine storm**.



RT- PCR (Reverse Transcription-Polymerase Chain Reaction) – It is the primary test to detect COVID-19 infection across the globe. It is a sensitive test that uses swab samples drawn from the nasal/oral cavity to test for the presence of viral RNA (ribonucleic acid). It has got better **sensitivity (ability to correctly identify those with the disease)** and **specificity (ability to correctly identify those without the disease)** rates in current diagnostic tests for COVID.

Antibody Tests – These tests check your blood by looking for antibodies, and that just means you have had a past infection of SARS-CoV-2. Antibodies are proteins that help fight off infections, and are specific to every disease, granting immunity against getting that particular disease again. **An antibody test, with poor specificity, is not believed to be effective in detecting new infections.** States have been asked to commence testing seroprevalence in the community, using antibody tests, that are blood tests.

Convalescent Plasma Therapy – Researchers are examining the efficacy of using convalescent plasma, that is, using neutralising antibodies from the blood of people who have recovered from the COVID-19 infection to treat patients with COVID-19.

Hydroxychloroquine (HCQ) – An antimalarial oral drug that is being repurposed for treatment in COVID-19. It has also been used successfully in the treatment of some auto immune conditions. Its value in COVID-19 has not been resolved entirely.

Flattening the Curve – Reducing the number of new COVID-19 cases, day on day. The idea of flattening the curve is to ensure that the health infrastructure is not overwhelmed by a large number of cases.

Herd Immunity – This is also known as **community immunity**, and constitutes the reduction in risk of infection within a population, often because of previous exposure to the virus or vaccination.

PPE – Personal protective equipment, or PPE, is specialised clothing and equipment used as a safeguard against health hazards including exposure to the disease.

Asymptomatic Transmission of Covid-19: Why It Matters, Where Evidence Stands

- The World Health Organization's Covid-19 technical lead Maria Van Kerkhove claimed that asymptomatic transmission of the disease is "extremely rare." After queries poured in from around the world, the WHO called a social media interaction in which Van Kerkhove clarified that **asymptomatic transmission does happen and that, according to some modelling studies, the incidence of such transmission could be as high as 40%**. A look at why the question of asymptomatic transmission is an important factor in the Covid-19 pandemic, and where the evidence stands.

What Is Asymptomatic Transmission?

Asymptomatic transmission is when a person who has no symptoms of Covid-19 – such as fever, body ache, cough etc – transmits the novel coronavirus to another person. This is important because of the high infectiousness of the virus. If indeed asymptomatic transmission was rare as the WHO had initially claimed, the need for universal use of masks would reduce. In such a scenario, only people who showed symptoms would need



to wear face covers to prevent onward transmission of the virus. Also, containing the virus would be easier if every person who showed symptoms simply self-isolated.

How Far Does Asymptomatic Transmission Occur?

Estimates vary but, by all accounts, it does take place. A study from China published in Nature Medicine on April 15 estimated that **44% cases who had contracted the disease had caught the disease from a person who was not showing symptoms.**

In general, asymptomatic patients of Covid-19 have been observed to be younger and without comorbidities.

How Can an Asymptomatic Person, Who Is Not Coughing and Sneezing, Transmit A Disease That Spreads Through Droplets?

The coronavirus SARS-CoV-2 resides in the upper respiratory tract. That is what makes it such a potent traveller through droplets from the human body to a surface and then onwards to its next victim. "Normally for symptomatic people therefore the transmission mode is obvious – **coughing or sneezing. But for asymptomatic it can happen when you are singing, or in the gym breathing heavily or in a night club where you are shouting to be heard by somebody who is standing very close to you.** Basically, in any situation when you express air under pressure, droplet transmission can happen," Dr Michael Ryan, Executive Director, WHO Health Emergencies Programme, said in the interaction.

If Asymptomatic COVID Cases Spread the Disease, How Does One Stay Safe?

Universal use of masks is a good place to start. This can prevent inadvertent spread by an asymptomatic person who is not aware of his/her positive status. It is also important to maintain a distance of at least one metre from any individual, apart from handwashing and maintenance of personal hygiene. At home, it is best to wear a mask, especially if there are elderly people in the house. but if that is not possible, it is advisable to cover one's mouth when coughing or sneezing or to do so into one's shirt sleeve. WHO recommends fabric masks for people who are living in areas of active transmission and cannot practise physical distancing, such as in public transport or in closed settings.

Population-Wide Mask Use Can Bring R Number Below 1

- A new modelling study led by the University of Cambridge suggests that if facemasks are used across a population, it keeps the coronavirus 'reproduction number' under 1.0. When combined with lockdowns, widespread facemask use prevents further waves of the virus, according to the study, led by the University of Cambridge and published in the Proceedings of the Royal Society A. The research suggests that lockdowns alone will not stop the resurgence of SARS-CoV-2. However, **even homemade masks with limited effectiveness can dramatically reduce transmission rates if worn by enough people, regardless of whether they show symptoms.** The researchers worked to link the dynamics of spread between individuals with population-level models, to assess different scenarios of facemask adoption combined with periods of lockdown. The modelling included stages of infection and transmission via surfaces as well as air. Researchers also considered negative aspects of mask use, such as increased face touching. **The reproduction or 'R' number – the number of people an infected individual passes the virus onto – needs to stay below 1.0 for the pandemic to slow.** The study found that if people wear masks whenever they are in public it is twice as effective at reducing 'R' than if masks are only worn after symptoms appear. In all modelling scenarios, routine facemask use by 50% or



more of the population reduced Covid-19 spread to an R less than 1.0, flattening future disease waves and allowing less-stringent lockdowns. Viral spread reduced further as more people adopted masks when in public. And **100% mask adoption combined with on/off lockdowns prevented any further disease resurgence for the 18 months required for a possible vaccine.** The models suggest that a policy of total facemask adoption can still prevent a second wave even if it isn't instigated until 120 days after an epidemic begins (defined as the first 100 cases). The team investigated the varying effectiveness of facemasks. Previous research shows that even homemade masks made from cotton t-shirts or dishcloths can prove 90% effective at preventing transmission. The study suggests that an entire population wearing masks of just 75% effectiveness can bring a very high 'R' number of 4.0 all the way down to under 1.0, even without aid of lockdowns.

What are WHO's New Guidelines?

The new guidelines on face masks are a move away from what WHO said previously. So far, it maintained that there was not enough evidence to suggest that healthy individuals should wear masks and encouraged the use of medical face masks only by those who were sick or caring for the sick. Now, in the revised guidelines it suggests that everyone should wear fabric masks (non-medical) in public. Fabric masks should contain at least three layers of different materials. On the other hand, any person showing the symptoms of COVID-19 should wear a medical mask apart from self-isolating and seeking medical advice as soon as they feel unwell. It has advised governments to encourage the general public to wear masks where there is a widespread transmission and physical distancing is difficult such as while using public transport, in shops or other confined environments. Further, in areas with widespread transmission, WHO advises medical masks (surgical or procedure masks that are flat or pleated) for all people working in clinical areas of a health facility and not just workers dealing with patients with COVID-19.

Are There Any Disadvantages of Encouraging the General Public to Wear Masks?

WHO mentions some potential harms and disadvantages of the use of face masks by healthy people in the general public. These include increased risk of self-contamination due to manipulation of a face mask, potential self-contamination if non-medical masks are not changed when soiled or wet, potential headache or breathing difficulties and a false sense of security, leading to potentially lower adherence to other critical preventive measures such as physical distancing and hand hygiene.

India: With the Centre allowing re-opening of malls, hotels, restaurants and places of worship from June 8, the Ministry of Health and Family Welfare (MoHFW) Thursday issued standard operating procedures (SOPs) for these to contain the spread of the novel coronavirus (Covid-19). As per these guidelines wearing masks is compulsory for those entering religious places, restaurants, offices and shopping malls.

The drugs India is fighting COVID with

Remdesivir

Remdesivir, an antiviral drug first developed for treating Ebola in 2014, is one of the possible Covid-19 treatments being investigated in the WHO's Solidarity Trial. It inhibits viral replication in the body. Last month, the US National Institutes of Allergies and Infectious Diseases released preliminary trial results showing recovery time of Covid patients given remdesivir improved from 15 to 11 days. The Drug Controller General of

[Shatabdi Tower, Sakchi, Jamshedpur](#)



India on June 1 approved a five-day regime of remdesivir. Doctors are currently prescribing it for moderately to severely ill patients. Remdesivir costs ₹10,000-20,000 per vial. Gilead Sciences, the manufacturer, has signed licensing deals with Cipla, Ferozsons Labs, Hetero Labs, Jubilant Lifesciences and Mylan to expand supply in India and Pakistan.

Favipiravir

Favipiravir is an antiviral given to inhibit viral replication. It is used as an anti-influenza drug. First manufactured by Japan's Fujifilm Toyama Chemical Ltd, it is manufactured in India by Glenmark Pharmaceutical and Strides Pharma. It is being used for moderately symptomatic to severely ill Covid patients, but access is not easy. Ten hospitals have been shortlisted for a phase III trial with mild and moderately ill Covid-19 patients. Another trial by Glenmark will test **favipiravir with the drug umifenovir** on 158 Covid patients.

Tocilizumab

This is an **immunosuppressant commonly used to treat for rheumatoid arthritis.** In Mumbai, more than 100 severely ill Covid patients have been treated with this expensive drug (₹40,000-60,000 per dose) as a preventive against ventilator requirement; government hospitals are giving it free. It was first tried in Lilavati Hospital on a 52-year-old patient, whose health did not improve as he had reached an advanced stage. In other patients a recovery is being observed although it is too early to provide data, doctors said. Dr Mohan Joshi, Dean of Nair Hospital, said over 95 per cent patients administered tocilizumab have shown recovery in civic hospitals. "We are giving this drug to breathless, patients with pneumonia and those at risk of cytokine storm (a severe immune reaction)," said Lilavati Hospital pulmonologist Dr Jalil Parkar. A randomised control trial has begun across several centres in India. Tocilizumab is manufactured by Roche Pharma, and marketed by Cipla. In India it is sold under the brand name Actemra.

Itolizumab

This drug is commonly used for the skin disorder psoriasis, rheumatoid arthritis, multiple sclerosis, and autoimmune disorders. In India, Biocon launched it in 2013. It is being trailed in Mumbai and Delhi on moderately to severely ill Covid patients. Initial results will come by July.

Hydroxychloroquine

This antimalarial drug is a subject of debate over its efficacy against Covid. The WHO halted its HCQ arm in the Solidarity Trial following a study in The Lancet, then reinstated it after a retraction by the authors. India is the largest producer of this drug. Doctors use HCQ use in Covid patients with symptoms as mild as headache, fever, body pain, and even in critically ill patients. ICMR guidelines recommend low doses for nine days. "This drug is helping in faster recovery, but that is just preliminary assessment," one doctor said. Others warn against side effects such as a chaotic heartbeat. Said Dr Gunjan Chanchalani, chief intensivist in Mumbai's Bhatia Hospital, "We reduced HCQ use to very few patients after so many negative reports came in medical literature. Now we plan to completely stop using HCQ."

Doxycycline + Ivermectin

Doxycycline is an antibiotic used to fight infection in the urinary tract, eye, or respiratory tract. Ivermectin is an anti-parasite drug for treatment of scabies, head lice, and filariasis.



The combination is used to treat Covid patients with acute symptoms. In mid-May, a Bangladesh Medical College Hospital study found 60 Covid patients given this combination had recovered. A Monash Biomedicine Discovery Institute study also found through laboratory analysis that ivermectin helps eliminate the virus in 48 hours.

Ritonavir + lopinavir

These antivirals are commonly used to treat HIV patients. They are being investigated in the Solidarity Trial. Some studies suggest they reduce mortality risk in Covid-19 patients; others have found no major improvement. Over a dozen manufacturers supply ritonavir and lopinavir in India. Doctors sometimes use the combination for severely ill patients.

Plasma Therapy

This is meant for critical patients with low oxygen saturation levels, or those suffering a cytokine storm. Patients who have recovered from severe Covid-19 donate their plasma, which is then injected into other critical patients to boost their immunity. A protocol approved by ICMR is used to select which patient is best suited for plasma therapy. Preference is given to those at risk of cytokine storm, extreme breathlessness with severe pneumonia.

In the eye of the HCQ storm

- While several studies started to appear showing that HCQ didn't measurably improve clinical outcomes in patients, the decisive blow was dealt in a May 21 study published online in the reputed Lancet. "Hydroxychloroquine or chloroquine with or without a macrolide for treatment of COVID-19: a multinational registry analysis" was published by Indian-origin cardiologist Dr. Mandeep Mehra of Harvard Medical School; Dr. Frank Ruschitzka, University of Zurich; and Dr. Amit Patel, University of Utah. It also included, as a co-author, Dr. Sapan Desai, the founder of the Chicago-based Surgisphere. The study was premised on health indicators from about 96,000 patients – an astoundingly large data set – spanning 671 hospitals and six continents and concluded that the medicine didn't improve mortality in COVID-19 patients and was linked to cardiac arrhythmia. Based on this, the World Health Organization announced a pause on the use of HCQ in its solidarity trial, pending a safety review and following suit, several governments in Europe too stopped the use of HCQ in trials. Within days, however, questions started to emerge from scientists around the globe on the statistical inferences made. More seriously, there were questions on the data set. Mortality rates attributed to countries seemed higher than what was available in public records, health records from COVID-19 patients in Africa seemed disproportionate and it seemed impossible for researchers to scrutinise records from individual hospitals.

Questions on Data

Peter Ellis, chief data scientist at the Australia-based Nous Group, penned an expose that accused Surgisphere of fabricating data. He argued that Surgisphere's database couldn't have been put together in two months, given that it can take years for electronic health records to be compiled into a machine-learning format. Moreover, the data involved was the personal health records of thousands and getting ethical approvals across continents for such private details would be globally controversial. Investigations by the Guardian Australia and an interview by The Scientist of Mr. Desai showed that no hospital, which was supposedly part of Mr. Desai's database, was willing to confirm their association for



the HCQ study. Mr. Ellis and the Guardian also reported that the **LinkedIn profiles of Surgisphere's employees showed none of them with the demonstrated expertise of dealing with troves of patient records and clinical data.** For its part, Surgisphere's website claims to be a "physician-led public service organisation". Founded in 2008, it claimed to have "amassed data" on over 240 million patient encounters. The HCQ study was not funded by any drug company, private or public donor, or political organisation, it noted in a statement after the controversy broke out. The authors of the Lancet study, some of whom were also authors of a study that linked COVID-19, cardiovascular disease and the role of certain cardiac drugs in the New England Journal of Medicine, retracted their papers, saying that **Surgisphere wasn't able to provide the source data for analysis to independent reviewers, citing "client-confidentiality agreements"**. A day before, the WHO had lifted its 'pause'. The Scientist reported that Mr. Desai is named in multiple medical malpractice lawsuits in the U.S. His firm appeared once to be in the business of selling medical textbooks and publishing a journal, Surgical Radiology. In his interview to the publication, Mr. Desai said he'd be considering an independent audit of the HCQ study.

What Is the Message from The Controversy?

The retractions have exposed **gaps in the peer review process.** It is **usually an unpaid job for researchers who are sparing time for work that carries no credit.** Checks and balances that can call out fudged data are very few. James Heathers, a research scientist at North-eastern University in Boston wrote in The Guardian: "The immediate solution to this problem of extreme opacity, which allows flawed papers to hide in plain sight, has been advocated for years: require more transparency, mandate more scrutiny. Prioritise publishing papers which present data and analytical code alongside a manuscript. Re-analyse papers for their accuracy before publication, instead of just assessing their potential importance. Engage expert statistical reviewers where necessary, pay them if you must. Be immediately responsive to criticism, and enforce this same standard on authors. The alternative is more retractions, more missteps, more wasted time, more loss of public trust ... and more death." The Covid-19 pandemic has given rise to a global hunger for scientific work and a rush of medical journals to get research published. **The compulsive need among researchers to publish papers, or perish, is called the Darsee Syndrome, after John Darsee, a researcher who was considered extremely bright early in his career, before being accused of data fraud.** Said Dr K S Reddy, president of the Public Health Foundation of India, member of the Indian Council of Medical Research's Covid-19 task force and member of the executive group of the international steering committee of the Solidarity Trial, "Scientific publications depend on rigorous, unbiased and knowledgeable peer reviews by experts supplemented by the journal's editorial team. Slip-ups can occur at any stage in this process... When expedited reviews are conducted at a great rush, in the Covid-19 era, the chances of a slip-up increase. The consequences can be harmful if the errors are uncorrected. However, the beauty of science is that it can quickly self-correct... Lessons will be learnt but respect for science must go up and not diminish as a result of this controversy."

What is the Status of HCQ Now?

While the WHO has reinstated the HCQ arm of its trial, India has never wavered from its faith in the drug as a treatment and a prophylactic for Covid-19. India weathered The Lancet study, citing its own data to justify the use of the drug. Meanwhile, investigators in the Recovery Trial at the University of Oxford have announced that they would stop enrolment for the HCQ arm as no benefits have been found of the drug.



Ventilators Can Heal but Also Harm (The Author Is the Chairman of Pallium India And Director, Trivandrum Institute of Palliative Sciences)

→ Ventilators are not easy to understand, this is true even for most doctors. Only a relatively small percentage of people who work in ICUs are able to disentangle, de-mystify and decipher these complex machines. Now, we find ourselves on our knees before a disease that takes away our fundamental ability to draw breath. The seemingly logical solution appears to be the creation and use of more ventilators. Unfortunately, it is not that simple. If the breathing process is compromised, it most often leads to the failure of every other organ system, making the ventilator the undisputed hero of the piece. A ventilator is able to force air into the lungs so that breathing in is no longer the person's responsibility. This sounds deceptively simple. The nose and the mouth draw in air. The windpipe or the trachea directs the air into passages called the bronchi. These tubes pass through our lungs and divide further into tiny bronchioles that end in balloon-shaped pockets called alveoli, of which the average human has about three million. Blood vessels called capillaries surround the alveoli. It is here that oxygen enters the bloodstream. By simply drawing in air, we call into being a silent orchestral dance that can be felt if we place our palms upon our heaving chests. Even the best artificial ventilators fall far short of duplicating this rhythm and flow.

Safety Factors

But even if the ventilator is not a completely refined one, isn't it better than nothing? An artificial ventilator that is not exactly graded or calibrated can become a killing machine. The altered pressure changes can damage the lungs. **Ventilators can only drive air into the lungs. They cannot fulfil the equally vital task of transferring oxygen into the blood, should the lungs be too damaged to do so.** In the present situation, first, everyone with a breathing difficulty from COVID-19 does not automatically require a ventilator. Second, they may not even be good candidates for ventilation because, in a large number of people with serious COVID-19, the lungs seem to be too badly damaged to recover. Third, the general condition of the person determines whether there is a reasonable chance for him or her to come out of it alive and well. This is not to say that ventilation is not a viable option in some cases.

Chances of Survival

Unfortunately, however, evidence thus far indicates that in general, the chances of survival after ventilation are not good. A published study based on the experience in 12 New York hospitals showed that **only 11.9% of 320 patients survived, in whom ventilators were used and the treatment had come to a logical conclusion (discharge or death of the patient).** That result spanned all age groups. In the elderly, particularly among those with specific associated diseases, the chances of survival are even poorer. Symptoms and their experience vary widely across populations, and all this talk of ventilation is applicable only to the minority – those with severe infection, particularly, the elderly and those with other serious concurrent illnesses. To understand what is best for a patient an evaluation is necessary. The process is called triage. It is recommended that the attending team and the triage team are separate from one another. On May 19, the World Health Assembly passed a resolution that palliative care should be made available to all people with COVID19. This would mean being mindful of suffering irrespective of disease status and making a concentrated effort to alleviate it as far as possible. It would involve adequate treatment of pain as well as other distressing symptoms. This would be bolstered by



appropriate emotional support. Honest information compassionately given forms the cornerstone of such practice. Those with reasonable chances of survival are ear-marked to receive care in intensive care units with ventilators when necessary. Such ventilators should not be hastily put-together contraptions, but those that are able to mimic air flow in the lungs as near normal as possible. Enough sedation is given to them so that the ventilator is tolerated and stress minimised. **Those with next-to-no chances of survival and their families would be counselled about the gravity of the situation and assisted in making an informed choice whether to go for aggressive intensive care with a ventilator or to forgo it while continuing to receive comfort care with compassion.**

Palliative Care

By providing palliative care to those with COVID-19 we shall be reducing the quantum of suffering. Following the advice of World Health Assembly to provide access to palliative care would necessitate basic online training to all doctors and nurses treating COVID-19, and access to essential palliative care drugs including controlled medicines. Will we square up to the task?



DreamIAS